Final

2015 Annual Land Use Control Monitoring Report,

RVAAP-01 Ramsdell Quarry Landfill

and

RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



January 27, 2016

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188		
The public reporting burden for this collection or gathering and maintaining the data needed, and co information, including suggestions for reducing the 1215 Jefferson Davis Highway, Suite 1204, Arli penalty for failing to comply with a collection of in PLEASE DO NOT RETURN YOUR FOR	f information ompleting and te burden, to ngton, VA 2 formation if i RM TO TH	is estimated to average 1 hour d reviewing the collection of infor Department of Defense, Washin 2202-4302. Respondents shou it does not display a currently val IE ABOVE ADDRESS.	per response, incl mation. Send com ngton Headquarters d be aware that no id OMB control nur	uding the tin ments regard Services, Di otwithstandin nber.	me for reviewing instructions, searching existing data sources, ding this burden estimate or any other aspect of this collection of irectorate for Information Operations and Reports (0704-0188), ng any other provision of law, no person shall be subject to any
1. REPORT DATE (DD-MM-YYYY)	2. REPC	DRT TYPE			3. DATES COVERED (From - To)
4. TITLE AND SUBTITLE					NTRACT NUMBER
					ANT NUMBER
				5C. PRC	DGRAM ELEMENT NUMBER
6. AUTHOR(S)				5d. PRC	DJECT NUMBER
				5e. TAS	SK NUMBER
				5f. WOI	RK UNIT NUMBER
7. PERFORMING ORGANIZATION NA	Ame(s) an	ND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGE	NCY NAM	E(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY ST	ATEMEN	Γ			
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT	18. NUMBER OF	19a. NAI	ME OF RESPONSIBLE PERSON
a. REPORT b. ABSTRACT c. TH	IIS PAGE		PAGES	19b. TEL	EPHONE NUMBER (Include area code)



John R. Kasich, Governor Mary Taylor, Lt. Governor Craig W. Butler, Director

March 15, 2016

Mr. Mark Leeper, P.G., MBA Army National Guard Directorate Environmental Programs Division ARNGD-ILE-CR 111 South George Mason Drive Arlington, VA 22204 Re: US Army Ravenna Ammunition Plt RVAAP Remediation Response Project Records Remedial Response Portage County 267000859029

Subject: Approval of the "Final 2015 Annual Land Use Control Report at RVAAP-01 Ramsdell Quarry Landfill and RVAPP-05 Winklepeck Burning Grounds at the Ravenna Army Ammunition Plant, Ravenna, Ohio," Dated January 27, 2016, Ohio EPA ID # 267-000859-029

Dear Mr. Leeper:

The Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR), has received and reviewed the document entitled, *"Final 2015 Annual Land Use Control Report at RVAAP-01 Ramsdell Quarry Landfill and RVAPP-05 Winklepeck Burning Grounds at the Ravenna Army Ammunition Plant, Ravenna, Ohio,"* dated January 27, 2016. This document, received by Ohio EPA's NEDO on January 28, 2016, was prepared for the U.S. Army Corps of Engineers (USACE) Louisville District, by Vista Sciences Corporation.

Ohio EPA has reviewed this documentation and has found no significant deficiencies. As a result, the "*Final 2015 Annual Land Use Control Report at RVAAP-01 Ramsdell Quarry Landfill and RVAPP-05 Winklepeck Burning Grounds*" is approved.

If you have any questions or concerns, please do not hesitate to contact me at (330) 963-1249.

Sincerely,

2L9.AM

Andrew C. Kocher Site Coordinator Division of Environmental Response and Revitalization

ACK/nvr

- cc: Gregory F. Moore, USACE, Louisville District Haney/Harris, Vista Sciences, Newton Falls Katie Tait/Kevin Sedlak, Camp Ravenna
- ec: Bob Princic, NEDO, DERR Rod Beals, NEDO, DERR Justin Burke, CO, DERR



Final

2015 Annual Land Use Control Monitoring Report,

RVAAP-01 Ramsdell Quarry Landfill

and

RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



January 27, 2016

DOCUMENT DISTRIBUTION

For the

Final 2015 Annual Land Use Control Monitoring Report, RVAAP-01 Ramsdell Quarry Landfill and RVAAP-05 Winklepeck Burning Grounds

> Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Name/Organization	Number of Printed Copies	Number of Electronic Copies
Mark Leeper, ARNG-ILE Clean Up	0	1
Kevin Sedlak, ARNG and Katie Tait, OHARNG	0	Email w/o attachments
Andrew Kocher, Ohio EPA Project Manager – NEDO-DERR	1	3
Justin Burke, Ohio EPA – CDO-DERR	0	Email w/o attachments
Quyet La, USACE - Louisville	0	1
Administrative Record – RVAAP Restoration Program	2	2

ARNG-ILE = Army National Guard Environmental Programs Division

OHARNG = Ohio Army National Guard

Ohio EPA-NEDO-DERR = Ohio Environmental Protection Agency-Northeast District Office –Division of Environmental Response and Revitalization

Ohio EPA-CDO-DERR = Ohio Environmental Protection Agency-Central District Office –Division of Environmental Response and Revitalization

USACE = United States Army Corps of Engineers

RVAAP = Ravenna Army Ammunition Plant

TABLE OF CONTENTS

SECTION 1.0	INTRODUCTION1
1.1 Report Int	roduction1
1.2 Facility Lo	ocation1
1.3 Facility H	istory2
1.4 Land Use	Controls, Monitoring, And Reporting Requirements
1.5 Annual LU	JC Inspection and Monitoring Report Requirement
SECTION 2.0	ANNUAL LUC Monitoring REPORT FOR RAMSDELL QUARRY LANDFILL.5
2.1 Ramsdell	Quarry Landfill
2.2 RQL Ann	ual Inspection Form
SECTION 3.0 GROUNDS	ANNUAL LUC Monitoring REPORT FOR WINKLEPECK BURNING 10
3.1 Winkleped	ck Burning Grounds
3.2 LUC Quar	rterly Inspection and Report Mechanisms for WBG10
3.3 Land Use	Control Awareness Training12
3.4 Camp Rav	venna Perimeter Fence
SECTION 4.0	CONCLUSION14
4.1 General L	UC Training
4.2 Land Use	Consistency and Land Use Control Effectiveness at RQL14
4.3 Land Use	Consistency and Land Use Control Effectiveness at WBG14
4.4 Land Use	Control Deficiency Corrective Action at RQL and WBG15
4.5 Land Use	Control Effectiveness Certification
SECTION 5.0	REFERENCES

LIST OF APPENDICES

- Appendix AWeekly RQL Inspection ReportsAppendix BRQL Soil Repair MemoAppendix CQuarterly RQL Inspection Reports
- Appendix D RQL Access Logs

LIST OF APPENDICES, continued

Appendix E	RQL Annual Inspection Photographs
Appendix F	FY 2015 Quarterly Land Use Control Index Maps
Appendix G	Final FY 2015 First Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds
Appendix H	Final FY 2015 Second Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds
Appendix I	Final FY 2015 Third Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds
Appendix J	Final FY 2015 Fourth Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds
Appendix K	FY 2015 Perimeter Fence Defect Call Outs Identified and Repaired

LIST OF ACRONYMS AND ABBREVIATIONS

ACM	Asbestos Containing Material
AOC	Area of Concern
AR	Army Regulation
ARNG	Army National Guard
bgs	below ground surface
Camp Ravenna	Camp Ravenna Joint Military Training Center
CERCLA	Comprehensive Environmental Response, Compensation, and Liability
	Act
C.F.R.	Code of Federal Regulations
DFFOs	Director's Final Findings and Orders
FWSAP	Facility-Wide Sampling and Analysis Plan
FWGWMPP	Facility-Wide Groundwater Monitoring Program Plan
FY	Fiscal Year
GIS	Geographical Information System
IRP	Installation Restoration Program
LUC	Land Use Control
МК	Mark
MEC	Munitions and Explosives of Concern
MRS	Munitions Response Site
NCP	National Contingency Plan
NBC	Nuclear, Biological, Chemical
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
PMP	Property Management Plan
RD	Remedial Design
RDX	Research Department Explosive
ROD	Record of Decision
RQL	Ramsdell Quarry Landfill
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
TNT	Trinitrotoluene
U.S.C.	United States Code
USP&FO	United States Property and Fiscal Officer
UXO	Unexploded Ordnance
WBG	Winklepeck Burning Grounds

SECTION 1.0 INTRODUCTION

1.1 Report Introduction

As of September 2015, two areas at the former Ravenna Army Ammunition Plant (RVAAP), now known as the Camp Ravenna Joint Military Training Center (Camp Ravenna) have designated Land Use Controls (LUCs); Ramsdell Quarry Landfill (RQL) and Winklepeck Burning Grounds (WBG). As explained in greater detail in Sections 1.4 and 1.5, annual reports are required for the areas at Camp Ravenna that utilize LUCs to protect the integrity of an environmental remedy (if present), human health, and the environment by limiting the activities that may occur at those areas.

The following sections present the 2015 Annual Report for Land Use Controls Inspections, RVAAP-01 Ramsdell Quarry Landfill and RVAAP-05 Winklepeck Burning Grounds, Camp Ravenna Joint Military Training Facility, Former Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. This annual report is laid out as follows:

Section 1.0 – General introduction to the facility, and a general description of Land Use Controls, monitoring and annual reporting requirements.

Section 2.0 – Annual Report for RQL.

Section 3.0 – Summary of FY2015 Quarterly LUC Inspection Reports for WBG.

Section 4.0 – Conclusions

Section 5.0 – References

1.2 Facility Location

Camp Ravenna is located in northeastern Ohio within Portage and Trumbull counties, and is approximately three miles east/northeast of the City of Ravenna and one mile north/northwest of the City of Newton Falls. The facility is approximately 11 miles long and 3.5 miles wide. The facility is bounded by State Route 5, the Michael J. Kirwan Reservoir, and the CSX System Railroad to the south; Garret, McCormick, and Berry Roads to the west; the Norfolk Southern Railroad to the north; and State Route 534 to the east, as shown in Figure 1. In addition, the facility is surrounded by the communities of Windham, Garrettsville, Charlestown, and Wayland.



Figure 1.0 Map of Camp Ravenna Joint Military Training Center (Former Ravenna Army Ammunition Plant)

1.3 Facility History

RVAAP was a load, assemble, and pack facility built to produce large-caliber artillery projectiles and bombs. Although RVAAP downsized after World War II, plant production lines were reactivated during the Korean and Vietnam Wars. Additionally, the plant conducted nearly continuous demilitarization of war stocks, refurbishment of inventoried ammunition, and minor research and development projects. By 1992, the installation's status changed from "inactive but maintained" to that of "caretaker."

The Department of Defense established the Installation Restoration Program (IRP) to provide guidance and funding for the investigation and cleanup of potential contamination and past operations caused by historical activities at military installations. The IRP began at RVAAP in 1989. Administrative accountability for the initial acreage of the facility was transferred to the United States Property and Fiscal Officer (USP&FO) for Ohio in May 1999 with subsequent transfers to follow. To date, administrative accountability for the entire 21,683-acre facility has been transferred to the USP&FO for Ohio and subsequently licensed to the Ohio Army National Guard (OHARNG) for use as a military training site, Camp Ravenna. The RVAAP restoration program involves cleanup of former production/operational areas throughout the facility related to former activities conducted under the RVAAP. The restoration program is currently managed by the Army National Guard (ARNG) with support from the OHARNG.

1.4 Land Use Controls, Monitoring, And Reporting Requirements

All work, plans, and documentation for the RVAAP IRP at Camp Ravenna must be in conformance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) [42 United States Code (U.S.C.) §9601, *et seq.*], the National Contingency Plan (NCP) [40 Code of Federal Regulations (C.F.R.) Part 300], and the Director's Final Findings and Orders (DFFOs) [June 10, 2004]. If residual contamination is left in place after the CERCLA remediation process is complete and the contamination still poses a potential for unacceptable risks or exceeds cleanup standards, then the Record of Decision (ROD) for the Areas of Concern/Munitions Response Sites (AOC/MRS) will require LUCs in accordance with the approved Remedial Design (RD).

LUCs include any physical, legal, or administrative mechanism that places restrictions on the use of, or limits access to, real property to prevent exposure to contaminants at concentrations greater than permissible levels or other safety issues. The intent of using these controls is to protect the integrity of the remedy (if present), human health, and the environment by limiting the activities that may occur at an AOC/MRS. When implemented, these LUCs provide protection to individuals using or working at the AOC/MRS by limiting and/or preventing activities which could potentially result in risks to those individuals. The Army is responsible for controlling land use on active installations such as Camp Ravenna and can internally restrict the use of such property. LUCs may include engineering controls such as fences, Seibert markers and signs, or administrative controls such as awareness training and restrictions on use including type of use and duration.

The Property Management Plan (PMP), dated August 2012, identifies LUCs and restrictions for specific AOCs/MRSs at Camp Ravenna and provides mechanisms to implement and manage those LUCs. The PMP is required under Army Regulation (AR) 210-20 and satisfies requirements of the DFFOs. The PMP lists general performance objectives of LUCs at Camp Ravenna as well as AOC/MRS specific LUCs detailed to address the concerns present on that particular AOC/MRS. According to Section 1.3 of the PMP, it is the responsibility of the Army to implement, inspect, maintain and enforce LUCs set forth under the RVAAP Restoration Program.

1.5 Annual LUC Inspection and Monitoring Report Requirement

The PMP requires that the Army conduct a minimum of an annual inspection of the LUCs to confirm that the LUCs remain effective and still meet the LUC objectives, and also requires that the results of the annual LUC inspection be included in an Annual LUC Monitoring Report to be submitted to the Ohio EPA for review and approval. The Annual LUC Monitoring Report is required to evaluate the status and effectiveness of LUCs with a description of how LUC deficiencies, including inconsistent land uses, were addressed. The Annual LUC Monitoring Reports will be used in the preparation of the CERCLA 121(c) Five-Year Review. This Annual LUC Monitoring Report presents the following:

• The FY 2015 Annual Report for the Ramsdell Quarry Landfill. The LUCS were instituted for RQL in December 2014. This is the first annual LUC report for RQL.

• A summary of the monitoring conducted during the Fiscal Year (FY) 2015 Quarterly LUC Inspection Reports for WBG. This is the third annual report completed in accordance with the Final PMP dated August 2012.

Additionally, the PMP requires that a written certification will be submitted with the Annual Monitoring Report that states whether or not the LUCs remain in place and are effective. The written certifications for both the RQL and WBL LUCs are presented in Section 4.4.

SECTION 2.0 ANNUAL LUC MONITORING REPORT FOR RAMSDELL QUARRY LANDFILL

2.1 Ramsdell Quarry Landfill

RQL encompasses approximately 14 acres in the northeastern portion of Camp Ravenna. RQL was initially a stone quarry that was excavated 30 to 40 feet below existing grade until ceasing quarrying operations in 1941. From 1946 to the 1950s, the bottom of the quarry was used to burn waste explosives from Load Line 1. Between 1941 and 1989, the western and southern sections of the abandoned quarry were used for landfill operations. No information is available regarding landfill disposal activities from 1941 to 1976, and no information is available on other activities at the quarry from the 1950s to 1976. Only nonhazardous solid waste was deposited in RQL from 1976 until it was closed in 1989. In 1978, a portion of the abandoned quarry was permitted as a sanitary landfill by the State of Ohio. The sanitary landfill closed in 1990 under State of Ohio solid waste regulations, and was covered by a clay cap covering approximately four acres.

Although post-closure requirements for RQL under State of Ohio solid waste regulations only require that a quarterly inspection be conducted, weekly inspections have been conducted at the site as a best management practice. The weekly inspections assess the condition of various aspects of the RQL, including (but not limited to) vehicular access, gate and fence condition, landfill and cap integrity, and groundwater monitoring well security. The weekly inspection sheets from December 1, 2014 through October 15, 2015 are presented in Appendix A.

A large amount of construction and miscellaneous debris was discovered during soil remediation and removal activities in the quarry bottom in June 2010. A portion of the debris was found to have asbestos-containing material (ACM) in them. After removing and disposing of the soil and construction debris (all considered as ACM), the area was backfilled and graded to the preexcavation elevation.

RQL is managed as Restricted Access due to residual asbestos and contamination and the closed landfill. Permissible exposure parameters have been established for personnel accessing the RQL, and are defined as one hour/day for 250 days/year for 25 years. In order to enforce the Restricted Access status of the RQL, the following LUCs were established in December 2014:

- All digging or excavation within the quarry bottom is prohibited.
- Digging and excavation on the landfill cap will be regulated by the post-closure care plan and the Ohio solid waste regulations.
- Permanent warning signs will be installed and maintained around RQL on the gates and on the chain-link and high tensile wire fence at 300 ft. centers to warn of the ACM hazard in the quarry bottom. The signs will meet the requirements of OAC 3745-20-07(B)(1)(b).
- As no soil disturbing activities are allowed within the quarry bottom, OSHA asbestos training set forth at 29 CFR 1926.1101(k)(9)(vii) is not required. Any personnel entering the quarry bottom will be briefed of the asbestos hazards.

In order to track exposure, personnel entering the LUC area sign an access log sheet each time they enter and exit the LUC area.

2.2 RQL Annual Inspection Form

Camp Ravenna Joint Military Training Center (Camp Ravenna)/ Former Ravenna Army Ammunition Plant (RVAAP) Land Use Control (LUC) Inspection Form for RVAAP-01 Ramsdell Quarry Landfill AOC

In accordance with the Camp Ravenna/former RVAAP PMP (dated August 2012) and Appendix A-2 and the Final Remedial Design for Soil and Dry Sediment at RVAAP-01 Ramsdell Quarry Landfill (RQL), a LUC inspection of RQL was conducted by <u>Allan Brillinger (Vista Sciences</u> Corporation) on behalf of Camp Ravenna on October 15, 2015.

According to LUCs set forth in the *Final Remedial Design for Soil and Dry Sediment at the RVAAP-01 Ramsdell Quarry Landfill*, dated 9 April 2014, and memorialized in the PMP, periodic monitoring of LUCs, in the form of site inspections, is required to be conducted by the Army to confirm that the LUCs remain effective and still meet LUC objectives for continued remedy protectiveness. Site inspections are required to be conducted on an annual basis and inspections of the solid waste landfill are conducted in accordance with State of Ohio solid waste regulations and the Ohio Environmental Protection Agency (Ohio EPA) Director's Final Findings and Orders (Ohio EPA 2004). Additional LUC inspections may be conducted when landfill inspections are conducted as needed. The required Annual LUC Report is to be submitted to the Ohio EPA for review and approval.

The inspections shall include the following:

- Review of LUC training/inbriefs/maintenance and access logs and other documentation as applicable to RQL.
- Evaluation of activities at RQL to ensure that all activities executed within RQL are in compliance with the established digging restrictions and established exposure limits (Security Guard/Maintenance Worker one (1) hour/day for 250 days/year for 25 years).
 - All digging or excavation within the quarry bottom is prohibited due to residual asbestos and contamination.
 - Digging and excavation on the landfill cap will be regulated by the post closure care plan and the Ohio solid waste regulations.
 - Due to not meeting the industrial/commercial standard, exposure monitoring for the full-time facility employee must be conducted to ensure and document that exposure at the AOC is not above the established exposure limit set for the Security Guard/Maintenance worker of one (1) hour/day for 250 days/year for 25 years.
- Inspection of warning signs on gates and fencing.
- Inspection of RQL fencing and gates.

LUC deficiencies or inconsistent land uses that are identified must be reported and identified on the inspection form/report and must also be reported to the Army National Guard (ARNG)/Ohio Army National Guard (OHARNG).

Review of LUCs – Management/Corrective Action

Activities and Land Use:

a) This AOC is to be managed as Restricted Access and is restricted from residential land use. Has residential use occurred? Have other land uses or land use changes occurred?

No residential land use has occurred at the RQL. There have been no other land uses or land use changes over the past year.

b) What activities have occurred at RQL since last Inspection? Has any maintenance been performed at the AOC?

This is the first annual inspection of the RQL since the LUCs were instituted in December 201. The high tensile wire fence was repaired due to single strand breaks in December 2014 and January 2015. In mid-January, three eroded areas within the LUC enclosure (but off the landfill cap) were filled with clean soil, and were seeded April 2015 once the snow cover melted (Appendix B). Annual mowing was conducted for the RQL in early October. Additional minor eroded/settled areas inside the LUC enclosure (but off the landfill cap) were filled with clean soil and seeded in October 2015.

Weekly inspections were conducted in accordance with Ohio solid waste regulations. The weekly inspection forms are presented in Appendix A. Quarterly inspections were conducted by the Portage County Health Department. The quarterly inspection letters are presented in Appendix C.

Semi-annual groundwater monitoring activities were conducted at the RQL in March 2015 and July 2015.

c) Are activities at RQL being conducted in compliance with established digging restrictions and established exposure limits (exposure for full-time employees who access RQL must be tracked)?

The activities taking place at RQL are being conducted in accordance with the established digging restrictions. The exposure limits to personnel who must access the RQL LUC area are being tracked with Log In sheets that every person entering the LUC area must fill out when entering and exiting the LUC area. The completed Access Log sheets for December 2014 through October 15, 2015 are presented in Appendix D.

d) Are the warning signs in place and functional? Please note condition and any deficiencies.

The warning signs are posted on the RQL LUC fence and gate as required. Signs that read "DANGER – Unauthorized Personnel Keep Out" and "Danger – Asbestos Waste Disposal Site – Do Not Create Dust – Breathing Asbestos is Hazardous to Your Health" are posted on the LUC fence and gate at 300 ft. centers.

e) Is the RQL fencing and gates intact and in good condition? Please note condition and any deficiencies.

The RQL fencing and gate are intact and in good condition. There are no deficiencies with the fence and gates.

Inspections and Reporting

Inspections are required on an annual basis. Periodic monitoring inspections may be conducted as needed. Are annual inspections being conducted as required? Have any additional inspections been completed?

The annual LUC inspection was conducted on October 15, 2015. As per Ohio solid waste regulations, The RQL is inspected weekly. The weekly RQL inspection forms are presented in Appendix A. Additionally, the Portage County Health Department conducts a quarterly inspection of the RQL. The Portage County Health Department inspection letters are presented in Appendix D. Photographs of the RQL LUC area taken during the annual inspection are presented in Appendix E.

An Annual Report is required. Has the annual report been completed and submitted to the Ohio EPA?

The RQL LUCs were instituted in December 2014. This is the first annual inspection and report for the RQL LUCs.

Training/Inbriefs (as applicable to RQL):

Are RQL LUC training and/or inbriefs (for those who need to access RQL) being conducted as applicable? Describe the training (content/who attended/who provided/documentation of training).

LUC training is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna, and was conducted on March 3rd and 5th, 2015. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and specific LUC and other restrictions for RQL, as well as other areas at Camp Ravenna. Training materials and rosters are on file in the Camp Ravenna Environmental Office. Training will be conducted for additional Camp Ravenna staff and contractors that missed the March training dates as needed.

A "Land Use Control (LUC) Brief for Contractors/Personnel" was conducted for all personnel that entered the RQL LUC area. The training consisted of a review of the RQL site history, the environmental hazards present at the RQL, the LUC s that have been instituted, and the requirements of all personnel that enter the LUC area. All personnel that have received the brief sign the briefing form that states that they have been briefed and understand the RQL

LUC requirements, and that they will comply with all requirements. The signed briefing forms are kept on file at the Camp Ravenna Environmental office.

If training was not provided, explain why and what corrective actions were initiated.

N/A

Is access to RQL for full-time employees of the facility being logged in order to track exposure? Please review access logs to ensure exposure is within the established exposure limits.

Access for all personnel entering the RQL LUC area are being tracked with the Access Log. The established exposure limits are one (1) hour/day for 250 days/year for 25 years. The most any one worker was working inside the RQL area from December 1, 2014 through October 15, 2015 was 41 hours for a Maintenance Worker. The Maintenance Worker that had the 41 hours within the LUC area spent 4.5 hours conducting soil repairs and 36.5 hours mowing.

LUC Violations (if any):

Description of any observed/noted LUC violation(s) as identified.

The top wire of the 5-wire fence was observed to be broken on December 19, 2014 and again on January 30, 2015.

Date of Notification of LUC violations (if applicable) to ARNG/OHARNG:

The above-noted fence wire breaks were reported to ARNG/OHARNG on December 19, 2014 and January 30, 2015.

Description of any corrective actions taken to remedy observed LUC violations or recommended corrective actions:

The fence was repaired on December 30, 2014 and again on March 13, 2015.

Additional Notes/Comments:

Original Inspection Completed by:

Signature:

llan B. B.

Printed Name: Allan B. Brillinger Title: Program Manager Organization: Vista Sciences Corporation Date: October 15, 2015

SECTION 3.0 ANNUAL LUC MONITORING REPORT FOR WINKLEPECK BURNING GROUNDS

3.1 Winklepeck Burning Grounds

As described in the Property Management Plan (PMP), WBG encompasses 211.66 acres and is located in the central portion of Camp Ravenna (see Appendix F maps). The burning grounds area has been in operation since 1941. Prior to 1980, burning was conducted on the bare ground and the ash was abandoned at the site. Wastes treated in the area included Research Department Explosive (RDX), antimony sulfide, Composition B, lead azide, trinitrotoluene (TNT), propellants, black powder, waste oil, sludge from the load lines, domestic wastes, and small amounts of laboratory chemicals. From 1980 until 1998, periodic burning of scrap explosives, propellants, and explosive-contaminated waste materials (e.g., wipe rags, paper, and cardboard) was conducted in raised refractory-lined metal trays within a 1.5-acre area. A Part-B permit covering the active portion of the site was withdrawn in 1994. The burn trays along the 90-day storage unit of Building 1601 were closed in accordance with Ohio Environmental Protection Agency (Ohio EPA) guidance in 1998. Munitions and Explosives of Concern (MEC) is present in the Area of Concern (AOC). The previously applied remedy at the WBG AOC consisted of excavation of contaminated soil to preclude likely exposure through human contact. A portion of that remedy resulted in hazardous substances, pollutants, or contaminants remaining greater than levels that allow unlimited use and unrestricted exposure. Therefore, a component of the remedial action at the WBG AOC includes LUCs which are detailed in Section A-1.6 of the PMP.

Per the PMP, the land use for the WBG is *Small Arms Range* (including the existing Mark [MK] 19 Grenade Machinegun Range) for the OHARNG Military Use and Training. The Department of the Army has classified the Small Arms Range as an Operational Range at the WBG AOC. The Small Arms Range Land Use, in terms of the Risk Assessment, was created to assess specific training activities that would occur on a small arms range and was developed to assess risks to OHARNG personnel. In addition to the small arms training, certain activities are required to sustain and maintain the area as a range, such routine maintenance and activities that are to be performed by the National Guard Range Maintenance Soldier and/or other similar authorized personnel on the WBG AOC can be found in the PMP.

3.2 LUC Quarterly Inspection and Report Mechanisms for WBG

The PMP states that site inspections will be conducted on a quarterly basis at WBG. The WBG Inspectors Quarterly Inspection Report Form completed for each quarter of FY 2015 states that all quarterly inspections include evaluation of the following:

- Review of LUC training and documentation as applicable to WBG.
- Evaluation of the facility perimeter fence to ensure that it is maintained in a manner that is protective and effective and deters trespassers.
- Evaluation of activities at WBG to ensure that all activities executed within WBG are in compliance with OHARNG range safety regulations/standard operating procedures (SOPs), established digging restrictions, and established exposure limits. All digging, intrusive

activities, or excavation on the WBG AOC outside of the Unexploded Ordnance (UXO)/ MEC-cleared areas within the MK-19 Grenade Machinegun Range is prohibited with the following exceptions:

- Routine maintenance of roads, ditches, culverts and activities listed in A-1.4 of the PMP (maintenance of targetry and associated lifting mechanisms, range maintenance activities including removal of practice rounds, vegetation management, compatible natural resource management activities, nuisance wildlife control, drainage maintenance, wetland delineation, grassland management, scientific research and sampling activities);
- Ground surface repairs by authorized range personnel in support of authorized range activities;
- Digging along target array areas by authorized range personnel to a depth of one (1) foot below ground surface (bgs).

This shall also include evaluation of required range signage. The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations.

- Evaluation of groundwater activities to ensure that any groundwater activities are being conducted in a manner consistent with established LUCs. Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent Facility-Wide Sampling and Analysis Plan (FWSAP) as part of the AOC-specific IRP or Facility-Wide Ground Water Monitoring Program Plan (FWGWMPP).
 - The abandonment and replacement of monitoring wells damaged by activities conducted on the Installation and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio EPA guidance, the most recent FWSAP, and applicable Ohio Administrative Code requirements.

Four quarterly LUC inspection were conducted during FY 2015. The LUC inspections generally consisted of the following:

- An inspection of the Camp Ravenna perimeter fence.
- A review of current land uses at WBG to determine if they are in compliance with the LUCs.
- A review of activities at WBG since the previous inspection to determine if they are in compliance with the LUCs.
- A review of required warning signage.
- A review of training applicable to WBG LUCs.
- A description of any noted LUC deficiencies, any corrective actions taken to remedy the LUC deficiencies, and/or any recommended corrective action.

The following WBG quarterly inspections were conducted in FY 2015 by Don Trocchio of Vista Sciences Corporation:

• FY 2015 First Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds (report dated April 3, 2015, inspection completed December 17, 2014). This report is included in Appendix G.

- FY 2015 Second Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds (report dated July 23, 2015, inspection completed March 31, 2015). This report is included in Appendix H.
- FY 2015 Third Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds (report dated October 30, 2015, inspection completed June 15, 2015). This report is included in Appendix I.
- FY 2015 Fourth Quarter Land Use Control Inspection, RVAAP-05 Winklepeck Burning Grounds (report dated December 18, 2015, inspection completed August 13, 2015). This report is included in Appendix J.

3.3 Land Use Control Awareness Training

Section 4.2 of the PMP, *Land Use Control Awareness Training*, describes requirements and guidelines for LUC awareness training at the facility. LUC awareness training for Camp Ravenna staff and tenant units was conducted on March 3rd and 5th, and is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna. Formal LUC training has been conducted since 2006 and refresher training is given annually to all personnel. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and included specific restrictions for WBG. Annual training is conducted throughout the year as needed for additional Camp Ravenna staff and contractors that missed the March training dates.

Using units also receive an in-brief prior to firing on the range. Using units and tenant units at Camp Ravenna are not allowed down range. Environmental contractors who access WBG are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. They must read and sign the in-brief form. Training records are kept on file in the Camp Ravenna Environmental Office.

3.4 Camp Ravenna Perimeter Fence

Currently, the only facility-wide engineering control for the AOCs/MRSs is the perimeter fence, as listed in Section 4.1.1 of the PMP. The Camp Ravenna perimeter fence is situated mostly in Portage County, Ohio, with a small portion (see maps in Appendix F - FY 2015 Quarterly Land Use Control Index Maps) extending easterly into western Trumbull County, Ohio. The entire perimeter fence was inspected for each of the FY 2015 quarterly inspections.

The majority of the original Camp Ravenna perimeter fence is approximately seventy years old. Most, but not all, of the perimeter fence situated within Trumbull County is less than approximately ten years old. Typically, but not all, of the perimeter fence consists of a six foot high chain link fence fabric with steel I-beam shaped posts set on 10 to 12 foot centers set in concrete footers. The top and bottom of the fence fabric is reinforced with a horizontal pipe running along the entire length. On top of each post is a V bracket with six strands of 15-gauge barb wire, three strands inward facing and three strands outward facing. Twenty-six access gates are scattered throughout the approximate 30 miles of perimeter fencing evaluated (see maps in Appendix F – FY 2015 Quarterly Land Use Control Index Maps). Most of the former railroad access gates have been welded shut along with a few vehicle access gates that are no longer used.

In addition to documenting compliance with training, operation, and maintenance requirement set forth in the PMP, quarterly inspections also identify, document, and map major defects along the perimeter fence for future repair. In the inspector's judgment, a major defect was considered a breach in the fence through which an adult could gain unlawful access to the facility. Additionally, during the evaluation, major defects noted in previous inspections were visited and repairs logged if completed or ongoing. Geographical Information System (GIS) raw field data collected from the inspections were reduced and compiled in ESRI Arc Map. Index Maps depicting the call outs along with Detail Maps and photographs of each call out were prepared and submitted along with the WBG Inspectors Quarterly Inspection Report Form. Final approved versions of each FY 2015 Quarterly LUC Inspection Report are included in Appendices G, H, I and J of this report.

The four quarterly inspections performed in FY 2015 reported a total of 20 documented major defects in the perimeter fence. A total of 13 documented defects from the FY 2014 quarterly inspections had not yet been repaired at end of the FY 2014 reporting period. Of this total, 29 repairs were performed and documented in the subsequent (FY 2015) quarterly inspection reports. See Appendix K for a table of all perimeter fence defect call outs identified and repaired in FY 2015. When a major defect is noted during the LUC field inspection the Army is notified via email detailing the date and location. The date of notification is included in the quarterly LUC inspection report under "Section 6. Date of notification of LUC violation (if applicable)."

The Camp Ravenna maintenance crews are limited to making only minor fence repairs. Repair logs make reference to "contractor needed" on some call out sections where more extensive repairs are required. An example would be storm washouts (i.e., SE2A) along the perimeter road that continue to damage the perimeter fence. Culvert pipe inlets and outlets become clogged with debris, old corrugated metal culvert pipes have rusted and collapsed and some pipe sizes are unable to handle the storm runoff, all contributing to the washouts along the perimeter road.

It should be noted that only repairs of defects called out and included in previous LUC Inspection Reports are conveyed in the detail sheets of the subsequent LUC Inspection Reports. These repairs are documented in repair logs kept by the Camp Ravenna Maintenance Crews and are included with the quarterly reports in Attachment 2 – Camp Ravenna Fence Repair Log (Appendices G, H, I and J of this report). Numerous minor repairs (consisting of patching smaller openings in the fence fabric, replacing missing/broken barb wire, repairing frost heaved posts, removing fallen trees and branches resting on top of the fence) that were not sited during the LUC field inspection, were, and continue to be, repaired by the Camp Ravenna staff/maintenance crew and are not documented in repair logs. Overall, the perimeter fence at Camp Ravenna is intact and in good condition, and is an effective LUC for the WBG.

SECTION 4.0 CONCLUSION

4.1 General LUC Training

The OHARNG provided training to all Camp Ravenna staff and tenant units including an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/MRSs, and specific restrictions for RQL and WBG (See Section 2.2 and 3.3). All training requirements presented in the PMP were met by the OHARNG in FY 2015. Training compliance is demonstrated in the RQL Inspection Form (Section 2.2) and in the FY 2015 Quarterly LUC Inspection Reports for WBG that are included in Appendices G, H, I and J of this report. Training materials and rosters are on file in the Camp Ravenna Environmental Office.

4.2 Land Use Consistency and Land Use Control Effectiveness at RQL

The land use at RQL is Restricted Access due to residual asbestos, contamination and the closed landfill. Based on the completed weekly, quarterly and annual inspections at RQL, there are no inconsistent uses or activities discovered or reported at RQL during the time when the LUCs were instituted in December 2014 through when the annual inspection was conducted on October 15, 2015. All activities conducted within the RQL LUC area were performed in compliance with established digging restrictions, and established exposure limits as described in the PMP. This indicates current LUC objectives are being met to ensure the remedy is effective and protective.

An in-brief was provided to all personnel entering the RQL LUC area that included an overview of the history of the RQL, the land use controls/restrictions, and specific restrictions for RQL. All training and maintenance requirements specific to the RQL LUC were met by the OHARNG during this reporting period and is documented in the pages of this report.

4.3 Land Use Consistency and Land Use Control Effectiveness at WBG

Per the PMP, the land use for the WBG is Small Arms Range (including the existing MK-19 Grenade Machinegun Range) for the OHARNG Military Use and Training. Based on the completed inspections during FY 2015, there were no inconsistent uses or activities discovered or reported at WBG. All training and activities conducted within the WBG AOC were performed in compliance with OHARNG range safety regulations/SOP, established digging restrictions, and established exposure limits as described in the PMP. This indicates current LUC objectives are being met to ensure the remedy is effective and protective of human health and the environment.

The LUCs for the WBG AOC were evaluated quarterly in FY 2015 as stated in the PMP using the parameters listed in Section 3.1 LUC Quarterly Inspection and Reporting Mechanisms for WBG. These Quarterly LUC Inspections show all LUCs requirements presented in the PMP for WBG remained in place and were effective through FY 2015.

Units that utilize the range at WBG also receive an in brief prior to firing on the range and are not allowed down range. Environmental contractors who access WBG are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. All training, operation, and maintenance requirements specific to WBG presented in the PMP were met by the OHARNG in FY 2015 and is documented in the FY 2015 Quarterly LUC Inspection Reports included in Appendix G, H, I and J of this report.

4.4 Land Use Control Deficiency Corrective Action at RQL and WBG

The main purpose of inspecting and monitoring LUCs is to identify and correct LUC deficiencies and violations. LUC inspection reports allow the OHARNG to document consistent land use, as well as corrective action if deficiencies are encountered.

For the RQL, inspections were conducted by personnel familiar with the RQL so that changes (if present) were readily noted. Minor fence repairs and soil cover deficiencies were noted and corrected as weather conditions allowed. There repairs were tracked throughout the year to monitor their effectiveness.

For the WBG, each quarterly inspection has been conducted using the same parameters, resulting in a uniform and concise system of identification and repair of perimeter fence defect call outs. Of the total number of perimeter fence defect call-outs identified, approximately 80% were repaired by the next quarterly inspection.

4.5 Land Use Control Effectiveness Certification

This certifies that to the best of my knowledge and belief all of the information contained in this Annual LUC Monitoring Report is accurate, and that the Land Use Controls instituted for the Ramsdell Quarry Landfill and the Winklepeck Burning Grounds are in place and remain effective.

Jan. 27, 2016 (date) (signature)

Allan B. Brillinger (printed name)

Program Manager, Vista Sciences Corporation
(Title).

SECTION 5.0 REFERENCES

Final Property Management Plan for the Designated Areas of Concern and Munitions Response Sites, Volume One – Version 1.0. U.S. Army Corps of Engineers. August 2012.

Ravenna Army Ammunition Plant Restoration Program website: <u>www.rvaap.org</u>

Final Remedial Action Report for Soil and Dry Sediment at RVAAP-01 Ramsdell Quarry Landfill, Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. US Army Corps of Engineers. January 30, 2015

Appendix A

Weekly RQL Inspection Reports

late: October 23,	2015				
spected by: AI Br	illinger				
Veather Conditions / Recent Pro		50° no recent rain			
Time: Started 10:40	U U	11:00 (@p/pm)			
Type of inspection: Windshield Site Walk Other					
inspected	Status/Condition	Comments			
. Vehicular Access	good				
2. Entrance					
a. Gate/Chain	9000	both gates locked			
3. Landfill Site/Cap Integrity	2	U .			
a. Vegetative Cover	9000				
b. Standing Water on Cap	none				
c. Animal Disturbances	nore				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	none				
f. Runoff, Siltation	none				
g. Leachate	nore				
. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	7000				
c. Well ID Legible	yes				
	Ū				
. Comments:					
	· · ·				
. Description of Repairs/Remed	ial Action needed:				
1					
		•			

Date: October 15,2	015				
	illinger				
Weather Conditions / Recent Precipitation: Sunny 62°, rain Jesterday pm.					
Time: Started 1:45 (am/pm) Completed 2:30 (am/pm)					
Type of inspection: Windshield Site Walk Other					
Inspected	Status/Condition	Comments			
1. Vehicular Access	good				
2. Entrance	0				
a. Gate/Chain	good				
3. Landfill Site/Cap Integrity	0	4			
a. Vegetative Cover	good	recently mowed *			
b. Standing Water on Cap	none				
c. Animal Disturbances	none				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	good	minor repairs (off cap) **			
f. Runoff, Siltation	good	· · · · · · · · · · · · · · · · · · ·			
g. Leachate	good				
4. Monitoring Wells (5)	v .				
a. Locks in place?	yes				
b. Condition of Casing	good				
c. Well ID Legible yes					
0					
5. Comments:					
		e recently mowed			
** minor soil repa	irs seeding of a	reas off cap.			
-	<u> </u>				
6. Description of Repairs/Remedi	al Action needed:				
· · · · · · · · · · · · · · · · · · ·					

Time: Started [1] 3 (am/pm) Completed [1] 50 (am/pm) Type of inspection Windshield Site Walk Other DCGUL r:M Revice Inspected Status/Condition Comments 1. Vehicular Access Good 2. Entrance Image: Completed for the second sec	Inspected by: Kebeccik Weather Conditions / Recent Pre	cipitation: (25°, c)	oudy lovercast. Moderate raining end
Drave rim of FenceInspectedStatus/ConditionComments1. Vehicular AccessGood2. EntranceImage: Status and	Time: Started 11.37	(am/pm) Complete	d 11.50 (am/pm)
InspectedStatus/ConditionComments1. Vehicular AccessGrood2. Entrance	Type of inspection: Windshiel	Site Walk	Other
1. Vehicular Access Grood 2. Entrance	Drove riv	n offence	
2. Entrance a. Gate/Chain 3. Landfill Site/Cap Integrity a. Vegetative Cover b. Standing Water on Cap c. Animal Disturbances d. Woody Vegetation e. Gully Erosion/Soil Cover f. Runoff, Siltation g. Leachate 4. Monitoring Wells (5)	Inspected	Status/Condition	Comments
a. Gate/Chain (200) 3. Landfill Site/Cap Integrity a. Vegetative Cover Grood Marcel b. Standing Water on Cap None c. Animal Disturbances None d. Woody Vegetation None e. Gully Erosion/Soil Cover Grood Minor aleas tobe Filled f. Runoff, Siltation None g. Leachate None	1. Vehicular Access	Good	
3. Landfill Site/Cap Integrity	2. Entrance		
a. Vegetative Cover Grood #Mawed b. Standing Water on Cap None c. Animal Disturbances None d. Woody Vegetation None e. Gully Erosion/Soil Cover Grood #Minor aleas tabe Filled f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5)	a. Gate/Chain	Good	
a. Vegetative cover Upon b. Standing Water on Cap None c. Animal Disturbances None d. Woody Vegetation None e. Gully Erosion/Soil Cover Good f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5) None	3. Landfill Site/Cap Integrity		
c. Animal Disturbances None d. Woody Vegetation None e. Gully Erosion/Soil Cover Grood Minor aleas tobe Filled f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5)	a. Vegetative Cover	Grood	* Mawed
d. Woody Vegetation Nove e. Gully Erosion/Soil Cover Grood #Minor aleas tobe filled f. Runoff, Siltation Nove g. Leachate Nove 4. Monitoring Wells (5)	b. Standing Water on Cap	None	
e. Gully Erosion/Soil Cover Grood Minor aleas tobe Filled f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5)	c. Animal Disturbances	Mong	
f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5) Image: Content of the second seco	d. Woody Vegetation	None	
f. Runoff, Siltation None g. Leachate None 4. Monitoring Wells (5) Image: Content of the second seco	e. Gully Erosion/Soil Cover	Grood	*Minor areas tobe filled
I. Monitoring Wells (5)	f. Runoff, Siltation		
	g. Leachate	None	
a. Locks in place?	. Monitoring Wells (5)		
	a. Locks in place?	Yes	
b. Condition of Casing Good	b. Condition of Casing	Good	
c. Well ID Legible	c. Well ID Legible		
		1-	i and i a
5. Comments:	5. Comments:		

Date: October 2, 2015	-			
Inspected by: AI Brillin	nay			
Weather Conditions / Recent Pre	cipitation: <u>48</u> °, c.	loudy; no rain prev. 24 hrs		
Time: Started 10:00		(an/pm)		
Type of inspection: Windshiel	Site Walk	Other		
Site walk NW corner only				
inspected	Status/Condition	Comments		
1. Vehicular Access	good			
2. Entrance	<i>U</i>			
a. Gate/Chain	9000	* w. gate open for mowing		
3. Landfill Site/Cap Integrity		· · · · ·		
a. Vegetative Cover	good	- currently being mowed		
b. Standing Water on Cap	none	0 0		
c. Animal Disturbances	none			
d. Woody Vegetation	none			
e. Gully Erosion/Soil Cover	9000	minor areas to be filled after mouin		
f. Runoff, Siltation	nanl			
g. Leachate	none			
4. Monitoring Wells (5)				
a. Locks in place?	yes			
b. Condition of Casing	good	· · · · · · · · · · · · · · · · · · ·		
c. Well ID Legible	yes			
5. Comments:				
· currently being n	rowed			
U U				
· ·				
6. Description of Repairs/Remed				
		the cap to be repaired		
after mowi	no	T .		
	U	·		

Date: 25 Sep-	temper 20	015
	aney	
Weather Conditions / Recent Pre	cipitation: 77°, P	autly Cloudy, Calm
Time: Started 3',00	(am(pm) Completed	3', 22 (am/pm)
Type of inspection: Windshield	Site Walk	Other
Drove	Around Outs	ide
Inspected	Status/Condition	Comments
1. Vehicular Access	67002	
2. Entrance		
a. Gate/Chain	67002	
3. Landfill Site/Cap Integrity		•
a. Vegetative Cover	Good	up to 6' high *
b. Standing Water on Cap	- Croot Norp	
c. Animal Disturbances	Good None	
d. Woody Vegetation	ENone	
e. Gully Erosion/Soil Cover	None	Minor areas of Cap Previously NA
f. Runoff, Siltation	None	
g. Leachate	None	
4. Monitoring Wells (5)		
a. Locks in place?	Yes	
b. Condition of Casing	Good	
c. Well ID Legible	Yes	
5. Comments:	CINI	
* Veg. Mowin	& Sched W	ed for early October.
~		
6. Description of Repairs/Remedi	al Action needed:	
		· · · · · · · · · · · · · · · · · · ·

Date: September	18,2015					
	cillinger					
Weather Conditions / Recent Pre	Ŷ	14 70° no recentrain				
Time: Started 9:45						
Type of inspection: Windshield Site Walk Other						
drove around outside						
Inspected	Status/Condition	Comments				
1. Vehicular Access	good					
2. Entrance	0					
a. Gate/Chain	good					
3. Landfill Site/Cap Integrity	v	•				
a. Vegetative Cover	good	very up to 6 high *				
b. Standing Water on Cap	nore	0,				
c. Animal Disturbances	nono	· · · · · · · · · · · · · · · · · · ·				
d. Woody Vegetation	none					
e. Gully Erosion/Soil Cover	none	**				
f. Runoff, Siltation	none					
g. Leachate	nine	······································				
4. Monitoring Wells (5)						
a. Locks in place?	yes					
b. Condition of Casing	6000					
c. Well ID Legible yes						
0						
5. Comments:						
* mowing scheduled for late Sept/early Oct.						
0						
6. Description of Repairs/Remedi	al Action needed:	·				
* * minor repai	rs needed of	for areas off the cap.				

Date: 9-11-15					
Inspected by: Al Brillinger 73					
Weather Conditions / Recent Precipitation: Sunny 73° No recent rain					
Time: Started 11:05 (am/pm) Completed 11:30 (am/pm)					
Type of inspection: Windshield Site Walk Other					
Inspected	Status/Condition	Comments			
1. Vehicular Access	Good				
2. Entrance					
a. Gate/Chain	Good				
3. Landfill Site/Cap Integrity		•			
a. Vegetative Cover	9000	veg. up to 6' high (2)			
b. Standing Water on Cap					
c. Animal Disturbances	none				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	good	* OFF-CAP EROSION ()			
f. Runoff, Siltation	,				
g. Leachate					
4. Monitoring Wells (5)					
a. Locks in place?					
b. Condition of Casing					
c. Well ID Legible					
5. Comments:					
1) off-cup enosim noted also reported to USC by Brad Kline					
(OHARNG). Previously repaired small "channel" showing signs of					
settlement and/or untime					
6. Description of Repairs/Remedi	al Action needed:				
1) soil to be filled u	1) soil to be filled upon or just prior + completion of or				
just prior to mowing.					
(2) Mowing scheduled for late sept. / early Oct.					

Date: September 3 2015					
Inspected by: AI Brillinger					
Weather Conditions / Recent Precipitation: Sunny 80° no recent rain					
Time: Started (:00 (am/pm) Completed (:20 (am/pm))					
Type of inspection: Windshield Site Walk Other					
(drove around ou	tside of LUC -	Fence			
Inspected	Status/Condition	Comments			
1. Vehicular Access	good				
2. Entrance					
a. Gate/Chain	good	gates locked			
3. Landfill Site/Cap Integrity	0	•			
a. Vegetative Cover	avod	Veg. up to 6' high ()			
b. Standing Water on Cap	none				
c. Animal Disturbances	none				
d. Woody Vegetation	nene				
e. Gully Erosion/Soil Cover	nere				
f. Runoff, Siltation	none				
g. Leachate	none				
4. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	محح				
c. Well ID Legible	yes				
·	Ú.	· · · · · · · · · · · · · · · · · · ·			
5. Comments:					
• mowing scheduled for late Sept early oct.					
6. Description of Repairs/Remedial Action needed:					

Date: 8 - 28 - 2015					
Inspected by: Becky Haney					
Weather Conditions / Recent Precipitation: Swnny, 71°,					
Time: Started 11.38 (am/pm) Completed 11.54 (am/pm)					
Type of inspection: Windshield	-	Other			
		the Porimeter of LUCFonce			
Inspected	Status/Condition	Comments			
1. Vehicular Access	4000				
2. Entrance	0				
a. Gate/Chain	100%	Grater Closed and Locked			
3. Landfill Site/Cap Integrity	0				
a. Vegetative Cover	2002	yea-upto la high			
b. Standing Water on Cap	Novo				
c. Animal Disturbances	None				
d. Woody Vegetation	None				
e. Gully Erosion/Soil Cover	Nono				
f. Runoff, Siltation	Mano				
g. Leachate	Nore				
4. Monitoring Wells (5)					
a. Locks in place?	Ves				
b. Condition of Casing	Doop				
c. Well ID Legible	Yes				
5. Comments: N/A					
6. Description of Repairs/Remedial Action needed:					
NY A					

Date: August	Date: A latar					
Hugust	Fluguest 21, 2013					
Weather Conditions / Recent Precipitation: Sunny 60°, lightrain prev. 24 hrs.						
Time: Started 8:35	(an/pm) Completed	<u>පි: 5ට</u> (කිෆ්/pm)				
Type of inspection: Windshield Site Walk Other						
druve or around a	outside of Luc	fence				
inspected	Statue/Condition	Comments				
1. Vehicular Access	good					
2. Entrance	0					
a. Gate/Chain	good	bothquites closed & locked				
3. Landfill Site/Cap Integrity	U .					
a. Vegetative Cover	9000	Veg. up to 6' high				
b. Standing Water on Cap	none					
c. Animal Disturbances	nono					
d. Woody Vegetation	nene					
e. Gully Erosion/Soil Cover	nene					
f. Runoff, Siltation	neng					
g. Leachate	nene					
4. Monitoring Wells (5)						
a. Locks in place?	yes					
b. Condition of Casing	god					
c. Well ID Legible	yes					
	<u>v</u>					
5. Comments:						
6. Description of Repairs/Remedial Action needed:						

Date: Analog + 14 7	<u></u>				
7090S1 .1, 2					
Inspected by: AI Brillinger					
Weather Conditions / Recent Precipitation: Mostly sunny, 81°, no rain prev. 24 hrs.					
	(am/pm) Completed	12:25 (am/pm)			
Type of inspection: Windshield Site Walk Other					
(drove around	site outside of	LUC fence)			
inspected	Status/Condition	Comments			
1. Vehicular Access	good				
2. Entrance	5				
a. Gate/Chain	good	both gates locked			
3. Landfill Site/Cap Integrity	U	<u> </u>			
a. Vegetative Cover	good	veg. up to 5' high			
b. Standing Water on Cap	none	<i>b</i>			
c. Animal Disturbances	none				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	none				
f. Runoff, Siltation	none				
g. Leachate	none				
4. Monitoring Wells (5)					
a. Locks in place?	good				
b. Condition of Casing	good				
c. Well ID Legible	yes				
5. Comments:					
6. Description of Repairs/Remedial Action needed:					
		•			
Date: Quart 7 2	015				
----------------------------------------------------------------------------------------------------------------------------------	-------------------	---------------------------------------	--	--	--
1.09031 1, 2		· · · · · · · · · · · · · · · · · · ·			
nspected by: A1 15	Brillingen	1 729 4 -			
Weather Conditions / Recent Precipitation: Party cloudy 73° no recentrain Time: Started /2:00 (am/pm) Completed /2:20 (am/pm)					
	F '				
ype of inspection: Windshiel	d) Site Walk	Other			
Inspected	Status/Condition	Comments			
. Vehicular Access	9000				
. Entrance	Ŭ				
a. Gate/Chain	2000	both gates Locked			
. Landfill Site/Cap Integrity	0	both gates Locked			
a. Vegetative Cover	9000	Vey. up to ~ 5' high			
b. Standing Water on Cap	none				
c. Animal Disturbances	nono				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	nene				
f. Runoff, Siltation	nene				
g. Leachate	none				
. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	good				
c. Well ID Legible	yes				
	ð				
. Comments:					
, Connitionity.					
- Ministration vor constant in the start of the					
. Description of Repairs/Remed	al Action needed:				
	·				

ype of inspection: Windshie	id Site Walk	Other
Inspected	Status/Condition	Comments
. Vehicular Access	9000	
. Entrance		
a. Gate/Chain	good	East gate latch adjusted so that pad lock fits in latch to lock i
. Landfill Site/Cap Integrity		pad lock tits in laten to lock i
a. Vegetative Cover	good	Veg. up to 5' high
b. Standing Water on Cap	none	
c. Animal Disturbances	none	
d. Woody Vegetation	none	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	none	
g. Leachate	nine	
Monitoring Wells (5)		•
a. Locks in place?	yes	
b. Condition of Casing	aroad	
c. Well ID Legible	yes	
*	0	
Comments:		

Inspected by: <u>Al Brillinger</u> Weather Conditions / Recent Precipitation: partly sunny 84°, no recent precip Time: Started 2:00 (am/pril) Completed 2:20 (am/pril)				
Type of inspection: Windshield Site Walk Other				
inspected	Status/Condition	Comments		
. Vehicular Access	good			
2. Entrance				
a. Gate/Chain	east gate needs	chain for lock, west gate or		
. Landfill Site/Cap Integrity		7 0		
a. Vegetative Cover	good .	veg. up to 5' high		
b. Standing Water on Cap	none	0		
c. Animal Disturbances	none			
d. Woody Vegetation	none			
e. Gully Erosion/Soil Cover	nore			
f. Runoff, Siltation	none			
g. Leachate	none	· · · · · · · · · · · · · · · · · · ·		
. Monitoring Wells (5)	L			
a. Locks in place?	URS			
b. Condition of Casing	crood			
c. Well ID Legible	425			
		· · · · · · · · · · · · · · · · · · ·		
. Comments:				
. Description of Repairs/Remea	lial Action needed:			
		ck; lock doesn't fit		
in latch				

	Site Walk	Other
inspected	Status/Condition	Comments
. Vehicular Access	good	
. Entrance		
a. Gate/Chain	good	gates locked
Landfill Site/Cap Integrity)
a. Vegetative Cover	2000)	Veg. up to ~ 4' high
b. Standing Water on Cap	none	0.0
c. Animal Disturbances	none	
d. Woody Vegetation	none	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	none	
g. Leachate	non	
Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
b. Condition of Casing		nevisihle

Date:					
	•				
nspected by: AI Brill	inger				
Weather Conditions / Recent Precipitation: cloudy 66°F, recent rain					
Time: Started 10:10	(am/pm) Completed	<u>10:25 (am/pm)</u>			
Type of inspection: Windshield Site Walk Other					
inspected	Status/Condition	Comments			
1. Vehicular Access	good				
2. Entrance					
a. Gate/Chain	good	gates locked			
3. Landfill Site/Cap Integrity)			
a. Vegetative Cover	good	veg. up to 4' high			
b. Standing Water on Cap	none				
c. Animal Disturbances	none				
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	none				
f. Runoff, Siltation	none				
g. Leachate	none				
4. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	good				
c. Well ID Legible	yes				
	0				
5. Comments: fence inta	at				
er Tild Tild geförstattan och er er an er första första första genanna er an första första er er er er er er e					
5. Description of Repairs/Remed	al Action needed:				
		-			

Time: Started 10:15 (m/pm) Completed 10:45 Type of inspection: Windshield Site Walk Other					
Weather Conditions / Recent Precipitation: 66°, cloudy no cair Time: Started 10:15 (mppm) Completed 10:45 Type of inspection: Windshield Site Walk Other					
Fine: Started 10:15 (mpm) Completed 10:14 5 Type of inspection: Windshield Site Walk Other					
Type of inspection: Windshield Site Walk Other					
Inspected Status/Condition Cont I. Vehicular Access good	(an/pm)				
1. Vehicular Access good 2. Entrance a. Gate/Chain good a. Gate/Chain good gates loc 3. Landfill Site/Cap Integrity a. Vegetative Cover good gates loc b. Standing Water on Cap nume good gates up c. Animal Disturbances nume good gates up d. Woody Vegetation nume g. g. Gully Erosion/Soil Cover nume f. Runoff, Siltation nume g. Leachate nume g. 4. Monitoring Wells (5) a. Locks in place? y.cs y.cs b. Condition of Casing g.ood g.ood g. Well ID Legible 5. Comments:					
1. Vehicular Access good 2. Entrance a. Gate/Chain good a. Gate/Chain good gates low 3. Landfill Site/Cap Integrity a. Vegetative Cover good gates low b. Standing Water on Cap nune good gates up c. Animal Disturbances nune good gates up d. Woody Vegetation nune g. g. Gully Erosion/Soil Cover nune g. f. Runoff, Siltation nune g. Leachate nune g. 4. Monitoring Wells (5) a. Locks in place? y.cs y.cs b. Condition of Casing g.ood g.ood g. 5. Comments: 0 y.cs y.cs					
2. Entrance a. Gate/Chain good gates low 3. Landfill Site/Cap Integrity a. Vegetative Cover good grass up b. Standing Water on Cap nume c. Animal Disturbances nume d. Woody Vegetation nume e. Gully Erosion/Soil Cover nume f. Runoff, Siltation nume g. Leachate nume 4. Monitoring Wells (5) a. Locks in place? yes b. Condition of Casing grood c. Well ID Legible z yes	ments				
2. Entrance a. Gate/Chain good gates to 3. Landfill Site/Cap Integrity a. Vegetative Cover good gates to a. Vegetative Cover good gates up b. Standing Water on Cap none gates up c. Animal Disturbances none gates up d. Woody Vegetation none gates up e. Gully Erosion/Soil Cover none gates up f. Runoff, Siltation none gates up g. Leachate none gates up 4. Monitoring Wells (5) a. Locks in place? yes up b. Condition of Casing good good up 5. Comments: up up up					
3. Landfill Site/Cap Integrity 9000 9000 a. Vegetative Cover 9000 91005 91005 b. Standing Water on Cap none 9000 91005 91005 c. Animal Disturbances none 9000 91005 91005 91005 d. Woody Vegetation none 9000 91005 91005 91005 e. Gully Erosion/Soil Cover none 91005 91005 91005 f. Runoff, Siltation none 91005 91005 91005 g. Leachate none 91005 91005 91005 4. Monitoring Wells (5) 91005 91005 91005 a. Locks in place? 91005 91005 91005 5. Comments: 91005 91005 91005					
3. Landfill Site/Cap Integrity 0 a. Vegetative Cover good good grass up b. Standing Water on Cap nume c. Animal Disturbances nume d. Woody Vegetation nume e. Gully Erosion/Soil Cover nume f. Runoff, Siltation nume g. Leachate nume 4. Monitoring Wells (5) a. Locks in place? ycs ycs 5. Comments: 0	cked				
b. Standing Water on Cap none c. Animal Disturbances none d. Woody Vegetation none e. Gully Erosion/Soil Cover none f. Runoff, Siltation none g. Leachate none 4. Monitoring Wells (5) a. Locks in place? b. Condition of Casing g.ocd c. Well ID Legible z.ycs					
b. Standing Water on Cap none c. Animal Disturbances none d. Woody Vegetation none e. Gully Erosion/Soil Cover none f. Runoff, Siltation none g. Leachate none 4. Monitoring Wells (5) a. Locks in place? b. Condition of Casing g.ocd c. Well ID Legible z ycs 5. Comments:	to 4'high				
d. Woody Vegetation nunl e. Gully Erosion/Soil Cover nunl f. Runoff, Siltation nunl g. Leachate nunl 4. Monitoring Wells (5)	0				
d. Woody Vegetation nonl e. Gully Erosion/Soil Cover nonl f. Runoff, Siltation nonl g. Leachate nonl 4. Monitoring Wells (5)					
f. Runoff, Siltation none g. Leachate none 4. Monitoring Wells (5)					
g. Leachate nonl 4. Monitoring Wells (5)					
4. Monitoring Wells (5) a. Locks in place? yes b. Condition of Casing gyood c. Well ID Legible gyos 5. Comments:	·				
a. Locks in place? yes b. Condition of Casing grood c. Well ID Legible zyes 0 0	·				
b. Condition of Casing q. 500 c. Well ID Legible 5. Comments:					
c. Well ID Legible					
5. Comments:					
	· · · · · · · · · · · · · · · · · · ·				
6. Description of Rensins/Remedial Action needed.					
6. Description of Renairs/Remodial Action needed.					
6. Description of Renairs/Remodial Action needed					
	<u></u>				
	<u> </u>				

Date: June 26,20	15			
Inspected by: AI Br:				
Weather Conditions / Recent Pre		- 77°F, rain earlier in week		
Time: Started 12:55	(an/pm) Completed	• •		
Type of inspection: Windshiel	· ·	Other		
inspected	Status/Condition	Comments		
I. Vehicular Access	9020			
2. Entrance	0			
a. Gate/Chain	locked			
3. Landfill Site/Cap Integrity				
a. Vegetative Cover	9000	veg. cover up to 4' high		
b. Standing Water on Cap	none			
c. Animal Disturbances	none			
d. Woody Vegetation	none			
e. Gully Erosion/Soil Cover	none	s.		
f. Runoff, Siltation	none			
g. Leachate	nome			
. Monitoring Wells (5)		:		
a. Locks in place?	yes			
b. Condition of Casing	goal			
c. Well ID Legible	yes			
	.9			
5. Comments: fence	in good cerre	dition as observed from.		
	Ramsdell f	d		
		·····		
5. Description of Repairs/Remed	ial Action needed:			

inspected	Status/Condition	
Valiantes Asses		Comments
Vehicular Access	- <u>3</u> 000	
Entrance		
a. Gate/Chain	good	both gates locked
Landfill Site/Cap Integrity		
a. Vegetative Cover	goad	Veg 73' high
b. Standing Water on Cap	none	
c. Animal Disturbances	nore	
1. Woody Vegetation	none	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	none	
z. Leachate	none	
Monitoring Wells (5)		1
a. Locks in place?	yes	
b. Condition of Casing	yes good	
c. Well ID Legible	yes	

ype of inspection: Windshie	eid Site Walk	Other
inspected	Status/Condition	Comments
Vehicular Access	good	
Entrance		
a. Gate/Chain	gates locked	
Landfill Site/Cap Integrity	0	
a. Vegetative Cover	good	Veg 1-1' high
b. Standing Water on Cap	none	- U
c. Animal Disturbances	none	
d. Woody Vegetation	nine	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	nore	
g. Leachate	nene	
Monitoring Wells (5)		:
a. Locks in place?	yes	
b. Condition of Casing	- 485 - 3000	
c. Well ID Legible	yes	
	0	

Date: June 5, 2015					
nspected by: AI Bril					
Weather Conditions / Recent Pr	ecipitation: Sunny	73°, no measurable rain since \$513			
Time: Started 11:00	v	11:20 (@m/pm)			
Type of inspection: Windshie	d Site Walk	Other			
inspected	Status/Condition	Comments			
I. Vehicular Access	Good				
2. Entrance	0				
a. Gate/Chain	both gates locked)			
3. Landfill Site/Cap Integrity					
a. Vegetative Cover	good	grass > 2' high			
b. Standing Water on Cap	none observed	v			
c. Animal Disturbances	none observed				
d. Woody Vegetation	good				
e. Gully Erosion/Soil Cover	none observed				
f. Runoff, Siltation	none observed				
g. Leachate	nine observed				
4. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	good				
c. Well ID Legible	yes				
5. Comments:					
	· · ·				

5. Description of Repairs/Reme	ial Action needed:				
1.					

ime: Started 2:05 ype of inspection: Windshie	-	, heavy rain previous n 220 (am/pm) Other
Inspected	Status/Condition	Comments
. Vehicular Access	good	
. Entrance	0	
a. Gate/Chain	both gates locked	
Landfill Site/Cap Integrity	, , , , , , , , , , , , , , , , , , ,	
a. Vegetative Cover	9000 q	nass > 1' high
b. Standing Water on Cap	none observed	U
c. Animal Disturbances	none observed	
d. Woody Vegetation	nonl	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	none observed	
g. Leachate	nume observed	
. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	arond	
	yes	
c. Well ID Legible	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
c. Well ID Legible	Ģ.	
c. Well ID Legible	~	
	······································	

Date: May 21, 2015					
Inspected by: AI Brillin	60.0		1		
Weather Conditions / Recent Precipitation: 60° ແບບປາງ					
Time: Started 16:00		npieted 16:1			
Type of inspection: Windshiek	i Site	Walk	Other		
Inspected	Status/Cond	ition	Comments		
1. Vehicular Access	good				
2. Entrance	0				
a. Gate/Chain	locked				
3. Landfill Site/Cap Integrity					
a. Vegetative Cover	good				
b. Standing Water on Cap	none		•		
c. Animal Disturbances	none		1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -		
d. Woody Vegetation	none				
e. Gully Erosion/Soil Cover	none				
f. Runoff, Siltation	none				
g. Leachate	none				
4. Monitoring Wells (5)					
a. Locks in place?	yes				
b. Condition of Casing	900d				
c. Well ID Legible	yes				
	V.				
5. Comments:					
6. Description of Repairs/Remed	al Action neede	d:			
······································					

Date: Ma la 2 - 15		
1104 13 2013		1997 - Million State, and an annual state and a state of the
spected by: AI Br	•	······································
Veather Conditions / Rece		light rain
ime: Started 10.2	30 (am/pm) Completed	11:20 (am/pm)
ype of inspection: Wind	dshield Şite Walk	Other
* a/so ce	onducted Annual Luc	inspection
inspected	Status/Condition	Comments
I. Vehicular Access	good	
2. Entrance	U	
a. Gate/Chain	9000)	gates locked
3. Landfill Site/Cap Integrit		U
a. Vegetative Cover	good	
b. Standing Water on Cap	0	
c. Animal Disturbances	neme	
d. Woody Vegetation	none	
e. Gully Erosion/Soil Co	ver none	
f. Runoff, Siltation	nore	
g. Leachate	nonl	
4. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
	Ô	
. Comments:		

5. Description of Repairs/R	Competing Action needed.	
······································		

Date: May 8 2015		
ispected by: AI Brill		
•	ince minitation: 78° c	
/eather Conditions / Recent Pro		10:50 (Mpm)
ime: Started 10:30		
ype of inspection: Windshiel	d Site Walk	Other
la cara de d		0
Inspected	Status/Condition	Comments
. Vehicular Access	9000	· · · · · · · · · · · · · · · · · · ·
. Entrance		
a. Gate/Chain	9000	gateslocked
. Landfill Site/Cap Integrity	-	
a. Vegetative Cover	9000	
b. Standing Water on Cap	none	
c. Animal Disturbances	none	
d. Woody Vegetation	none	
e. Gully Erosion/Soil Cover	none	
f. Runoff, Siltation	none	
g. Leachate	none	
Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	423	
Τ		
. Comments:		
	·	
Description of Description	lial Action model	
Description of Repairs/Remed	Hai Action necoca:	
		· · · · · · · · · · · · · · · · · · ·

•

Inspected Vehicular Access Entrance	Site Walk Statue/Condition	<u>Other</u> Other Comments
Inspected Vehicular Access	Statue/Condition	
. Vehicular Access . Entrance		Comments
. Vehicular Access . Entrance	- 300d	
a Gate/Chain		·
	good	
3. Landfill Site/Cap Integrity	0	
a. Vegetative Cover	good re	paired areas have been seeded
b. Standing Water on Cap	none noted	
c. Animal Disturbances	none noted	
d. Woody Vegetation	good	
e. Gully Erosion/Soil Cover	-	ight depressions (2) NW part of L
f. Runoff, Siltation	none noted	•
g. Leachate	none noted	
. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	

 $\overline{}$

Date: April 23, 2015			
Inspected by: AI Brill,	ngen		
Weather Conditions / Recent Precipitation: light snow / rain cloudy, 37"			
Time: Started 10:35		10:50 (am/pm)	
Type of inspection: Windshield	Site Walk	Other	
		·	
Inspected	Status/Condition	Comments	
1. Vehicular Access	good		
2. Entrance	5		
a. Gate/Chain	good	gates locked : in good shape	
3. Landfill Site/Cap Integrity	0	0	
a. Vegetative Cover	good	-¥<	
b. Standing Water on Cap	none		
c. Animal Disturbances	none		
d. Woody Vegetation	none		
e. Gully Erosion/Soil Cover	good		
f. Runoff, Siltation	good		
g. Leachate	good		
4. Monitoring Wells (5)			
a. Locks in place?	yes		
b. Condition of Casing	good		
c. Well ID Legible	yes		
	0		
5. Comments:			
	······································		
6. Description of Repairs/Remedi	al Action needed:		
* areas repaired in 1	lan. 2015 to b	e seeded	
	·		

ype of inspection: Windshie	d Site Walk	Other pantial site wa outside fence
Inspected	Status/Condition	Comments
. Vehicular Access	3000	
. Entrance	0	······································
a. Gate/Chain	locked good	
. Landfill Site/Cap Integrity	, 0	
a. Vegetative Cover	9000	
b. Standing Water on Cap	none observed	
c. Animal Disturbances	nene observed	
d. Woody Vegetation	good	
e. Gully Erosion/Soil Cover	good	
f. Runoff, Siltation	9000	
g. Leachate	Good	
. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	avod	
c. Well ID Legible	yes	
. Comments:	<u>,</u>	

Date: Apr; 1 10, 2015		
inspected by:	· · · · · · · · · · · · · · · · · · ·	
Weather Conditions / Recent Pre	cipitation: 57° R	ain (heavy at times) previous Z days
Time: Started ILIO		
Type of inspection: Windshiek		(partial) Other
Inspected	Status/Condition	Comments
1. Vehicular Access	good	
2. Entrance	2	
a. Gate/Chain	gates locked	
3. Landfill Site/Cap Integrity	5	
a. Vegetative Cover	9000	
b. Standing Water on Cap	none noted	
c. Animal Disturbances	none	
d. Woody Vegetation	good	
e. Gully Erosion/Soil Cover	goai	minor settling in repaired area *
f. Runoff, Siltation	good	2
g. Leachate	none noted	
4. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
	U	
5. Comments:		
* trough-shaped onear	epaired in Jan	2015 Showing continued settlement
<u>с</u> , ,	-	0
6. Description of Repairs/Remed	al Action needed:	
* areas repaired wil so;	l in Jan 2015 no	red seeding.
		U

Date: April 2 2015	· · · · · · · · · · · · · · · · · · ·			
11/11 2,2010	1.			
Inspected by: AI Brillinger				
Weather Conditions / Recent Precipitation: 60° partly sunny Time: Started 10:55 (am/pm) Completed 11:30 (am/pm)				
Time: Started 10:55	(am/pm) Completed	(11:30 (an/pm)		
Type of inspection: Windshield	Site Walk	Other outside perimeter fence		
tenco				
Inspected	Status/Condition	Comments		
1. Vehicular Access	good			
2. Entrance	9000	•		
a. Gate/Chain	both gates locked			
3. Landfill Site/Cap Integrity	good			
a. Vegetative Cover	9000			
b. Standing Water on Cap	9000			
c. Animal Disturbances	good			
d. Woody Vegetation	good			
e. Gully Erosion/Soil Cover	good			
f. Runoff, Siltation	good			
g. Leachate	9,000			
4. Monitoring Wells (5)	0			
a. Locks in place?	yes			
b. Condition of Casing	3000			
c. Well ID Legible	yes			
	<u>0</u>			
5. Comments:				
	· · · · · · · · · · · · · · · · · · ·			
6. Description of Repairs/Remed	ial Action needed:			
3 repaired a rea		Seeded.		
s repuised a conse	June 10 me			
L		•		

	d Site Walk	Other
Inspected	Status/Condition	Comments
. Vehicular Access	good	
. Entrance	good	
a. Gate/Chain	bothquites locke)
Landfill Site/Cap Integrity	U U	
a. Vegetative Cover	good	
b. Standing Water on Cap	good	
c. Animal Disturbances	good	
d. Woody Vegetation	good	
e. Gully Erosion/Soil Cover	good	*****
f. Runoff, Siltation	9000	
g. Leachate	2000	19 - M Martin
Monitoring Wells (5)	0	
a. Locks in place?	yes	
b. Condition of Casing	9000	Anna
c. Well ID Legible	Jes	
	0	
Comments:		
		······································
Description of Pennirs/Penne	tial Action needed.	
Description of Repairs/Remed		2015 mand Soul
- incus iepui	()	2015 need Seeding

Date: March 20 2015				
Inspected by: Al Brillingen				
Weather Conditions / Recent Precipitation: Cloudy light mist 37°				
Weather Conditions / Recent Precipitation: Cloudy Light mist 37°Time:Started11:10(am/pm)Completed11:30(am/pm)				
Type of inspection: Windshield Site Walk Other				
Inspected	Status/Condition	Comments		
1. Vehicular Access	good			
2. Entrance	ິ 			
a. Gate/Chain	good			
3. Landfill Site/Cap Integrity	0			
a. Vegetative Cover	good			
b. Standing Water on Cap	none observed			
c. Animal Disturbances	none observed			
d. Woody Vegetation	none observed	······································		
e. Gully Erosion/Soil Cover	none observed	* repaired areas need seeding		
f. Runoff, Siltation	none observed	0		
g. Leachate	none observed			
4. Monitoring Wells (5)				
a. Locks in place?	yes			
b. Condition of Casing	good			
c. Well ID Legible	ives			
	0			
5. Comments: Landfillin	ow free of sr	out cover.		
* Jack Madved Portage	o conducted qu	arterly inspection on 3/16		
(AB: BK accompanied	him) - no viol	ations noted		
6. Description of Repairs/Remed	ial Action needed:			
* The areas that n	sere repaired in	January 2015 need to be		
Seeded		0		
** The top wire of the eastern fence has been repaired				

Date: March 13, 201	5	· · · · · · · · · · · · · · · · · · ·
Inspected by: AI Brillin		
Weather Conditions / Recent Pre		50°
Time: Started 12:15	(am/pf) Completed	, <u>/2:3≲ (am/jûn)</u>
Type of inspection: Windshiek	<	Other
inspected	Status/Condition	Comments
1. Vehicular Access	Good	
2. Entrance		
a. Gate/Chain	Good	
3. Landfill Site/Cap Integrity		
a. Vegetative Cover	not visible	mostly (790%) snow covered
b. Standing Water on Cap	notvisible	
c. Animal Disturbances	not visible	
d. Woody Vegetation	not visible	
e. Gully Erosion/Soil Cover	not visible	
f. Runoff, Siltation	not visible	
g. Leachate	not visible	Y .
4. Monitoring Wells (5)		
a. Locks in place?	goodyes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
5. Comments:		
	·	
6. Description of Repairs/Remed		
* Eastern 5-wire fe	no top wire br	roken

Neather Conditions / Recent Pro	cipitation 19°F	>1' Snow cover	
Time: Started 12:00 (am/pm) Completed 12:00 (am/pm)			
Type of inspection: Windshield Site Walk Other			
			Inspected
. Vehicular Access	fair	road is plowed, gates are not plowed	
. Entrance			
a. Gate/Chain	locked	gate snowed in	
. Landfill Site/Cap Integrity			
a. Vegetative Cover	not visibb	landfill is snow-covered : frozon	
b. Standing Water on Cap	not visible	N. Contraction of the second s	
c. Animal Disturbances	not visible	at at is 10	
d. Woody Vegetation	nat visible		
e. Gully Erosion/Soil Cover	not visibb	η, τι ··· ··	
f. Runoff, Siltation	not visible	1 ¹ 1 ¹ 1 ¹ 0	
g. Leachate	not visible	ь ¹¹ г. ⁰	
. Monitoring Wells (5)			
a. Locks in place?	yes		
b. Condition of Casing	god		
c. Well ID Legible	yes	l	
	U .		
. Comments:			
. Description of Repairs/Remed	ial Action needed:		
· Eastern f	fence top wire	of 3-wire high tensile	
		scution	

Date: Fridoy, Feb. 27, :	2015	
Inspected by: Al Brillin		
Weather Conditions / Recent Pre		cent snowfall, (snow cover 71')
Time: Started 10:40	•	(1:00 (am/pm)
Type of inspection: Windshiel	>	Other
Inspected	Status/Condition	Comments
1. Vehicular Access	fair	Ramsdell Rd not placed ' 4- wheel drive and
2. Entrance		. ,
a. Gate/Chain	good	
3. Landfill Site/Cap Integrity		landfill covered w/ snow (>1')
a. Vegetative Cover	vone observed	+ frozen
b. Standing Water on Cap	none obsalled	h
c. Animal Disturbances	none observed	4
d. Woody Vegetation	none visible	11
e. Gully Erosion/Soil Cover	none visible	}1
f. Runoff, Siltation	none visible	11
g. Leachate	none visible	k
4. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
	• •	·
5. Comments: landfilli	s snow-covered	and fromen. Snow cover
is greate	er than 1' H	rick.
	<u></u>	
6. Description of Repairs/Remed		
•		fence broken in 1 spot
(previousl	(noted)	
	-	·

Date: Friday February 20, 2015		
Date: Friday February 20, 2015 Inspected by: Al Brillinger		
Weather Conditions / Recent Precipitation: O°F, previously -24 earlier today, cavered		
	(am/pm) Completed	
Type of inspection: Windshiek	Site Walk	Other
inspected	Status/Condition	Comments
1. Vehicular Access	poor	Ramsdell Rd. not placed
2. Entrance	•	
a. Gate/Chain	good	
3. Landfill Site/Cap Integrity	-	
a. Vegetative Cover	not visible	landfill is snow-covered 71' dep
b. Standing Water on Cap	н	
c. Animal Disturbances	11	
d. Woody Vegetation	11	
e. Gully Erosion/Soil Cover	ł.	
f. Runoff, Siltation	11	
g. Leachate	11	
4. Monitoring Wells (5)		
a. Locks in place?	yes	
b. Condition of Casing	good	
c. Well ID Legible	yes	
	0	
5. Comments: . landfill i	s frozen : sne	w-covered
' Snaw cove	•	
6. Description of Repairs/Remed	ial Action needed:	
· top wire of e	astern 5-wire	fence is still broken
in 1 location.		

Date: February 13,2015			
Inspected by: AI Brillinger			
Weather Conditions / Recent Precipitation: 10°, site is snow-covered & frozen			
Time: Started <u>/2:35 (am/pm)</u> Completed <u>/2:50 (am/pm)</u>			
Type of inspection: Windshiek	Site Walk	Other	
Inspected	Status/Condition	Comments	
1. Vehicular Access	fair	Ramsdell Rd. is plowed, gate access is not	
2. Entrance		,	
a. Gate/Chain	9000		
3. Landfill Site/Cap Integrity			
a. Vegetative Cover	not visible	site is snow-covered	
b. Standing Water on Cap	not visible	h. 4	
c. Animal Disturbances	not visible	n 1	
d. Woody Vegetation	3000		
e. Gully Erosion/Soil Cover	not visible	site is snow-covered	
f. Runoff, Siltation	not visible	~ ~ U	
g. Leachate	not visible		
4. Monitoring Wells (5)			
a. Locks in place?	uas		
b. Condition of Casing	good		
c. Well ID Legible	yes		
5. Comments:	<u></u>		
6. Description of Repairs/Remedial Action needed:			
· top wire of eastern 5-wire fence still broken			
	(1 spot)		

Date: Feb. 5, 2015			
Inspected by: AI Brillinger			
1 · · ·	Weather Conditions / Recent Precipitation: 10° recent snowfall		
Time: Started 11:00	(am)pm) Completed		
Type of inspection: Windshield			
Inspected	Status/Condition	Comments	
1. Vehicular Access		Ramsdell Rd. not plowed-	
2. Entrance		difficult/ impassable to	
a. Gate/Chain	locked-good	vehicles	
3. Landfill Site/Cap Integrity	U ·		
a. Vegetative Cover	Snow covered	* frozen	
b. Standing Water on Cap	۱(5 v	
c. Animal Disturbances	10	۶	
d. Woody Vegetation	u .	Y	
e. Gully Erosion/Soil Cover	۱۲	v	
f. Runoff, Siltation	١	17	
g. Leachate	11	<i>۱</i> ۲	
4. Monitoring Wells (5)			
a. Locks in place?	yes		
b. Condition of Casing	9000		
c. Well ID Legible	yes	· · · · · · · · · · · · · · · · · · ·	
	6		
5. Comments:			
· Ramsdell Rd not plaved. >12" snow on road:			
walked Ramsdell Rd from west gate to east gate			
surveyed fence à landfill w/ binoculars			
6. Description of Repairs/Remedial Action needed:			
• nore			
· ·			
L <u></u>			

Date: January 30,2015			
Inspected by: AI Brillinger			
Weather Conditions / Recent Precipitation: 17", light snow (~2-3 snow in last 24 hrs)			
Time: Started 12:40 (am/pm) Completed 13:00 (am/pm)			
Type of inspection: Windshield		Other	
Inspected	Status/Condition	Comments	
1. Vehicular Access	9000		
2. Entrance			
a. Gate/Chain	gate locked		
3. Landfill Site/Cap Integrity			
a. Vegetative Cover	none visible		
b. Standing Water on Cap	none visible		
c. Animal Disturbances	none visible		
d. Woody Vegetation	none		
e. Gully Erosion/Soil Cover	none visible		
f. Runoff, Siltation	none visible		
g. Leachate	nue visible		
4. Monitoring Wells (5)			
a. Locks in place?	yes		
b. Condition of Casing	gead		
c. Well ID Legible	yes		
	u		
5. Comments: RQL 15 5n	sw covered and	frozen.	
· Broken top wire of eastern WC bandary fence			
, B			
6. Description of Repairs/Remedial Action needed:			
none except fence wire break			

Date: January 23,2015				
Date: January 23,2015 Inspected by: Al Brillinger				
Weather Conditions / Recent Precipitation: 25°, cloudy ~3" snow on 1/2				
Time: Started 10:50	0 1			
Type of inspection: Windshield	Site Walk	Other		
		· · · · · · · · · · · · · · · · · · ·		
Inspected	Status/Condition	Comments		
1. Vehicular Access	apod			
2. Entrance	5			
a. Gate/Chain	good			
3. Landfill Site/Cap Integrity	snow covered			
a. Vegetative Cover	11			
b. Standing Water on Cap	u.			
c. Animal Disturbances	11			
d. Woody Vegetation	11			
e. Gully Erosion/Soil Cover	See comment below			
f. Runoff, Siltation	See comment below - fromen, snow cove	bon		
g. Leachate	.vt			
4. Monitoring Wells (5)				
a. Locks in place?	yes			
b. Condition of Casing	ged			
c. Well ID Legible	yes			
5. Comments:				
·····				
6. Description of Repairs/Remedial Action needed:				
* 3 meas previously described, were repaired on 1/21				
~ 6.5 cuilds soil placed in 3 areas				
** sign-in box j	nstalled 1/15	·		

Date: January 16, 2015			
Inspected by: Raberren Hanes			
Weather Conditions / Recent Precipitation:			
Time: Started <u></u> दे.दे।	(am(pm) Completed	2:33 (am/pm)	
Type of inspection: Windshield	$\overline{}$	Other	
Inspected	Status/Condition	Comments	
1. Vehicular Access	61002	Bates Locked	
2. Entrance			
a. Gate/Chain	Grood	Gates Locked	
3. Landfill Site/Cap Integrity			
a. Vegetative Cover	Snow Covered		
b. Standing Water on Cap	Snow Covered		
c. Animal Disturbances	None		
d. Woody Vegetation	None		
e. Gully Erosion/Soil Cover	Previously Notel	Areas	
f. Runoff, Siltation	None		
g. Leachate	None		
4. Monitoring Wells (5)			
a. Locks in place?	Yes		
b. Condition of Casing	Groop		
c. Well ID Legible	Ves		
	\ 		
5. Comments: Lawfill	5. Comments: Landfill Cap is Snow Covered.		
6. Description of Repairs/Remedial Action needed:			
3 avers previously kloted.			

~

Date: January 9, 2015			
Inspected by: A.Brillinger			
Weather Conditions / Recent Precipitation: 18°, recent 3.4" snow			
Time: Started <u>اع، عه</u>			
Type of inspection: Windshiek		Other	
Inspected	Status/Condition	Comments	
1. Vehicular Access	9000	gates locked	
2. Entrance		5	
a. Gate/Chain	good	gates locked	
3. Landfill Site/Cap Integrity	5	9	
a. Vegetative Cover	snow covered		
b. Standing Water on Cap	snowcovered		
c. Animal Disturbances	none noted		
d. Woody Vegetation	none observed		
e. Gully Erosion/Soil Cover	previously noted a	ineas	
f. Runoff, Siltation	none observed		
g. Leachate	none observed		
4. Monitoring Wells (5)			
a. Locks in place?	yes	•	
b. Condition of Casing	9000		
c. Well ID Legible	yes		
5. Comments: landfill is	5. Comments: landfill is snow covered		
6. Description of Repairs/Remedial Action needed:			
· 3 areas previously noted			

Date: 30 December 2014			
Inspected by: Al Brillinger - Brad Kline (OHARNG)			
Weather Conditions / Recent Precipitation: partly Sunny 20°			
Time: Started 1:15 (am/pm) Completed 1:45 (am/pm)			
Site Walk	offence line		
	of tenke line		
Status/Condition	Comments		
good			
locked-good			
<u> </u>			
good			
none observed			
none observed			
none observed			
good	+* previously noted areas		
none observed	-		
none observed			
Yes	· · · · · · · · · · · · · · · · · · ·		
good	·		
Yes			
•			
5. Comments: Broken top wire on eastern LUC fence has been			
repaired			
6. Description of Repairs/Remedial Action needed:			
*+ previously noted areas will be filled with approved fill in			
January 2015			
ν			
	C. Brad Kline (c cipitation: partly s (am/gm) Completed site Walk Status/Condition good locked-good locked-good none observed none observed		

Date: December 24, 2014			
Inspected by: Al Brillinger			
Weather Conditions / Recent Precipitation: 52° light mist			
Time: Started <u>역:00 (am)</u> pm) Completed <u>역:15</u> (am/pm)			
Type of inspection: Windshield	D Site Walk	Other	
Inspected	Status/Condition	Comments	
1. Vehicular Access	Good		
2. Entrance			
a. Gate/Chain	locked-good		
3. Landfill Site/Cap Integrity	0	*	
a. Vegetative Cover	good		
b. Standing Water on Cap	none observed		
c. Animal Disturbances	none observed		
d. Woody Vegetation	none observed		
e. Gully Erosion/Soil Cover	good	** previously noted areas	
f. Runoff, Siltation	none observed		
g. Leachate	none observed		
4. Monitoring Wells (5)		· · · · · · · · · · · · · · · · · · ·	
a. Locks in place?	yes		
b. Condition of Casing	god		
c. Well ID Legible	wes		
	0		
5. Comments: * Eastern	fence line top	wire broken in 1 location	
~ 1/2 way between N : 5 fence line			
	\	· · · · · · · · · · · · · · · · · · ·	
6. Description of Repairs/Remedial Action needed:			
** previously noted area will be filled when ground conditions are			
not as soft			

Date: December 19,2014				
Inspected by: AI Brillinge	Inspected by: Al Brillinger & Rebecca Haney			
Weather Conditions / Recent Precipitation: درات کی کی ا				
Time: Started 2:15 (am/off) Completed 2:45 (am/off)				
Type of inspection: Windshield	Site Walk	Other		
Inspected	Status/Condition	Comments		
1. Vehicular Access	- 300d			
2. Entrance				
a. Gate/Chain	<u>q00d</u>	both gates locked		
3. Landfill Site/Cap Integrity		**		
a. Vegetative Cover				
b. Standing Water on Cap	none observed			
c. Animal Disturbances	none observed			
d. Woody Vegetation	පුගට	none observed on cap.		
e. Gully Erosion/Soil Cover	good	* previously noted eroded areas		
f. Runoff, Siltation	none noted			
g. Leachate	none observed			
4. Monitoring Wells (5)				
a. Locks in place?	yes	•		
b. Condition of Casing	9000			
c. Well ID Legible	yes			
	~			
5. Comments: ** fence int	5. Comments: ** fence infact except for broken top wire (1 location)			
on east side of fenced area.				
6. Description of Repairs/Remedial Action needed:				
* eroded areas (3) to be filled when approved fill dirt is available.				
L				

Date: December 12, 2014				
Inspected by: Al Brillinger				
-	Weather Conditions / Recent Precipitation: 30° cloudy, no recent precip.			
Time: Started 10:కం				
Type of inspection: (Windshield	Site Walk	Other		
Inspected	Status/Condition	Comments		
1. Vehicular Access	good			
2. Entrance				
a. Gate/Chain	9000	both gates locked		
3. Landfill Site/Cap Integrity	· •	3		
a. Vegetative Cover	good			
b. Standing Water on Cap	none observed			
c. Animal Disturbances	none observed			
d. Woody Vegetation	good	none observed in cap area		
e. Gully Erosion/Soil Cover	good	* previously noted eroded areas		
f. Runoff, Siltation	none noted	•		
g. Leachate	none observed			
4. Monitoring Wells (5)				
a. Locks in place?	yes	•		
b. Condition of Casing	good			
c. Well ID Legible	yes			
U				
5. Comments:				
** fence intact				
6. Description of Repairs/Remedial Action needed:				
* eroded areas (3) to be filled when approved fill dirt is				
available				

Date: 5 Dec 2014		
Inspected by: Briting Albrillinger Weather Conditions / Recent Precipitation: Over cast/ Mist 36		
Type of inspection: Windshiel	d Site Walk	Other
Inspected	Status/Condition	Comments
1. Vehicular Access		
2. Entrance		
a. Gate/Chain	Locked	
3. Landfill Site/Cap Integrity		
a. Vegetative Cover	6000	
b. Standing Water on Cap	None	
c. Animal Disturbances	None	
d. Woody Vegetation	None	
e. Gully Erosion/Soil Cover	Previously Notes	<u>\</u>
f. Runoff, Siltation	None	
g. Leachate	None	
4. Monitoring Wells (5)		
a. Locks in place?	Yes	
b. Condition of Casing	Good	
c. Well ID Legible	1 Yes	·
	•	
5. Comments:		······································
·		······································
6. Description of Repairs/Remedial Action needed:		
	· · · · · · · · · · · · · · · · · · ·	
Appendix B

RQL Soil Repair Memo

Memo

То:	Tim Morgan, State Environmental Supervisor	
From:	Al Brillinger, Program Manager, Vista Sciences Corporation	ABB
cc:	Katie Tait (OHARNG), Kevin Sedlak (NGB), Quyet C. La (US	SACE)
Date:	January 23, 2015	
Re:	Camp Ravenna Ramsdell Quarry Landfill Cap Repairs	

Vista Sciences Corporation (VSC) filled 3 areas at the Ramsdell Quarry Landfill (RQL) with clean, approved soil on January 21, 2015. A drawing of the RQL and the repaired areas is attached to this memo.

Two (2) of the areas (labeled "A" and "B" on the attached figure) were located on the Ramsdell Quarry Landfill cap, and consisted of shallow (<1 ft. deep and <2 feet in diameter) depressions. The third location (labelled "C" on attached figure) was located north of the landfill cap in the northwest section of the fenced-in area of the RQL. The approximate dimensions of the depression were 20 ft. long x 1.5 ft. deep by 2-3 ft. wide.

The soil used to repair the depressions and holes at the RQL was obtained from Patrick Excavating and Materials, 5839 State Route 5, Ravenna, Ohio and was delivered to the site in a 20 yard load. The soil was quarried from an area at Patrick's quarry that had been reserved for use at Camp Ravenna. The reserved area had been sampled and tested by Leidos for use on the Camp Ravenna B1200 project. The soil was tested for Metals, Explosives, Semi-Volatile Organic Compounds (SVOCs), Pesticides, Polychlorinated biphenyls (PCBs) and Volatile Organic Compounds (VOCs). The test results for the soil are in the approved "Field Change Request (FCR) FCR-RVAAPB1200-002" prepared for Leidos' B1200 project at Camp Ravenna, and are attached to this memo.

Approximately 6.5 cubic yards of soil was used to repair the 3 areas at the RQL. A rubber-tracked T750-model Bobcat Compact Loader was used to transport and place the soil at the repaired areas. Orange marker stakes were placed at the repaired areas for reference purposes and the areas will be monitored in the upcoming months for changes.

The remaining approximately 13.5 cubic yards of soil was placed with the loader in a stockpile located west of the west gate, south of Ramsdell Road at the location labeled "D" on the attached figure. The stockpiled soil will be seeded in the Spring with a seed mix approved for use at Camp Ravenna. A sign will be placed adjacent to the stockpiled soil that reads "Clean soil for Environmental Use only. Please contact Brad Kline (614) 336-4918) or Katie Tait (614) 336-6136 at the OHARNG Environmental Office for further information."

Attachments: Ramsdell Quarry Landfill Repairs Map Field Change Request (FCR) FCR-RVAAPPB1200-002



FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-002

FCR NO. FCR-RVAAPB1200-002 DATE INITIATED 10/24/14 PROJECT Building 1200 and Anchor Test Area Remedial Action DATE INITIATED 10/24/14 CONTRACT NO. GSA Contract No. W912QR-04-D-0028 Delivery Order No. 0001
REQUESTOR IDENTIFICATION NAME Jed Thomas ORGANIZATION Leidos PHONE <u>330-405-5802</u>
TITLE Deputy Project Manager SIGNATURE
BASELINE IDENTIFICATION
BASELINE(S) AFFECTED Cost Scope Milestone Method of Accomplishment
AFFECTED DOCUMENT (TITLE, NUMBER AND SECTION) <u>Remedial Design for Soil, Sediment, and Surface Water at RVAAP-13 Building 1200 and RVAAP-48</u> <u>Anchor Test Area (Section 8.1)</u>
DESCRIPTION OF CHANGE: Section 8.1 of the referenced Remedial Design indicates the a previous backfill source will be utilized for backfill once the cleanup goals are attained during the soil excavation at the Building 1200 and Anchor Test Area AOCs. However, the backfill source specified in the Remedial Design is no longer available for use. Accordingly, Leidos identified and sampled a new backfill source at Patrick Excavating and Trucking at 5839 State Route 5, Ravenna, Ohio.
On September 11, 2014, the staged backfill source at Patrick Excavating and Trucking was sampled. One ISM sample (B12bf-060M-0014M-SO) was collected and analyzed for RVAAP full suite parameters except VOCs. One discrete sample (B12bf-060-0015-SO) was collected and analyzed for VOCs.
The results of the analyses are attached to this FCR. Data was screened using the RVAAP surface soil background values and Resident Receptor cleanup goals (CUGs) at 10-6 risk. The EPA Regional Screening Level for resident for soil (10-6 risk) (May 2014) was used if an analyte did not have a CUG. A brief summary of the results are presented below.
 All analyte concentrations were below either the surface background values or the screening level. All pesticide, PCB, explosive, and VOC analyte concentrations were either not detectable or had estimated concentrations. All SVOC analyte concentrations were either not detectable or were below the screening level, with the exception of benzo(a)pyrene at a concentration of 0.11 mg/kg. The concentration of here (a) and (b) and (b)
benzo(a)pyrene (0.11 mg/kg) is less than half the Resident Farmer CUG at 10-5 of 0.221 mg/kg. Additional details of the sampling activities will be presented in the Remedial Action Report.
The justification for this FCR is to obtain approval of staged soil for use as backfill after the Building 1200 and Anchor Test Areas meet the cleanup goals. As noted, the source used previously and cited in the Remedial Design is no longer available for use. Having acceptable backfill available for the remedial action is a critical component of completing this remedial action.
IMPACT OF NOT IMPLEMENTING REQUEST:
The impact of not implementing request is there will not be soil backfill available at the time the cleanup goals are attained during the soil removal activities. This would result in having open excavations that may result in ponding of storm water, safety hazards, and will delay the overall site restoration component of this remedial action.

FIELD CHANGE REQUEST (FCR) FCR-RVAAPB1200-002

COST ESTIMATE (\$) 0	ESTIMATOR SIGN PHONE <u>NA</u>	ATURE <u>No</u> DATE <u>NA</u>	cost impact to USACE	
PREVIOUS FCR AFFECTED		ES, FCR NO.	_	
USACE COTR	mark W.T	uilter .	DATE/0/29/20/ DATE//5//14/	<u>4</u>
OHIO EPA PROJECT MANA	GERA	the	DATE 1/5/14	_
LEIDOS H&S MANGER SIGNA		NA	DATE <u>NA</u>	-
		\sim		

Sample Id Date	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060- 0015-SO 09/11/14	B12bf-060M- 0014-SO 09/11/14
Analyte	-1				09/11/14	07/11/14
		<u>і </u>	etals	<u>I</u>		1
Aluminum	7429-90-5	17700	7380	REC	NR	6400
Antimony	7440-36-0	0.96		RFC	NR	0.13 J
Arsenic	7440-38-2	15.4	0.425		NR	7.4
Barium	7440-38-2	88.4	1413		NR	7.4 46 J
Beryllium	7440-39-3	0.88		RSL	NR	0.38 J
Cadmium	7440-43-9	0.00		RFC	NR	<0.35 UJ
Calcium	7440-43-9	15800	1000000		NR	1700
Chromium	7440-70-2	17.4	8147		NR	15 J
Cobalt	7440-47-3	17.4		RFC	NR	6.4
and the second se	7440-48-4	10.4		RFC	NR	7.4
Copper	7439-89-6		180000			
Iron		23100 26.1		RDA RSL	NR NR	14000
Lead Magnesium	7439-92-1 7439-95-4	3030	400		NR NR	17
	7439-95-4	1450		RFC	NR	590
Manganese Nickel	7440-02-0	21.1		RFC	NR	11 J
Potassium	7440-02-0	927	1000000		NR	370
Selenium				RDA RSL	the second s	
Silver	7782-49-2	1.4			NR	1.4
Sodium	7440-22-4	0		RFC	NR	0.038 J
Thallium	7440-23-5		1000000		NR	71 J
	7440-28-0	0	0.612		NR	<0.35 UJ
Vanadium	7440-62-2	31.1		RFC	NR	15 22 J
Zinc	7440-66-6	61.8 Organics	2321	KFC	NR	33 J
1267	100.05.4	Organics	- Explosives	DDG	hm	1-0.05 11
1,3,5-Trinitrobenzene	99-35-4			RFC	NR	<0.05 U
1,3-Dinitrobenzene	99-65-0		0.765	RFC RFC	NR	<0.05 U
2,4,6-Trinitrotoluene	118-96-7				NR	<0.05 U
2,4-Dinitrotoluene	121-14-2		0.753		NR	<0.05 U
2,6-Dinitrotoluene	606-20-2		0.769		NR	<0.05 U
2-Amino-4,6-Dinitrotoluene	35572-78-2			RFC	NR	<0.05 U
2-Nitrotoluene	88-72-2			RFC	NR	<0.05 U
3-Nitrotoluene	99-08-1			RSL	NR	<0.05 U
4-Amino-2,6-Dinitrotoluene	19406-51-0			RFC	NR	<0.05 U
4-Nitrotoluene	99-99-0			RFC	NR	<0.05 U
HMX	2691-41-0			RFC	NR	<0.05 U
Nitrobenzene	98-95-3			RSL	NR	<0.05 U
Nitrocellulose	9004-70-0		18000000		NR	<1.8 U
Nitroglycerin	55-63-0			RFC	NR	<0.25 U
Nitroguanidine	556-88-7			RSL	NR	<0.039 U
PETN	78-11-5			RSL	NR	0.04 J
RDX	121-82-4			RFC	NR	<0.05 U
Tetryl	479-45-8	L		RSL	NR	<0.05 U
		Organics -	Semivolatile			
1,2,4-Trichlorobenzene	120-82-1		5.8	RSL	NR	<0.043 U

Building 1200/Anchor Test Area Backfill Sample Results

Sample Id	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source		B12bf-060M- 0014-SO	
Date Analyte	-				09/11/14	09/11/14	
	105 50 1	1	100	DOI			
1,2-Dichlorobenzene	95-50-1		180	RSL	NR	<0.086 U	
1,3-Dichlorobenzene	541-73-1			NR	NR	<0.086 U	
1,4-Dichlorobenzene	106-46-7			RSL	NR	<0.086 U	
2,4,5-Trichlorophenol	95-95-4			RSL	NR	<0.17 U	
2,4,6-Trichlorophenol	88-06-2			RSL	NR	<0.086 UJ	
2,4-Dichlorophenol	120-83-2			RSL	NR	<0.17 U	
2,4-Dimethylphenol	105-67-9			RSL	NR	<0.17 U	
2,4-Dinitrophenol	51-28-5			RSL	NR	<0.17 U	
2-Chloronaphthalene	91-58-7			RSL	NR	<0.0043 U	
2-Chlorophenol	95-57-8			RSL	NR	<0.086 U	
2-Methyl-4,6-dinitrophenol	534-52-1	ļ,	and the second	RSL	NR	<0.086 U	
2-Methylnaphthalene	91-57-6			RFC	NR	0.011 J	
2-Methylphenol	95-48-7			RSL	NR	<0.17 U	
2-Nitrobenzenamine	88-74-4		61		NR	<0.086 U	
2-Nitrophenol	88-75-5			NR	NR	<0.086 U	
3+4-Methylphenol	15831-10-4			RSL	NR	<0.17 U	
3,3'-Dichlorobenzidine	91-94-1		1.2	RSL	NR	<0.17 U	
3-Nitrobenzenamine	99-09-2			NR	NR	<0.17 U	
4-Bromophenyl phenyl ether	101-55-3			NR	NR	<0.086 U	
4-Chloro-3-methylphenol	59-50-7			RSL	NR	<0.17 U	
4-Chlorobenzenamine	106-47-8		2.7		NR	<0.17 U	
4-Chlorophenyl phenyl ether	7005-72-3			NR	NR	<0.086 U	
4-Nitrobenzenamine	100-01-6			RSL	NR	<0.17 U	
4-Nitrophenol	100-02-7			RFC	NR	<0.17 U	
Acenaphthene	83-32-9	L		RSL	NR	<0.0085 U	
Acenaphthylene	208-96-8			RSL	NR	<0.0043 U	
Anthracene	120-12-7		and the second	RSL	NR	0.013 J	
Benz(a)anthracene	56-55-3		0.221	RFA	NR	0.084	
Benzenemethanol	100-51-6.		620	RSL	NR	<0.17 U	
Benzo(a)pyrene	50-32-8		0.022	RFA	NR	0.11 *	
Benzo(b)fluoranthene	205-99-2		0.221	RFA	NR	0.16	
Benzo(ghi)perylene	191-24-2		170	RSL	NR	0.12	
Benzo(k)fluoranthene	207-08-9	1	2.21	RFA	NR	0.086	
Benzoic acid	65-85-0		25000	the second s	NR	0.2 J	
Bis(2-chloroethoxy)methane	111-91-1			RFC	NR	<0.17 U	
Bis(2-chloroethyl) ether	111-44-4	1		RSL	NR	<0.0085 U	
Bis(2-chloroisopropyl) ether	108-60-1			RSL	NR	<0.086 U	
Bis(2-ethylhexyl)phthalate	117-81-7			RSL	NR	<0.086 U	
Butyl benzyl phthalate	85-68-7			RSL	NR	<0.086 U	
Carbazole	86-74-8	1		RFC	NR	<0.086 U	
Chrysene	218-01-9			RFA	NR	0.11	
Di-n-butyl phthalate	84-74-2			RSL	NR	<0.086 U	
Di-n-octylphthalate	117-84-0		the second s	RSL	NR	<0.086 U	
Dibenz(a,h)anthracene	53-70-3	1		RFA	NR	<0.0085 U	

,

Building 1200/Anchor Test Area Backfill Sample Results

-

Sample Id	CAS Number	Background Criteria	Screening Level(HQ=.1, Risk=1E-6)	Screening Level Source	B12bf-060- 0015-SO	B12bf-060M- 0014-SO
Date	-				09/11/14	09/11/14
Analyte						
Dibenzofuran	132-64-9		15.3	RFC	NR	<0.0085 U
Diethyl phthalate	84-66-2		4900	RSL	NR	<0.086 U
Dimethyl phthalate	131-11-3			NR	NR	<0.086 U
Fluoranthene	206-44-0		163	RFC	NR	0.2
Fluorene	86-73-7		243	RFC	NR	<0.0085 U
Hexachlorobenzene	118-74-1		0.33	RSL	NR	<0.0085 U
Hexachlorobutadiene	87-68-3		6.2	RSL	NR	<0.086 U
Hexachlorocyclopentadiene	77-47-4	T	37	RSL	NR	<0.086 U
Hexachloroethane	67-72-1		4.3	RSL	NR	<0.086 U
Indeno(1,2,3-cd)pyrene	193-39-5		0.221	RFA	NR	0.096
Isophorone	78-59-1			RSL	NR	<0.086 U
N-Nitroso-di-n-propylamine	621-64-7		the second se	RFC	NR	<0.086 U
N-Nitrosodiphenylamine	86-30-6			RSL	NR	<0.086 U
Naphthalene	91-20-3			RFC	NR	0.0093 J
Pentachlorophenol	87-86-5			RFA	NR	<0.086 U
Phenanthrene	85-01-8			RSL	NR	0.066
Phenol	108-95-2		1800		NR	<0.086 U
Pyrene	129-00-0		the second se	RFC	NR	0.16
		Organics - 1	Pesticide/PCB			
4,4'-DDD	72-54-8			RSL	NR	<0.0017 U
4,4'-DDE	72-55-9			RFC	NR	0.0011 J
4,4'-DDT	50-29-3			RSL	NR	<0.0017 U
Aldrin	309-00-2		0.053		NR	<0.0017 U
Dieldrin	60-57-1		0.056		NR	<0.0017 U
Endosulfan I	959-98-8			RSL	NR	<0.0017 U
Endosulfan II	33213-65-9			RSL	NR	<0.0017 U
Endosulfan sulfate	1031-07-8			RSL	NR	<0.0017 U
Endrin	72-20-8			RFC	NR	<0.0017 U
Endrin aldehyde	7421-93-4			RSL	NR	<0.0017 U
Endrin ketone	53494-70-5			RSL	NR	<0.0017 U
Heptachlor	76-44-8		0.198		NR	<0.0017 U
Heptachlor epoxide	1024-57-3		0.098		NR	<0.0017 U
Lindane	58-89-9			RSL	NR	0.003 J
Methoxychlor	72-43-5			RSL	NR	<0.0033 U
Toxaphene	8001-35-2			RSL	NR	<0.034 U
alpha-BHC	319-84-6		0.085		NR	0.0049 J
alpha-Chlordane	5103-71-9			RSL	NR	<0.0017 U
beta-BHC	319-85-7		0.496		NR	0.0023 J
delta-BHC	319-86-8		0.190	NR	NR	<0.0023 J
gamma-Chlordane	5103-74-2		1.8	RSL	NR	0.0019 J
Barrana Chioreanie	0100 112	Organic	s - Volatile			1000000
1,1,1-Trichloroethane	71-55-6			RSL	<0.0012 U	NR
1,1,2,2-Tetrachloroethane	79-34-5			RSL	<0.0012 UJ	NR
1,1,2-Trichloroethane	79-00-5	1		RSL	<0.0012 U	NR

			Screening			
	CAS	Background		Screening	B12bf-060-	B12bf-060M-
Sample Id	Number Criteria Risk=1E-6) Level Source		Level Source	0015-SO	0014-SO	
Date					09/11/14	09/11/14
Analyte						
1,1-Dichloroethane	75-34-3		3.6	RSL	<0.0012 U	NR
1,1-Dichloroethene	75-35-4		23	RSL	<0.0012 U	NR
1,2-Dibromoethane	106-93-4		0.036	RSL	<0.0012 UJ	NR
1,2-Dichloroethane	107-06-2		0.46	RSL	<0.0012 U	NR
1,2-Dichloroethene	540-59-0			NR	<0.0024 U	NR
1,2-Dichloropropane	78-87-5		1	RSL	<0.0024 U	NR
2-Butanone	78-93-3		2700	RSL	<0.0047 U	NR
2-Hexanone	591-78-6		20	RSL	<0.0012 U	NR
4-Methyl-2-pentanone	108-10-1		530	RSL	<0.0012 U	NR
Acetone	67-64-1		6100	RSL	<0.018 UJ	NR.
Benzene	71-43-2		1.2	RSL	<0.00059 UJ	NR
Bromochloromethane	74-97-5		15	RSL	<0.0024 U	NR
Bromodichloromethane	75-27-4		0.29	RSL	<0.00059 UJ	NR
Bromoform	75-25-2		67	RSL	<0.0012 U	NR
Bromomethane	74-83-9		0.68	RSL	<0.0012 U	NR
Carbon disulfide	75-15-0		77	RSL	<0.0012 U	NR
Carbon tetrachloride	56-23-5		0.65	RSL	<0.0012 U	NR
Chlorobenzene	108-90-7		28	RSL	<0.0012 UJ	NR
Chloroethane	75-00-3		1400	RSL	<0.0012 U	NR
Chloroform	67-66-3		0.32	RSL	<0.00059 U	NR
Chloromethane	74-87-3		11	RSL	<0.00059 U	NR
Dibromochloromethane	124-48-1		0.73	RSL	<0.0012 UJ	NR
Ethylbenzene	100-41-4		5.8	RSL	<0.00059 UJ	NR
Methylene chloride	75-09-2		35	RSL	<0.0024 U	NR
Styrene	100-42-5		600	RSL	<0.00059 UJ	NR
Tetrachloroethene	127-18-4		8.1	RSL	<0.0012 UJ	NR
Toluene	108-88-3		490	RSL	<0.00059 UJ	NR
Trichloroethene	79-01-6		0.41	RSL	<0.0012 UJ	NR
Vinyl chloride	75-01-4		0.059	RSL	<0.0012 U	NR
Xylenes, total	1330-20-7		58	RSL	<0.0024 U	NR
cis-1,3-Dichloropropene	10061-01-5		1.8	RSL	<0.0012 UJ	NR
trans-1,3-Dichloropropene	10061-02-6		1.8	RSL	<0.0012 U	NR

*- Exceeds screening level

NR- not reported

U-not detected

UJ-not detected, reporting limit estimated

J- estimated

• . ^

RFC-Resident Farmer Child

RFA-Resident Farmer Adult

RDA-Recommended dail allowance for nutrient

RSL-EPA Regional Screening Level for resident for soil (May 2014)

Appendix C

Quarterly RQL Inspection Reports

STATE OF OHIO ADJUTANT GENERAL'S DEPARTMENT CAMP RAVENNA JOINT MILITARY TRAINING CENTER 1438 State Route 534 SW

Newton Falls, OH 44444

29 September 2015

Environmental Office

Bob Princic, Environmental Supervisor Ohio Environmental Protection Agency Division of Emergency and Remedial Response 2110 East Aurora Road Twinsburg, Ohio 44087-1924

Reference: Closed Ramsdell Quarry Landfill Status Report

Dear Mr. Princic,

On September 10, 2015, the subject Landfill was inspected by Portage County General Health District (see attached inspection report).

The Camp Ravenna Joint Military Training Center Support Services Contractor, Vista Sciences Corporation, conducts weekly inspections of the conditions of the landfill cap. No deficiencies have been detected since January 1, 2006. These inspection reports are available for your viewing at the Vista office located at Camp Ravenna Environmental Office.

If you have any further questions or require further clarification concerning this subject, please feel free to contact the undersigned at (614) 336-6568 or <u>timothy.m.morgan.nfg@mail.mil</u> at any time. The OHARNG is committed to environmental excellence and compliance and will work with the Ohio EPA should any issues ensue. Thank you for your time and consideration in this matter.

Sincerely,

Timothy M. Morgan Fort Ohio Environmental Supervisor

cc: Mark Leeper Katie Tait Kevin Sedlak Timothy Morgan Rod Beals

PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT

705 Oakwood Street Suite 208 Ravenna, Ohio 44266 Phone: 330-296-9919 Fax: 330-297-3597 E-mail: pchd@portageco.com



Joseph J. Diorio, MPH, MS, RS Health Commissioner Web: www.co.portage.oh.us/dept/healthdepartment

September 16, 2015

Al Brillinger Vista Sciences Corp. 1438 St. Rt. 534 SW Newton Falls, OH 44444

RE: Ramsdell Quarry Inspection

Dear Mr. Brillinger:

On September 10, 2015, I conducted a comprehensive inspection at Ramsdell Quarry. The weather was clear, about 80° F and pleasant. The slopes of the quarry are well vegetated and there were no serious issues. Brad Kline did point out a small erosion issue at the northwest corner near the pond, which will be taken care of.

No violations of Post Closure Rules were noted. Thank you for your cooperation and efforts.

If you have any questions, you can contact me at this office weekday mornings between 8:00 a.m. and 10:00 a.m. at (330) 296-9919 Ext. 116 or email at jmadved@portageco.com.

Sincerely,

Torbel

Jack Madved, R.S.

JM:maa

cc: Portage County Commissioners Bill Steiner, Director of Portage County Solid Waste Management Colum McKenna, Northeast District of OEPA

Enclosure

Fa Fa He Oh Ott	address <u>Raveno</u> Date 9 - 16 - 1	ell Quar a Arsca 5 Cline Madvid	Time Time Portage
Fa He Oh Ott	acility Brad P ealth District Tack hio EPA	S Cline Madved	
He Oh Ott	ealth District July	Cline Madved	-Portage
Oh	hio EPA	Madved	- Portage
	her		· · · · · · · · · · · · · · · · · · ·
RI I		• .	
		equired	Other
Coll Pie clos	lumn to denote compliance statu ease mark the N/A box if not app sed municipal solid waste landfil	 Marking the box in licable to this location 	following regulations? Please mark the box in the appropria the NO column indicates that a violation has been noted. This checklist is not all inclusice of regulations applicable
- Y N	N N/A 3745-27-14 Post closure c	are of MSW Landfills	Y N N/A (5) Monitoring and reporting requirements of OA(
	(A) Post-closure care activit (1) Leachate management, management, explosive gas monitoring, ground water mo	surface water extraction and	3745-27-10, 3745-27-12, 3745-76 (6) Annual report (7) Record keeping
T	(2) Integrity of cap system (3) Repair leachate outbreak		(D) Facility access Provide access to facility for Ohio EPA and local
X	(4) Quarterly inspections-rep 15 days		health department inspections
	ments: Since // erosio un the pond.	, (ssue	at north west corner
		Covir - r	is issues to aport-
5	unny - 80°F		
	Tuck Madrid rint Name of Inspector Completing F		9 Mocheel 9-10-15 Signature Date

STATE OF OHIO ADJUTANT GENERAL'S DEPARTMENT CAMP RAVENNA JOINT MILITARY TRAINING CENTER 1438 State Route 534 SW Newton Falls, OH 44444

23 June 2015

Environmental Office

Rod Beals, Environmental Supervisor Ohio Environmental Protection Agency Division of Emergency and Remedial Response 2110 East Aurora Road Twinsburg, Ohio 44087-1924

Reference: Closed Ramsdell Quarry Landfill Status Report

Dear Mr. Beals,

On June 15, 2015, the subject Landfill was inspected by Portage County General Health District (see attached inspection report).

The Camp Ravenna Joint Military Training Center Support Services Contractor, Vista Sciences Corporation, conducts weekly inspections of the conditions of the landfill cap. No deficiencies have been detected since January 1, 2006. These inspection reports are available for your viewing at the Vista office located at Camp Ravenna Environmental Office.

If you have any further questions or require further clarification concerning this subject, please feel free to contact the undersigned at (614) 336-6568 or <u>timothy.m.morgan.nfg@mail.mil</u> at any time. The OHARNG is committed to environmental excellence and compliance and will work with the Ohio EPA should any issues ensue. Thank you for your time and consideration in this matter.

Sincerely,

Timothy M. Morgan Fort Ohio Environmental Supervisor

cc: Mark Leeper Katie Tait Kevin Sedlak Timothy Morgan

PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT

705 Oakwood Street Suite 208 Ravenna, Ohio 44266 Phone: 330-296-9919 Fax: 330-297-3597 E-mail: pchd@portageco.com



DuWayne O. Porter, M.P.H., R.S. Health Commissioner Web: www.co.portage.oh.us/dept/healthdepartment

June 16, 2015

Al Brillinger Vista Sciences Corp. 1438 St. Rt. 534 SW Newton Falls, OH 44444

RE: Ramsdell Quarry Inspection

Dear Mr. Brillinger:

On June 15, 2015, I conducted a comprehensive inspection at Ramsdell Quarry. I was accompanied by Brad Kline, environmental technician. The weather was cloudy, 82° F and very humid. The thick vegetation on the slope is protecting the slope and there were no erosion issues.

No violations of Post Closure Rules were noted. Thank you for your cooperation.

If you have any questions, you can contact me at this office weekday mornings between 8:00 a.m. and 10:00 a.m. at (330) 296-9919 Ext. 116 or email at jmadved@portageco.com.

Sincerely, J. Nachar

Jack Madved, R.S.

JM:maa

cc: Portage County Commissioners Bill Steiner, Director of Portage County Solid Waste Management Colum McKenna, Northeast District of OEPA

Enclosure

	Ohio PEPA
'	a years and maying forward

Closed MSW Landfill Inspection Checklist

				40 years and musicas forward	-							
	F	aci	lity N	ame Rem	sdell Qu	a 11-1						
	A	ddr	ess	6-15-	15	. /					· •	
	D	ate)			•	T	ime			•	
	i.	isp	ectio	n Representatives		ever i						
	F	acil	ity	Brad	12 line	61	-1 -	- 3	56	49.18		
	H	eal	th Dis	strict Day	4 Mad	ved.	•	P	v.t	a 6 8 -		
	Ohio EPA											
	0	the	r							•	· .	
	Iŋ	Sige	cijor	NUTER PERM	Reason tor inspec	SIGNED AND						
		X	Com	orehensive	Required	- 📋 Ot	her					
	Ē		Focu	sed	Re-Inspection	n						
	ls	s th	e abc	ove site being ope	rated in complianc	e with the fol	low	ing ı	egul	ations? Please mark the	box in the appropriate	
•••	P	oluı Iea	mn to se m	denote complian ark the N/A box if	ce status. Marking not applicable to th	the box in the	ie N This	O c che	olum	n indicates that a violation to a second the second s	n has been noted. gulations applicable to	
~	cl	lose	ed mu	unicipal solid was	e landfills.							
20	Y	N	N/A				Y	N	N/A			
`. . ·	ļ		-	(A) Post-closure ca	losure care of MSW	/ Landfills		1.		(5) Monitoring and reporti 3745-27-10, 3745-27-12,		
· .				,	igement, surface wate					(6) Annual report		
				management, expl	osive gas extraction a	and	\vdash			(7) Record keeping		
		_			water monitoring sys	stem	-			(D) Facility access		
		-		(2) Integrity of cap (3) Repair leachate	-		/			Provide access to facility t	or Ohio EPA and local	
		~			ctions-report to Ohio	EPA within	-			health department inspect	ions	
	.		<u>.</u>	15 days	· · · · · · · · · · · · · · · · · · ·					• • • • • • • • • • • • • • • • • • •		
			nents	しっし	colution	S ino	<i>f</i>	d				
•		-	M	ehory ral	is have	not	ç	~	p	acted the	slope-	
	•		Th	is show	s youd	Q /3 U	i-d	2	r C0	ver and	soili	
	- Henny rains have not impacted the slope- This shows yourd ground cover and soil . protection:											
			/	•	• .					· · ·	· .	
	İ		-()		(C) 0 5		, ,		/	0		
()	U	٦Ç	in H	er Clo-d's	82°F	; hig	6		16.	nidity		
			J	Madrel		Q.		n	70	deal	· . ·	
		Pr	v	ame of Inspector Co					7 Signa	iture	Date	
			· 1/20	• •								

STATE OF OHIO ADJUTANT GENERAL'S DEPARTMENT CAMP RAVENNA JOINT MILITARY TRAINING CENTER 1438 State Route 534 SW Newton Falls, OH 44444

24 March 2015

Environmental Office

Rod Beals, Environmental Supervisor Ohio Environmental Protection Agency Division of Emergency and Remedial Response 2110 East Aurora Road Twinsburg, Ohio 44087-1924

Reference: Closed Ramsdell Quarry Landfill Status Report

Dear Mr. Beals,

On March 16, 2015, the subject Landfill was inspected by Portage County General Health District (see attached inspection report).

The Camp Ravenna Joint Military Training Center Support Services Contractor, Vista Sciences Corporation, conducts weekly inspections of the conditions of the landfill cap. No deficiencies have been detected since January 1, 2006. These inspection reports are available for your viewing at the Vista office located at Camp Ravenna Environmental Office.

If you have any further questions or require further clarification concerning this subject, please feel free to contact the undersigned at (614) 336-6568 or <u>timothy.m.morgan.nfg@mail.mil</u> at any time. The OHARNG is committed to environmental excellence and compliance and will work with the Ohio EPA should any issues ensue. Thank you for your time and consideration in this matter.

Sincerely,

Timothy M. Morgan Fort Ohio Environmental Supervisor

cc: Mark Leeper Katie Tait Kevin Sedlak Timothy Morgan

PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT

705 Oakwood Street Suite 208 Ravenna, Ohio 44266 Phone: 330-296-9919 Fax: 330-297-3597 E-mail: pchd@portageco.com



DuWayne O. Porter, M.P.H., R.S. Health Commissioner Web: www.co.portage.oh.us/dept/healthdepartment

March 17, 2015

Al Brillinger Vista Sciences Corp. 1438 St. Rt. 534 SW Newton Falls, OH 44444

RE: Ramsdell Quarry Inspection

Dear Mr. Brillinger:

On March 16, 2015, I conducted a comprehensive inspection at Ramsdell Quarry. I was accompanied by you and Brad Kline, environmental technician. The weather was sunny and 53°F with snow still on the slopes. We discussed the break in the perimeter fence and the filling in of erosion on the northwest corner and small holes on the slope.

No violations of Post Closure Rules were noted. Thank you for your cooperation.

If you have any questions, you can contact me at this office weekday mornings between 8:00 a.m. and 10:00 a.m. at (330) 296-9919 Ext. 116 or email at jmadved@portageco.com.

Sincerely,

Maded

Jack Madved, R.S.

JM:maa

cc: Portage County Commissioners

Enclosure

		Ohio EPA	·	CI	ose	d I	NSV	V Landfill Inspection Checklist	
. Fa	cility N	ame Ru	nsdell G	Duarry					
Ad	dress								
Da	te 🧖	3-16-	15		Ti	me			
XUS									
Fac	cility	R		Л	/		1	// _	Stray and States
·	alth Dis	strict \sim	d Kline	l'			Sri	llinger	
<u> </u>	io EPA	<u> </u>	10 Madre	il	·	•		·	
Oth	· · · ·	· · ·							
						يني. منابع	2 2011		
0		prehensive	Required		her				
	Focu	sed	Re-Inspection	۱ <u> </u>					
clo		inicipal solid was			IY	_	N/A	it is not all inclusice of regulations appli	
· · · ·	. <u>I.a.</u>	3745-27-14 Post	closure care of MSW	Landfills	Ļ				
		(A) Post-closure						(5) Monitoring and reporting requirements 3745-27-10, 3745-27-12, 3745-76	OFOAC
·		(1) Leachate mar	agement, surface wate	er ·				(6) Annual report	•
			plosive gas extraction a d water monitoring sys					(7) Record keeping	
		(2) Integrity of ca	o system		·			(D) Facility access	
		(3) Repair leacha	te outbreaks		.		•	Provide access to facility for Ohio EPA an health department inspections	d local
		(4) Quarterly insp 15 days	ections-report to Ohio I	EPA within	\vdash				
Com	nments	Same	small 1	Concens		ar	e.	filled w/ soil -	
	To	early	for green in	5. for		5 2	:1	used for repairs.	•
			in Indians.					•	
		•						·	
				· .					
5	vunn	4 - 53°	F , 5	6=22	01	~	Ħ	ie ground	· · · ·
		J. Mac			5	2.	•	Taded 3-16	
	Print N	ame of Inspector (completing Form				Sign	ature Date	;

STATE OF OHIO ADJUTANT GENERAL'S DEPARTMENT CAMP RAVENNA JOINT MILITARY TRAINING CENTER

1438 State Route 534 SW Newton Falls, OH 44444

06 January 2015

Environmental Office

Nancy Zikmanis, Environmental Supervisor Ohio Environmental Protection Agency Division of Emergency and Remedial Response 2110 East Aurora Road Twinsburg, Ohio 44087-1924

Reference: Closed Ramsdell Quarry Landfill Status Report

Dear Ms. Zikmanis,

On December 29, 2014, the subject Landfill was inspected by Portage County General Health District (see attached inspection report).

The Camp Ravenna Joint Military Training Center Support Services Contractor, Vista Sciences Corporation, conducts weekly inspections of the conditions of the landfill cap. No deficiencies have been detected since January 1, 2006. These inspection reports are available for your viewing at the Vista office located at Camp Ravenna Environmental Office.

If you have any further questions or require further clarification concerning this subject, please feel free to contact the undersigned at (614) 336-6568 or <u>timothy.m.morgan.nfg@mail.mil</u> at any time. The OHARNG is committed to environmental excellence and compliance and will work with the Ohio EPA should any issues ensue. Thank you for your time and consideration in this matter.

Sincerely,

Timothy M. Morgan Fort Ohio Environmental Supervisor

cc: Mark Leeper Katie Tait Kevin Sedlak Timothy Morgan

PORTAGE COUNTY COMBINED GENERAL HEALTH DISTRICT

705 Oakwood Street Suite 208 Ravenna, Ohio 44266 Phone: 330-296-9919 Fax: 330-297-3597 E-mail: pchd@portageco.com



DuWayne O. Porter, M.P.H., R.S. Health Commissioner Web: www.co.portage.oh.us/dept/healthdepartment

December 30, 2014

Al Brillinger Vista Sciences Corp. Camp Ravenna 1438 St. Rt. 534 SW Newton Falls, OH 44444

RE: Ramsdell Quarry

Dear Sir:

On December 29, 2014, I conducted a comprehensive inspection at Ramsdell Quarry. I was accompanied by Brad Kline, environmental technician. The weather was cloudy and 35° F.

No violations of Post Closure Rules were noted. Thank you for your cooperation.

If you have any questions, you can contact me at this office weekday mornings between 8:00 a.m. and 10:00 a.m. at (330) 296-9919 Ext. 116 or email at jmadved@portageco.com.

Sincerely, Macher

Jack Madved, R.S.

JM:df

Enclosure

		Ohio EPA		Clo	ose	d N	ISV	V Landfill Inspection	Checklist
	Facility N	ame R	ansile 11.	Cyu		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			· · · · · · · · · · · · · · · · · · ·
	Address		· · · · · · · · · · · · · · · · · · ·			1			
	Date	12-29-	[~]		Ti	me			
	Inspection	n Representative							
	Facility	B.	rod Eline						
	Health Dis	strict Ju	ik Mådre	d.					
	Ohio EPA								
	Other	<i>.</i> .			,				
		vivpet sed	Reason for his pection	☐ Oth	ner				
	[
•••	column to Please m	denote compliar	ice status. Marking the not applicable to this lo	box in the	e N() co	lum	ations? Please mark the n indicates that a violation t is not all inclusice of re	on has been noted.
	Y N N/A				Y	N	N/A		
`		3745-27-14 Post (A) Post-closure c	closure care of MSW Lar are activities	dfills				(5) Monitoring and reporti 3745-27-10, 3745-27-12,	
• .			agement, surface water				?	(6) Annual report	
			losive gas extraction and I water monitoring system					(7) Record keeping	•
		(2) Integrity of cap	system		·			(D) Facility access	
		(3) Repair leachat	e outbreaks		1			Provide access to facility f health department inspect	
	1 1 1	(4) Quarterly inspe 15 days	ctions-report to Ohio EPA	within .	1		J		
	Comments	: Weather	- 350 =	, Clo		γ		no: snow	at the
	A 8 pond	eros.a	attention !	S B J	n	Ŀ Ŀ		shall hol	es an
	A s' erosion will at the NW corner at the pond needs attention some small holes an the cap need to be Filled - no loss of cap integrity. New Fence installed abound. The								
	integ. Iandb	anty.	/UL ~ + e		•	ι	~	Talleck U.V.C	
	•	- Malve ame of Inspector C			9	7.	Signa	Marked	12-29-19 Date

Updated: 4/2013

Appendix D

RQL Access Logs

Sign In/Out Sheet for Ramsdell Quarry Landfill – Please sign in and out when entering and exiting the Ramsdell Quarry Landfill.
Please also note what activities were performed and what areas of the AOC were accessed.

Name	Date	Time In	Time Out	Description of Activities Performed (i.e., mowing, gw sampling, etc)	Areas Accessed (please choose and check)
Al Brillinger - VSC	9-11-15	1170	11:30	Weekly inspection	Groundwater monitoring well Landfill cap
GARY, B.	10-1-19	× 1110	4:00 Pm	manny	Quarry bottom Groundwater monitoring well Landfill cap
GARY, B.	10-2,15	-8:00	4:00	2.1	 Quarry bottom Groundwater monitoring well Landfill cap
Al Brillingr	10.2.15	10:00	10:15	Weekly inspection - check on maving ops	 Quarry bottom Groundwater monitoring well Landfill cap
GARY. B	10.511	800-	4:30 PM	maning	 Quarry bottom Groundwater monitoring well æLandfill cap
GARY. B	10 4 15	8.00	4: 70 72	moning	 Quarry bottom Groundwater monitoring well Landfill cap
GARY . B.	10.7.15	10:00	4.3012	ma anno	 Quarry bottom Groundwater monitoring well Landfill cap
Al Brillinger	10-15-15	1:45pm	2:30 pm	· Annual Inspection · Weakly Inspection	■Quarry bottom □ Groundwater monitoring well ■/Landfill cap
					 Quarry bottom Groundwater monitoring well Landfill cap
					 Quarry bottom Groundwater monitoring well Landfill cap

1

ł

4

.

.

Sign In/Out Sheet for Ramsdell Quarry Landfill – Please sign in and out when entering and exiting the Ramsdell Quarry Landfill. Please also note what activities were performed and what areas of the AOC were accessed.

Name	Date	Time In	Time Out	Description of Activities Performed	Areas Accessed (please choose
		<u> </u>		(i.e., mowing, gw sampling, etc)	and check)
Al Brillinger - Viz-	5-15-15	10:30	11:20	Inspection	S Quarry bottom
					Groundwater monitoring wells
AL 7					Is Landfill cap
Al Brillinger-VSC	6-12-15	11:00	11:45	Inspection	Quarry bottom
					Groundwater monitoring wells
A 1 824 AVIO AVI	ļ		ļ		s Landfill cap
Bad Kline - CHARNG	6 15-15	1000	11.30		A Quarry bottom
TI BALL OF		30.00	110	Infecto.	Groundwater monitoring wells
Jack Madrid - Pertase Le.	₩ <u>7</u>				pt_Landfill cap
Stanlago Strange	111			GUM water Lovel	C Quarry bottom
Stephen Sturgeon EGN	7/10/5	08:50	1000	measuremits	a Groundwater monitoring wells
Egn	ļ / '	-		In de sur 2001)	se Landfill cap
John Miller	-1			Well Maindens	Quarry bottom
Nona in	1/2/11	1100	1200		Groundwater monitoring wells
- Q / 1	7/21/15	1100		(gw)	A Landfill cap
a de al ti				Arrite	C Quarry bottom
Scott Spesshordt	7/22/15	0900	1700	GW Sempl. p	A Groundwater monitoring wells
EQM	לי)			, , , , , , , , , , , , , , , , , , , ,	🕫 Landfill cap
RAN PRISE	-71	0900		V	S Quarry bottom
	7/22/15		1700	GW SAMPLINE	Groundwater monitoring wells
Eam					⊭ Landfill cap
Eak Celbin Eam					A Quarry bottom
Unix Derving Form	7/22/15	1445	1645	And Scopling	Groundwater monitoring wells
EQM	1 1 15		1010	GW SIMP'IT	6 Landfill cap
Brad Klim - CHARNE	1	[75 Quarry bottom
wine hume	9/10/15	1130	100-	T	Ø Groundwater monitoring wells
Kane Tail - CHARNE	Thelis	0.00	1235	Inspection	🕫 Landfill cap
	1	<u> </u>	1		à Quarry bottom
Tack Madual Pering County	9/10/15	1130	10.00	T	S Groundwater monitoring wells
Pack Phone is the top	1 maps	100	1235	Tothection	⊠ Landfill cap

{

:

\$

.

1

4

2

85

.

Name/Company	Date	Time In	Time Out	Description of Activities Performed	Areas Accessed (please choose
				(i.e., mowing, gw sampling, etc)	and check)
Drew Kicher John EPA	7/s/10	10 DA	h: w	Citi valka a	 Quarry bottom Groundwater monitoring wells Landfill cap
Vonessen Stergerundel Dick	-1/s/15	lu nne	HOON	sile collect	
Nick Ragie USA	178-15	10 am	Hoor	site nalkerer	€Quarry bottom □ Groundwater monitoring wells ☆ Landfill cap
VICE BERG	71848	16.843	NON	have an worker	 Quarry bottom □ Groundwater monitoring wells ✓= Landfill cap
Kathing Tait	7/8/5	IAM	Hoor	SiteWalk	[•] [™]
Kein SEDLAL	1/9/.j-	11.19	Nova	S. he Walk	 Quarry bottom Groundwater monitoring wells Landfill cap
SulVettaw	7/s/12	11A	Noon	Situalk	
Colleen Lear	~1/11/15	08-50	ic w	Gium water Level Measurements	✓ Quarry bottom ✓ Groundwater monitoring wells ▲ Landfill cap

Sign In/Out Sheet for Ramsdell Quarry Landfill – Please sign in and out when entering and exiting the Ramsdell Quarry Landfill. Please also note what activities were performed and what areas of the AOC were accessed.

Sign In/Out Sheet for Ramsdell Quarry Landfill – Please sign in and out when entering and exiting the Ramsdell Quarry Landfill. Please also note what activities were performed and what areas of the AOC were accessed.

Name	Date	Time In	Time Out	Description of Activities Performed	Areas Accessed (please choose
				(i.e., mowing, gw sampling, etc)	and check)
Al Brillinger 1VSC					©-Quarry bottom
Becky Haney /VSC	IZLIGLIY	2:15p	2:45p	Weekly Inspectim/Quarterly	Groundwater monitoring wells
		***		Inspection	@Landfill cap
Brad Kline 10HARNY					Quarry bottom
Jack Medved Portage	12 29 14	1030	1145	Landfill Cap Inspection	□ Groundwater monitoring wells
county					sz-Landfill cap
Rich Sprinzl Leidos				Hi. Tensile Fence Repair	Quarry bottom x Fence
Jeff Becka R: T Fence	12/30/14	1035	1125	(East Sido)	Groundwater monitoring wells
					🗆 Landfill cap
Gary Brunswick NSC	1/21/15	0900	1330	Landfill Cap Repairs	Quarry bottom
					Groundwater monitoring wells
	ļ	·	<u></u>		s Landfill cap
AlBrillinger	1 21 15	0930	10;00	Landfill Cap Repairs	Quarry bottom
		13:00	13:30		Groundwater monitoring wells
	<u> </u>		+		e-Landfill cap
CulleenLear/Egm	3/11/15	1430	1445	CREAT ENTRACE OF SNOW	Quarry bottom Groundwater monitoring wells
					& Landfill cap Mferce
Tout of the of the start				an sampling	E Quarry bottom
EGM-C. Lear S. Spessmart	Histor	N1202	1.2.1.0	gwsampling	Groundwater monitoring wells
E. Corbin A Dricotter & Russell		0828	1330		∠ Choundwater monitoring wens B Landfill cap
Bileskins siticks sisting	<u>\$,</u>				B Quarry bottom
]]. Madved Portage co.	3/16/15	1015	1055	quarterly inspection	Groundwater monitoring wells
	נין שון כ	10.5	1055		S Landfill cap
A. Brillingen / VSC	4-10-15	11:15	11:30	checking repaired areas	□ Quarry bottom
A.Brillinge (IVSC				J	Groundwater monitoring wells
					C'Landfill cap
A.Brillinger/VSC	5-01-15	11:25	12:05	weekly inspection - check	G-Quarry bottom
		-		repaired areas	Groundwater monitoring wells
			1		erLandfill cap

(

Appendix E

RQL Annual Inspection Photographs



West side of Ramsdell Quarry Landfill, looking south from west gate.



East side of Ramsdell Quarry Landfill, looking north from southeast corner.



East and south side of Ramsdell Quarry Landfill, looking southwest from east side.



East gate and north fence of Ramsdell Quarry Landfill, looking west from east gate.

Appendix F

FY 2015 Quarterly Land Use Control Index Maps



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION SEE ATTACHED DETAIL SHEETS FOR EACH **DESIGNATED CALLOUT LOCATION**

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (9 locations)
- Repaired (13 Locations)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- \bigcirc Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)

Detail Sheet Callout	Detail Sheet Repair Callout	Detail Sheet Repair in Progress Callout
-------------------------	--------------------------------	-----------------------------------------------

				SUMMARY TABLE				
	Ca	amp Ravenna Joint Military 1	Training Cent	er 1st Qtr FY2015 LUC Inspection	US Su	rvey Ft		_
0.000	Data	Path to Photo Locat			N	The second second		0.11.1
Callout	Date			Comments	Northing	Easting	Path to Repair Photo Location	Callout
NW11	11/26/2014	c:\My Documents\My ArcPad\P	1010484.JPG	old abandoned rr utility pole leaning over top of fence	564883	2343968		NW11
SE02	12/16/2014	c:\My Documents\My ArcPad\P	1010427 JPG	repair in progress	551498	2361141		SE02
		,,,						
SW12	11/18/2013	c:\My Documents\My ArcPad\P	1010323.JPG	storm washout about 2 sections inlet needs cleared	552357	2330086		SW12
SW18	7/15/2014	c:\My Documents\My ArcPad\P	1010412.JPG	hole under fence at culvert outlet	556241	2328345		SW18
SW24	11/20/2014	c:\My Documents\My ArcPad\P	1010447.JPG	poacher hole	549402	2336086		SW24
NE15A	12/15/2014	c:\My Documents\My ArcPad\P	1010530 IDC	poacher hole (repeat)	563240	2383872		NE15A
NE31		c:\My Documents\My ArcPad\P		utility pole fallen on top of fence	572718	2363965		NE31
NE32		c:\My Documents\My ArcPad\P		12in tree has fallen on to the fence	563254	2384389		NE32
NE33		c:\My Documents\My ArcPad\P		8in tree has fallen on to the fence	563257	2384533		NE33
		,, ,						
NE30	7/21/2014	c:\My Documents\My ArcPad\P	1010425.JPG	poacher hole	571083	2382464	c:\My Documents\My ArcPad\P1010523.JPG	NE30
SE04	11/25/2013	c:\My Documents\My ArcPad\P	1010351.JPG	washout logged as type 2 on 2-27-14 0271 photo	558980			
SE05	04/22/2014	c:\My Documents\My ArcPad\P	1010402.JPG	washout below undamaged fence	550299	2358851	c:\My Documents\My ArcPad\P1010537.JPG	SE05
SW01		c:\My Documents\My ArcPad\P		bottom open	549403		c:\My Documents\My ArcPad\P1010448.JPG	
SW06A		c:\My Documents\My ArcPad\P		poacher hole in fence (repeat)	560708		c:\My Documents\My ArcPad\P1010472.JPG	
SW14		c:\My Documents\My ArcPad\P		poacher hole in fence	549386	2334237		
SW15 SW16		c:\My Documents\My ArcPad\P		tree blow down	549438	2339580		
SW16 SW17		c:\My Documents\My ArcPad\P c:\My Documents\My ArcPad\P		tree blow down/damaged fence tree blow down/fence top damaged	554267 556228		c:\My Documents\My ArcPad\P1010453.JPG c:\My Documents\My ArcPad\P1010462.JPG	
SW17 SW19		c:\My Documents\My ArcPad\P		tree blow down/tence top damaged tree blow down/top fence damaged	556581		c:\My Documents\My ArcPad\P1010462.JPG c:\My Documents\My ArcPad\P1010464.JPG	
SW20		c:\My Documents\My ArcPad\P		hole in bottom of fence below sign	559398			
SW21		c:\My Documents\My ArcPad\P		hole at bottom of fence	559659		c:\My Documents\My ArcPad\P1010471.JPG	
SW22		c:\My Documents\My ArcPad\P		poacher hole	560762		c:\My Documents\My ArcPad\P1010473.JPG	
022		or any bootanionioniony rifer dati	1010111.010		000102	2000000	ching becamentering riter addit to to route of	0.722
		REPAIRED 1ST QTR						

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District FIGURE \mathbf{N} Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone 2 500 10,000 15,000 Feet 5.000 Bar Scale in Feet INDEX Camp Ravenna JMTC 1438 State Route 534 SW MA Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@us.army.mil SCIENCES Ū MGRS 17T NF01946150 (NAD83)

WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 2nd Qtr. FY 2015



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION SEE ATTACHED DETAIL SHEETS FOR EACH DESIGNATED CALLOUT LOCATION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (9 locations)
- Repaired in FY2015
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



NOTE: As observed during the second quarter LUC inspections, the following perimeter fence defects were repaired: NW11, NE15A, NE33, SE02, SW12, and SW24. Additionally, the following areas were reported to have been repaired on March 25, 2015 after the damaged areas had been inspected: NW12, SW22, NE34, NE35, SW6B, NW1A and NW10A.

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 3rd Qtr. FY 2015

FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (4 locations)
- Repaired in FY2015 (25 Locations Total)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- Repair in progress (1 location)
 - --- Perimeter Fence Evaluated (29.8 miles)



SEE ATTACHED SUMMARY TABLE AND DETAIL SHEETS FOR EACH DESIGNATED CALLOUT LOCATION

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 4th Qtr. FY 2015



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (3 locations)
- Repaired (29 Locations Total)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- \bigcirc Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



SEE ATTACHED SUMMARY TABLE AND DETAIL SHEETS FOR EACH **DESIGNATED CALLOUT LOCATION**

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in August 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Appendix G

Final FY 2015 First Quarter Land Use Control Inspection for RVAAP-05 Winklepeck Burning Grounds
REPORT	Form Approved OMB No. 0704-0188							
The public reporting burden for this collection gathering and maintaining the data needed, and information, including suggestions for reducing 1215 Jefferson Davis Highway, Suite 1204, Ar penalty for failing to comply with a collection of PLEASE DO NOT RETURN YOUR FO	of information completing and the burden, to lington, VA 2 information if DRM TO TH	is estimated to average 1 hour d reviewing the collection of infor Department of Defense, Washin 2202-4302. Respondents shou it does not display a currently val IE ABOVE ADDRESS.	per response, incl mation. Send com ngton Headquarters d be aware that no id OMB control nur	uding the tir ments regard Services, Di otwithstandir nber.	me for reviewing instructions, searching existing data sources, ding this burden estimate or any other aspect of this collection of irectorate for Information Operations and Reports (0704-0188), ng any other provision of law, no person shall be subject to any			
1. REPORT DATE (DD-MM-YYYY)	. REPORT DATE (DD-MM-YYYY) 2. REPORT TYPE			3. DATES COVERED (From - To)				
4. TITLE AND SUBTITLE				5a. COI	NTRACT NUMBER			
				5b. GRANT NUMBER				
				5c. PROGRAM ELEMENT NUMBER				
6. AUTHOR(S)				5d. PROJECT NUMBER				
				5e. TASK NUMBER				
					5f. WORK UNIT NUMBER			
7. PERFORMING ORGANIZATION N	iame(s) an	ND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER			
9. SPONSORING/MONITORING AG	ENCY NAM	E(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)			
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)			
12. DISTRIBUTION/AVAILABILITY S	TATEMEN	r						
13. SUPPLEMENTARY NOTES								
14. ABSTRACT								
15. SUBJECT TERMS								
		17. LIMITATION OF		10- 14				
16. SECURITY CLASSIFICATION OF a. REPORT b. ABSTRACT c. T	: HIS PAGE	ABSTRACT	OF PAGES					
19b. TELEPHONE				EPHONE NUMBER (Include area code)				

Final

FY 2015 First Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

> Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

> > Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



April 3, 2015

Final

FY 2015 First Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

> Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

> > Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



April 3, 2015

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	Below Ground Surface
Camp Ravenna	Camp Ravenna Joint Military Training Center
EQM	Environmental Quality Management, Inc.
FWGWMPP	Facility-Wide Ground Water Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
IRP	Installation Restoration Program
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
МК	Mark
MRS	Munitions Response Site
MSG	Master Sergeant
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
PS	Professional Surveyor
PMP	Property Management Plan
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
UXO	Unexploded Ordnance
WBG	Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center (Camp Ravenna) / Former Ravenna Army Ammunition Plant (RVAAP) Quarterly Land Use Control (LUC) Inspection Form RVAAP-05 Winklepeck Burning Grounds

In accordance with the Camp Ravenna/former RVAAP Property Management Plan (PMP) dated August 2012 and Appendix A-1, an inspection of RVAAP-05 Winklepeck Burning Grounds (WBG) was conducted by <u>Don Trocchio</u> on <u>November 20, 24, 25 and 26, 2014 and December 1, 2, 3, 4, 15, 16 and 17, 2014</u>.

The quarterly inspections required by the PMP include the following:

- Review of LUC training and documentation as applicable to WBG.
- Evaluation of the Camp Ravenna perimeter fence to ensure that it is maintained in a manner that is protective and effective control and deters trespassers.
- Evaluation of activities at WBG to ensure that all activities executed within WBG are in compliance with Ohio Army National Guard (OHARNG) range safety regulations/standard operation procedure (SOP), established digging restrictions, and established exposure limits. All digging, intrusive activities, or excavation on the WBG Area of Concern (AOC) outside of the Unexploded Ordnance (UXO)/ Munitions and Explosives of Concern (MEC)-cleared areas within the Mark (MK) 19 Grenade Machinegun Range is prohibited with the following exceptions:
 - Routine maintenance of roads, ditches, culverts and activities listed in A-1.4 of the PMP (maintenance of targetry and associated lifting mechanisms, range maintenance activities including removal of practice rounds, vegetation management, compatible natural resource management activities, nuisance wildlife control, drainage maintenance, wetland delineation, grassland management, scientific research and sampling activities);
 - o Ground surface repairs by authorized range personnel in support of authorized range activities; and
 - Digging along target array areas by authorized range personnel to a depth of 1 foot below ground surface (bgs).

This shall also include evaluation of required range signage. The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations.

- Evaluation of groundwater activities to ensure that any groundwater activities are being conducted in a manner consistent with established LUCs. Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent Facility-Wide Sampling and Analysis Plan (FWSAP) as part of the AOC-specific Installation Restoration Program (IRP) or Facility-Wide Ground Water Monitoring Program Plan (FWGWMPP).
 - 2. The abandonment and replacement of monitoring wells damaged by activities conducted on Camp Ravenna and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio Environmental Protection Agency (Ohio EPA) guidance, the most recent FWSAP, and applicable Ohio Administrative Code requirements.

LUC deficiencies or inconsistent land uses that are identified must be reported and identified on the quarterly inspection form/report. These deficiencies must also be reported immediately to the Army, along with suggestions on how to remedy the deficiencies.

Review of LUCs – Management/Effectiveness/Corrective Action

1. AOC Map

Is the AOC map current with respect to AOC boundaries, land activities, and prescribed LUCs?

The AOC map was reviewed on November 20, 2014 by Don Trocchio, Professional Surveyor (PS), and it is current with respect to AOC boundaries, land activities and prescribed LUCs.

2. Camp Ravenna Perimeter Fence

Is the Camp Ravenna perimeter fence and associated gates being maintained in order to be an effective and protective control and deter trespassers?

The perimeter fence is currently being maintained by OHARNG staff to ensure it is an effective and protective land use control. In FY 2014 over 4500' of the perimeter fence at the west end of the facility was replaced and/or had barbed wire repairs completed. Also in FY 2014, a large section of fence (posts and fabric) on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 was replaced. As observed during the FY 2015 1st quarter inspection, the fence has been repaired at 13 locations (See Attachment 1, Figure 1 Index Map and Summary Table, and associated Detail Sheets) since the previous quarterly inspection in July 2014. The Camp Ravenna Fence Repair Log presented in Attachment 2 lists repairs to the perimeter fence that were carried out after the July inspection.

3. Activities and Land Use

a.) This AOC is restricted from residential land use. Has residential use occurred? Have other land use changes occurred?

Based on an interview with OHARNG Range Control Staff (Master Sergeant [MSG] Rex Hufenbach) on December 15, 2014 at the OHARNG Headquarters Building, no residential land use has occurred. Additionally, there has been no change in land use at the AOC since the previous inspection.

b.) What activities have occurred at WBG since the last inspection?

Winklepeck Burning Grounds/MK19 Range has been utilized for training purposes (i.e. MK19 Range firing/activities) since the last inspection. Additionally, mowing has occurred since the previous inspection. All activities are in accordance with designated LUCs/restrictions.

c.) Are activities (digging, range maintenance etc.) at WBG being conducted in compliance with OHARNG range safety regulations/SOP and established digging restrictions?

Based on an interview with MSG Rex Hufenbach on December 15, 2014, all activities within WBG are being conducted in compliance with OHARNG Range Safety Regulations/SOP and established digging restrictions. All activities are in accordance with those set forth in the PMP.

d.) Is the required range signage in place and functional? The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations. If not, describe what corrective actions will be undertaken?

MSG Rex Hufenbach stated all signage is placed at 200-meter intervals and found to be upright and intact and in conformance with Army regulations. Annual repairs for signage along the surface danger zone perimeter are scheduled for May 2015.

e.) Groundwater: Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:

- 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent FWSAP as part of the AOC-specific IRP or FWGWMPP.
- 2. The abandonment and replacement of monitoring wells damaged by Installation activities, and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio EPA guidance, the most recent FWSAP and applicable Ohio Administrative Code requirements.
- f.) Have any groundwater activities been conducted and, if yes, are they within the established control parameters?

Facility-wide Ground Water Monitoring Well sampling is conducted by Environmental Quality Management, Inc. (EQM) on a semi-annual basis in this area. During an interview on December 18, 2014 with Mr. Scott Spesshardt of EQM, he stated that all Ground Water Monitoring activity is conducted in accordance with the FWGWMPP and the parameters for groundwater monitoring as set forth in the PMP, Appendix A-1. A facility-wide groundwater sampling event occurred in July 2014. The next scheduled FWGWMPP sampling event is currently scheduled for the end of January 2015.

4. Inspections and Reporting

a.) Inspections are required on a quarterly basis. Are quarterly inspections being completed?

Quarterly Inspections have been completed for FY 2013 and FY 2014. This is the first Quarterly Inspection to be conducted for FY 2015. All Quarterly Inspections for FY 2013, FY 2014 and FY 2015 were conducted in accordance with the approved PMP dated August 2012.

b.) An annual report is required. Has the annual report been completed and submitted?

The Final FY 2014 Annual Report was submitted for stakeholder review on January 12, 2014.

5. Training (as applicable to WBG)

a.) Was LUC training (specific to WBG) being conducted as applicable? Describe the training (content/who attended/who provided/documentation of training).

LUC training is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and specific restrictions for WBG. Using units also receive an in-brief prior to firing on the range. Using units and tenant units at Camp Ravenna are not allowed down range. Environmental contractors who access Winklepeck are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. They must read and sign the in-brief form. Training materials and rosters are on file in the Camp Ravenna Environmental Office. LUC training specific to WBG was held on February 12 and 26, 2014 for Camp Ravenna units/staff, on May 6, 2014 for EQM (contractor) and for additional Camp Ravenna staff on June 4, 2014.

b.) If training was not provided, explain why and what corrective actions were initiated?

N/A

6. Description of any observed/noted LUC violation(s):

The Camp Ravenna perimeter fence has missing sections/openings/holes in the fence fabric and areas that are in disrepair as documented in this report. See Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspection and attached Detail Sheets.

7. Date of Notification of LUC violation (if applicable):

The Army was notified via e-mail on November 24, December 1, December 4 and December 16, 2014 of six new fence defects discovered during the 1st Quarter FY 2015 facility perimeter fence evaluation.

8. Description of any corrective actions taken to remedy observed LUC violation(s) or recommended corrective actions:

Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspections shows previous fence deficiencies that have been repaired since the last inspection. Additionally, a repair log is provided in Attachment 2 which documents repairs completed by Vista maintenance staff during the first quarter since the previous inspection in July 2014.

A large section of fence (posts and fabric) was replaced on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 in February 2014. In February 2014 over 4500' of barbed wire repair and/or perimeter fence installation at the west end of the facility were completed. These efforts and the efforts of the OHARNG staff to repair the identified deficiencies in the fence have improved the condition of the fence since the last inspection.

9. Additional Notes/Comments:

As requested by the Ohio EPA, WBG photographs taken during the LUC Inspection are included with this report (Attachment 2, Supplemental Detail Sheet No. 1).

Original Inspection Completed by:

Signature:	\rightarrow
Printed Name: Don Trocchio	
Title: Professional Surveyor	Organization: Vista Sciences Corporation
Date: December 23, 2014	·

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

FY 2015 First Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 1

Figure 1 Index Map Summary Table Detailed Quadrant Maps

Index Map



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION SEE ATTACHED DETAIL SHEETS FOR EACH **DESIGNATED CALLOUT LOCATION**

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (9 locations)
- Repaired (13 Locations)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- \bigcirc Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



				SUMMARY TABLE				
Camp Ravenna Joint Military Training Cer		t Military Training Cen	ter 1st Qtr FY2015 LUC Inspection	US Survey Ft				
Callout	Date	Path to F	Photo Location	Comments	Northing	Easting	Path to Repair Photo Location	Callout
NW11	11/26/2014	c:\My Documents\My	ArcPad\P1010484.JPG	old abandoned rr utility pole leaning over top of fence	564883	2343968		NW11
SE02	12/16/2014	c:\My Documents\My	ArcPad\P1010427.JPG	repair in progress	551498	2361141		SE02
SW12	11/18/2013	c:\My Documents\My	ArcPad\P1010323.JPG	storm washout about 2 sections inlet needs cleared	552357	2330086		SW12
SW18	7/15/2014	c:\My Documents\My	ArcPad\P1010412.JPG	hole under fence at culvert outlet	556241	2328345		SW18
SW24	11/20/2014	c:\My Documents\My	ArcPad\P1010447.JPG	poacher hole	549402	2336086		SW24
NE15A	12/15/2014	c:\My Documents\My	ArcPad\P1010530.JPG	poacher hole (repeat)	563240	2383872		NE15A
NE31			ArcPad\P1010522.JPG	utility pole fallen on top of fence	572718	2363965		NE31
NE32	12/15/2014	c:\My Documents\My	ArcPad\P1010531.JPG	12in tree has fallen on to the fence	563254	2384389		NE32
NE33	12/15/2014	c:\My Documents\My	ArcPad\P1010532.JPG	8in tree has fallen on to the fence	563257	2384533		NE33
NE30	7/21/2014	c:\My Documents\My	ArcPad\P1010425.JPG	poacher hole	571083	2382464	c:\My Documents\My ArcPad\P1010523.JPG	NE30
SE04	11/25/2013	c:\My Documents\My	ArcPad\P1010351.JPG	washout logged as type 2 on 2-27-14 0271 photo	558980	2377933	c:\My Documents\My ArcPad\P1010533.JPG	SE04
SE05	04/22/2014	c:\My Documents\My	ArcPad\P1010402.JPG	washout below undamaged fence	550299	2358851	c:\My Documents\My ArcPad\P1010537.JPG	SE05
014/04	00/07/00/0			L. H	540400	0000040		014/04
SW01 SW06A			ArcPad\P1010322.JPG ArcPad\P1010416.JPG	bottom open poacher hole in fence (repeat)	549403 560708		c:\My Documents\My ArcPad\P1010448.JPG c:\My Documents\My ArcPad\P1010472.JPG	
SW06A SW14			ArcPad\P1010416.JPG	poacher hole in fence	549386	2335572	c:\My Documents\My ArcPad\P1010472.JPG c:\My Documents\My ArcPad\P1010450.JPG	
SW14			ArcPad\P1010379.JPG	tree blow down	549380		c:\My Documents\My ArcPad\P1010450.JPG	
SW16			ArcPad\P1010404.3PG	tree blow down/damaged fence	554267		c:\My Documents\My ArcPad\P1010443.JPG	
SW17			ArcPad\P1010409.JPG	tree blow down/fence top damaged	556228		c:\My Documents\My ArcPad\P1010462.JPG	
SW19			ArcPad\P1010413.JPG	tree blow down/top fence damaged	556581		c:\My Documents\My ArcPad\P1010464.JPG	
SW20			ArcPad\P1010414.JPG	hole in bottom of fence below sign	559398		c:\My Documents\My ArcPad\P1010470.JPG	
SW21			ArcPad\P1010415.JPG	hole at bottom of fence	559659		c:\My Documents\My ArcPad\P1010471.JPG	
SW22	7/16/2014	c:\My Documents\My	ArcPad\P1010417.JPG	poacher hole	560762	2335683	c:\My Documents\My ArcPad\P1010473.JPG	SW22
	1	REPAIRED 1ST Q	TR					

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



MIN RVE



Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District FIGURE $(\mathbf{N}$ Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone 2 500 10 000 15,000 Feet 5.000 Bar Scale in Feet INDEX Camp Ravenna JMTC 1438 State Route 534 SW MA Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@us.army.mil SCIENCES Ū MGRS 17T NF01946150 (NAD83)

Summary Table

SUMMARY TABLE

	Camp Ravenna Joint Military Training Center 1st Qtr FY2015 LUC Inspection			rvey Ft		
Callout NW11	DatePath to Photo Location11/26/2014c:\My Documents\My ArcPad\P1010484.JPG	Comments old abandoned rr utility pole leaning over top of fence	Northing 564883	Easting 2343968	Path to Repair Photo Location	Callout NW11
SE02	12/16/2014 c:\My Documents\My ArcPad\P1010427.JPG	repair in progress	551498	2361141		SE02
SW12 SW18 SW24	11/18/2013 c:\My Documents\My ArcPad\P1010323.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010412.JPG 11/20/2014 c:\My Documents\My ArcPad\P1010447.JPG	storm washout about 2 sections inlet needs cleared hole under fence at culvert outlet poacher hole	552357 556241 549402	2330086 2328345 2336086		SW12 SW18 SW24
NE15A NE31 NE32 NE33	12/15/2014 c:\My Documents\My ArcPad\P1010530.JPG 12/3/2014 c:\My Documents\My ArcPad\P1010522.JPG 12/15/2014 c:\My Documents\My ArcPad\P1010531.JPG 12/15/2014 c:\My Documents\My ArcPad\P1010532.JPG	poacher hole (repeat) utility pole fallen on top of fence 12in tree has fallen on to the fence 8in tree has fallen on to the fence	563240 572718 563254 563257	2383872 2363965 2384389 2384533		NE15A NE31 NE32 NE33
NE30	7/21/2014 c:\My Documents\My ArcPad\P1010425.JPG	poacher hole	571083	2382464	c:\My Documents\My ArcPad\P1010523.JPG	NE30
SE04 SE05	11/25/2013 c:\My Documents\My ArcPad\P1010351.JPG 04/22/2014 c:\My Documents\My ArcPad\P1010402.JPG	washout logged as type 2 on 2-27-14 0271 photo washout below undamaged fence	558980 550299		c:\My Documents\My ArcPad\P1010533.JPG c:\My Documents\My ArcPad\P1010537.JPG	SE04 SE05
SW01 SW06A SW14 SW15 SW16 SW17 SW19 SW20 SW21 SW22	02/07/2013 c:\My Documents\My ArcPad\P1010322.JPG 7/16/2014 c:\My Documents\My ArcPad\P1010416.JPG 04/14/2014 c:\My Documents\My ArcPad\P1010379.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010408.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010408.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010409.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010413.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010414.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010414.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010414.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010414.JPG 7/15/2014 c:\My Documents\My ArcPad\P1010415.JPG 7/16/2014 c:\My Documents\My ArcPad\P1010415.JPG	bottom open poacher hole in fence (repeat) poacher hole in fence tree blow down/damaged fence tree blow down/fence top damaged tree blow down/fence damaged hole in bottom of fence below sign hole at bottom of fence poacher hole	549403 560708 549386 554267 556228 556581 559398 559659 560762	2335572 2334237 2339580 2328362 2328345 2328342 2330974 2331945	c:\My Documents\My ArcPad\P1010448.JPG c:\My Documents\My ArcPad\P1010472.JPG c:\My Documents\My ArcPad\P1010450.JPG c:\My Documents\My ArcPad\P1010445.JPG c:\My Documents\My ArcPad\P1010462.JPG c:\My Documents\My ArcPad\P1010462.JPG c:\My Documents\My ArcPad\P1010464.JPG c:\My Documents\My ArcPad\P1010470.JPG c:\My Documents\My ArcPad\P1010471.JPG c:\My Documents\My ArcPad\P1010473.JPG	SW01 SW06A SW14 SW15 SW16 SW17 SW19 SW20 SW21 SW22

REPAIRED 1ST QTR

NE (Northeast) Quadrant



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE15A discovered 12/15/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
- ---- Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



minnin

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE30 repaired 12/04/2014

PHOTO NE30 discovered 07/21/2014





DETAIL SHEET FOR NE30



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE31 discovered 12/03/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
 - Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

N

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone





LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE32 discovered 12/15/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
 - Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County









Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

SCIENCES

N

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



Don Trocchio, PS don.trocchio@us.army.mil



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE33 discovered 12/15/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
 - Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County









Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

N

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



NW (Northwest) Quadrant



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW11 discovered 11/26/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
- Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





SE (Southeast) Quadrant



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SE2 repairs in progress 12/16/2014

PHOTO SE2 discovered 07/18/2013







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SE4 repaired 12/16/2014

PHOTO SE4 discovered 02/27/2014







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SE5 repaired 12/16/2014

PHOTO SE5 discovered 04/22/2014





DETAIL SHEET FOR SE5

SW (Southwest) Quadrant



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW1 repaired 11/20/2014

PHOTO SW1 discovered 02/07/2013



Camp Ravenna Joint Military Training Center



DETAIL SHEET FOR SW1



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW6A repaired 11/25/2014

PHOTO SW6A discovered 07/16/2014







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW12 discovered 11/18/2013

Legend

- Opening in fence (2'≥) and/or fabric missing
- Repaired
 - Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in November 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW14 repaired 11/20/2014

PHOTO SW14 discovered 04/14/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP







Produced in November 2014 for:



"minimu

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW15 repaired 11/20/2014

PHOTO SW15 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in November 2014 for:



minum

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW16 repaired 11/24/2014

PHOTO SW16 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in November 2014 for:



44000 M

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW17 repaired 11/25/2014

PHOTO SW17 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW18 discovered 07/15/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
 - Perimeter Fence Evaluated



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW19 repaired 11/25/2014

PHOTO SW19 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone





LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW20 repaired 11/25/2014

PHOTO SW20 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL SHEET FOR SW20
DETAIL SHEET FOR SW21



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW21 repaired 11/25/2014

PHOTO SW21 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW22 repaired 11/25/2014

PHOTO SW22 discovered 07/16/2014





DETAIL SHEET FOR SW24



LAND USE CONTROL (LUC) INSPECTION 1st QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW24 discovered 11/20/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP









Produced in November 2014 for:



minim

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

QuarterlyLand Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 2

Supplemental Detail Sheet No. 1

Camp Ravenna Fence Repair Log

Supplemental Detail Sheet No. 1



SUPPLEMENTAL DETAIL SHEET NO.1 LAND USE CONTROL (LUC) INSPECTION PERIMETER FENCE INSPECTION 1st QUARTER FY2015

PHOTO N0.2 12/15/2014



PHOTO No.1 12/15/2014

PHOTO N0.3 12/15/2014



PHOTO N0.4 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP

Ohio Army National Guard







Produced in December 2014 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone

0	345	690	1,380			2,070 Feet		
				1	_		 	
		Bar S	Scale	in F	eet			



Camp Ravenna JMTC 1438 State Route 534 SW Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@us.army.mil

MGRS 17T NF01946150 (NAD83)

Camp Ravenna Fence Repair Log





Babries go over cut truch lep obb SW15-Smal - faberof - elips Botton Gaberof - elips Top Bar Somuel Gabries-SmAL Botton SWI Swill Cut forom outside , top Bar R.R. ta + PINS 500 17 50018 Pre Cut - Top pail + youts 50019

Appendix H

Final FY 2015 Second Quarter Land Use Control Inspection for RVAAP-05 Winklepeck Burning Grounds Final

FY 2015 Second Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



July 23, 2015

Final

FY 2015 Second Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



July 23, 2015

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	Below Ground Surface
Camp Ravenna	Camp Ravenna Joint Military Training Center
EQM	Environmental Quality Management, Inc.
FWGWMPP	Facility-Wide Ground Water Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
IRP	Installation Restoration Program
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
МК	Mark
MRS	Munitions Response Site
MSG	Master Sergeant
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
PS	Professional Surveyor
PMP	Property Management Plan
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
UXO	Unexploded Ordnance
WBG	Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center (Camp Ravenna) / Former Ravenna Army Ammunition Plant (RVAAP) Quarterly Land Use Control (LUC) Inspection Form RVAAP-05 Winklepeck Burning Grounds

In accordance with the Camp Ravenna/former RVAAP Property Management Plan (PMP) dated August 2012 and Appendix A-1, an inspection of RVAAP-05 Winklepeck Burning Grounds (WBG) was conducted by <u>Don Trocchio</u> on February 18, March 16, 17, 18, 19, 24, 25, 26, 30, and 31, 2015.

The quarterly inspections required by the PMP include the following:

- Review of LUC training and documentation as applicable to WBG.
- Evaluation of the Camp Ravenna perimeter fence to ensure that it is maintained in a manner that is protective and effective control and deters trespassers.
- Evaluation of activities at WBG to ensure that all activities executed within WBG are in compliance with Ohio Army National Guard (OHARNG) range safety regulations/standard operation procedure (SOP), established digging restrictions, and established exposure limits. All digging, intrusive activities, or excavation on the WBG Area of Concern (AOC) outside of the Unexploded Ordnance (UXO)/ Munitions and Explosives of Concern (MEC)-cleared areas within the Mark (MK) 19 Grenade Machinegun Range is prohibited with the following exceptions:
 - Routine maintenance of roads, ditches, culverts and activities listed in A-1.4 of the PMP (maintenance of targetry and associated lifting mechanisms, range maintenance activities including removal of practice rounds, vegetation management, compatible natural resource management activities, nuisance wildlife control, drainage maintenance, wetland delineation, grassland management, scientific research and sampling activities);
 - o Ground surface repairs by authorized range personnel in support of authorized range activities; and
 - Digging along target array areas by authorized range personnel to a depth of 1 foot below ground surface (bgs).

This shall also include evaluation of required range signage. The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations.

- Evaluation of groundwater activities to ensure that any groundwater activities are being conducted in a manner consistent with established LUCs. Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent Facility-Wide Sampling and Analysis Plan (FWSAP) as part of the AOC-specific Installation Restoration Program (IRP) or Facility-Wide Ground Water Monitoring Program Plan (FWGWMPP).
 - 2. The abandonment and replacement of monitoring wells damaged by activities conducted on Camp Ravenna and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio Environmental Protection Agency (Ohio EPA) guidance, the most recent FWSAP, and applicable Ohio Administrative Code requirements.

LUC deficiencies or inconsistent land uses that are identified must be reported and identified on the quarterly inspection form/report. These deficiencies must also be reported immediately to the Army, along with suggestions on how to remedy the deficiencies.

Review of LUCs – Management/Effectiveness/Corrective Action

1. AOC Map

Is the AOC map current with respect to AOC boundaries, land activities, and prescribed LUCs?

The AOC map was reviewed on March 16, 2015 by Don Trocchio, Professional Surveyor (PS), and it is current with respect to AOC boundaries, land activities and prescribed LUCs.

2. Camp Ravenna Perimeter Fence

Is the Camp Ravenna perimeter fence and associated gates being maintained in order to be an effective and protective control and deter trespassers?

The perimeter fence is currently being maintained by OHARNG staff to ensure it is an effective and protective land use control. In FY 2014, over 4500' of the perimeter fence at the west end of the facility was replaced and/or had barbed wire repairs completed. Also in FY 2014, a large section of fence (posts and fabric) on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 was replaced. As observed during the FY 2015 2nd quarter inspection, the fence has been repaired at 6 locations since the previous quarterly inspection in November/December 2014. These locations are NW11, NE15A, NE33, SE02, SW12 and SW24. Additionally, seven perimeter fence locations were repaired on March 25, 2015 after the inspection on those areas had already been conducted. These locations are NW12, SW22, NE34, NE35, SW6B, NW1A, and NW10A. Attachment 1, Figure 1 Index Map and Summary Table, and associated Detail Sheets present the damaged fence areas and photographs of repaired areas. Photographs of the areas repaired on March 25, 2015 will be presented in the next quarterly LUC inspection report. The Camp Ravenna Fence Repair Log presented in Attachment 2 lists repairs to the perimeter fence that were carried out after the November/December2014 inspection.

3. Activities and Land Use

a.) This AOC is restricted from residential land use. Has residential use occurred? Have other land use changes occurred?

Based on an interview with OHARNG Range Control Staff (Master Sergeant [MSG] Rex Hufenbach) on March 26, 2015 at the OHARNG Headquarters Building, no residential land use has occurred. Additionally, there has been no change in land use at the AOC since the previous inspection.

b.) What activities have occurred at WBG since the last inspection?

The WBG/MK19 Range has been utilized for training purposes (i.e. MK19 Range firing/activities) since the last inspection. Additionally, mowing has occurred since the previous inspection. All activities are in accordance with designated LUCs/restrictions.

c.) Are activities (digging, range maintenance etc.) at WBG being conducted in compliance with OHARNG range safety regulations/SOP and established digging restrictions?

Based on an interview with MSG Rex Hufenbach on March 26, 2015, all activities within WBG are being conducted in compliance with OHARNG Range Safety Regulations/SOP and established digging restrictions. All activities are in accordance with those set forth in the PMP.

d.) Is the required range signage in place and functional? The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations. If not, describe what corrective actions will be undertaken?

MSG Rex Hufenbach stated all signage is placed at 200-meter intervals and found to be upright and intact and in conformance with Army regulations. Annual repairs for signage along the surface danger zone perimeter are scheduled for May 2015.

- e.) Groundwater: Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent FWSAP as part of the AOC-specific IRP or FWGWMPP.
 - 2. The abandonment and replacement of monitoring wells damaged by Installation activities, and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio EPA guidance, the most recent FWSAP and applicable Ohio Administrative Code requirements.
- f.) Have any groundwater activities been conducted and, if yes, are they within the established control parameters?

Facility-wide Ground Water Monitoring Well sampling is conducted by Environmental Quality Management, Inc. (EQM) on a semi-annual basis in this area. During an interview on April 1, 2015 with Mr. Scott Spesshardt of EQM, he stated that all Ground Water Monitoring activity is conducted in accordance with the FWGWMPP and the parameters for groundwater monitoring as set forth in the PMP, Appendix A-1. A facility-wide groundwater elevation measuring event at the WBG took place on March 9, 2015. The next scheduled FWGWMPP sampling event is currently scheduled for the end of July 2015.

4. Inspections and Reporting

a.) Inspections are required on a quarterly basis. Are quarterly inspections being completed?

Quarterly Inspections have been completed for FY 2013 and FY 2014. This is the second Quarterly Inspection to be conducted for FY 2015. All Quarterly Inspections for FY 2013, FY 2014 and FY 2015 were conducted in accordance with the approved PMP dated August 2012.

b.) An annual report is required. Has the annual report been completed and submitted?

The Final FY 2014 Annual Report was submitted on January 12, 2015 and approved on March 17, 2015.

5. Training (as applicable to WBG)

a.) Was LUC training (specific to WBG) being conducted as applicable? Describe the training (content/who attended/who provided/documentation of training).

LUC training is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and specific restrictions for WBG. Using units also receive an in-brief prior to firing on the range. Using units and tenant units at Camp Ravenna are not allowed down range. Environmental contractors who access Winklepeck are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. They must read and sign the in-brief form. Training materials and rosters are on file in the Camp Ravenna Environmental Office. LUC training specific to WBG was held on March 3rd and 5th, 2015 for Camp Ravenna units/staff. Training will be conducted for additional Camp Ravenna staff and contractors that missed the March training dates as needed.

- b.) If training was not provided, explain why and what corrective actions were initiated?
 - N/A

6. Description of any observed/noted LUC violation(s):

The Camp Ravenna perimeter fence has missing sections/openings/holes in the fence fabric and areas that are in disrepair as documented in this report. See Attachment 1 - Figure 1 Index Map to Facility Perimeter Fence Inspection and attached Detail Sheets.

7. Date of Notification of LUC violation (if applicable):

The Army was notified via e-mail on March 18, 19 and 23, 2015 of seven new fence defects discovered during the 2nd Quarter FY 2015 facility perimeter fence evaluation. These locations are NW1A, NW10A, NW12, NE34, NE35, SW6B and SW22A (See Attachment 1, Figure 1 Index Map and Summary Table, and associated detail sheets).

8. Description of any corrective actions taken to remedy observed LUC violation(s) or recommended corrective actions:

As observed during the second quarter LUC inspection, the following perimeter fence defects were repaired: NW11, NE15A, NE33, SE02, SW12 and SW24. Additionally, the following areas were reported to have been repaired on March 25, 2015 after the damaged areas had been inspected: NW12, SW22, NE34, NE35, SW6B, NW1A, and NW10A.

Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspections shows previous fence deficiencies that have been repaired and/or reported since the last inspection. Additionally, a repair log is provided in Attachment 2 which documents repairs completed by the OHARNG maintenance staff during the second quarter of FY 2015.

A large section of fence (posts and fabric) was replaced on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 in February 2014. In February 2014, over 4500 feet of barbed wire repair and/or perimeter fence installation at the west end of the facility were completed. These efforts and the efforts of the OHARNG staff to repair the identified deficiencies in the fence have improved the condition of the fence since the last inspection.

9. Additional Notes/Comments:

As requested by the Ohio EPA, WBG photographs taken during the LUC Inspection are included with this report (Attachment 2, Supplemental Detail Sheet No. 1).

Original Inspection Completed by:					
Signature:					
Printed Name: Don Trocchio					
Title: Professional Surveyor Organization: Vista Sciences Corporation					
Date: April 6, 2015					

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

FY 2015 Second Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 1

Figure 1 Index Map FY 2015 Callout/Repair Summary Table Detailed Quadrant Maps

Figure 1 Index Map

WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 2nd Qtr. FY 2015



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION SEE ATTACHED DETAIL SHEETS FOR EACH DESIGNATED CALLOUT LOCATION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (9 locations)
- Repaired in FY2015
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



NOTE: As observed during the second quarter LUC inspections, the following perimeter fence defects were repaired: NW11, NE15A, NE33, SE02, SW12, and SW24. Additionally, the following areas were reported to have been repaired on March 25, 2015 after the damaged areas had been inspected: NW12, SW22, NE34, NE35, SW6B, NW1A and NW10A.

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



FY 2015 Callout/Repair Summary Table

FY 2015 CALLOUT/REPAIR SUMMARY TABLE

Camp Ravenna Joint Military Training Center 2nd Qtr FY2015 LUC Inspection US Survey Ft

Callout	Date	Comments	Northing	Easting
NW1A		repeat poacher hole		2356382
NW1A		repeat cut poacher hole in new fence	571637 571046	2354186
NW10A		poacher hole		2356355
	3/13/2013			2000000
NE31	2/19/2015	utility pole fallen on top of fence	572684	2363973
NE31 NE32		12in tree has fallen on to the fence	563254	2384389
NE32 NE34		poacher hole	573073	2366913
NE34 NE35		repeat poacher hole of undocumented repair	572916	2365711
NL33	3/19/2013		572910	2303711
	0/47/0045	nooshan hala in fance (ann act)	500700	0005570
SW6B SW18		poacher hole in fence (repeat) hole under fence at culvert outlet	560708	2335572 2328345
SW18 SW22A			556241 560762	2328345
50022A	3/17/2015	repeat poacher hole	560762	2335683
	7/04/06 1 1		574000	0000404
NE30	//21/2014	poacher hole	571083	2382464
SE04	11/25/2013	washout logged as type 2 on 2-27-14 0271 photo	558980	2377933
SE05	04/22/2014	washout below undamaged fence	550299	2358851
SW14		poacher hole in fence	549386	2334237
SW15		tree blow down	549438	2339580
SW16		tree blow down/damaged fence	554267	2328362
SW17		tree blow down/fence top damaged	556228	2328345
SW19		tree blow down/top fence damaged	556581	2328342
SW20		hole in bottom of fence below sign	559398	2330974
SW21		hole at bottom of fence	559659	2331945
SW22	7/16/2014	poacher hole	560762	2335683
NW11	11/26/2014	old abandoned rr utility pole leaning over top of fence	564883	2343968
NE15A	12/15/2014	poacher hole (repeat)	563240	2383872
NE33		8in tree has fallen on to the fence	563257	2384533
SE02	12/16/2014	washout	551498	2361141
	, .0, _0, 1			
SW12	11/18/2013	storm washout about 2 sections inlet needs cleared	552357	2330086
SW12 SW24		poacher hole	549402	2336086
01124	11/20/2014		040402	200000

REPAIRED 1ST QTR
REPAIRED 2ND QTR
REPAIRED AFTER 2ND QTR INSPECTION

NE (Northeast) Quadrant



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE15A as observed on 03/30/2015

PHOTO NE15A discovered 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



minim

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE31 discovered 12/03/2014

Legend

- Opening in fence (2'≥) and/or fabric missing/damaged
- Repaired
- Perimeter Fence Evaluated





Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE32 as observed on 03/30/2015

PHOTO NE32 discovered 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



"minim"

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

DETAIL

Louisville District







LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE33 as observed on 03/30/2015

PHOTO NE33 discovered 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



"minim"

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE34 discovered 03/19/2015

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE35 discovered 03/19/2015

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





NW (Northwest) Quadrant

DETAIL SHEET FOR NW1A



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW1A discovered 03/19/2015

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR NW10A



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW10A discovered 03/18/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



minim

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL SHEET FOR NW10A



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW11 as observed on 03/18/2015

PHOTO NW11 discovered 11/26/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



minim

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL SHEET FOR NW11



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.

PHOTO NW12 discovered 03/19/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





SE (Southeast) Quadrant


LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SE2 as observed on 03/26/2015, Date of repair is 04/10/2015

PHOTO SE2 discovered 07/18/2013





SW (Southwest) Quadrant

DETAIL SHEET FOR SW6B



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW6B discovered 03/17/2015

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR SW12



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW12 as observed on 03/16/2015. Repair date is February 2015.

PHOTO SW12 discovered 11/18/2013



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL SHEET FOR SW12

DETAIL SHEET FOR SW18



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW18 discovered 07/15/2014

Legend

Opening in fence (2'≥) and/or fabric missing/damaged

Perimeter Fence Evaluated



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR SW22A



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW22A discovered 03/17/2015

NOTE: Repairs to this callout were completed on March 25, 2015. A photograph of this repair will be presented in the FY 2015 3rd Quarter LUC Inspection Report.



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR SW24



LAND USE CONTROL (LUC) INSPECTION 2nd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SW24 as observed on 03/16/2015

PHOTO SW24 discovered 11/20/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in March 2015 for:



24 minuw

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

Quarterly Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 2

Supplemental Detail Sheet No. 1

Camp Ravenna Fence Repair Log

Supplemental Detail Sheet No. 1



SUPPLEMENTAL DETAIL SHEET NO.1 LAND USE CONTROL (LUC) INSPECTION PERIMETER FENCE INSPECTION 2nd QUARTER FY2015

PHOTO N0.2 03/26/2015

PHOTO N0.4 03/26/2015





PHOTO No.1 03/26/2015





PHOTO N0.3 03/26/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP

Ohio Army National Guard







Produced in March 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone

0	345	690 I			1,380 I	1	- 1	2,070 Feet
		Bar	Scal	e in	Feet			



Camp Ravenna JMTC 1438 State Route 534 SW Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@vistasciences.com

MGRS 17T NF01946150 (NAD83)

Camp Ravenna Fence Repair Log

Repair Log FY 2015 Second Quarter Land Use Control for RVAAP-05, Winklepeck Burning Grounds Camp Ravenna, Ohio

Location of	Description of Repair	Initials of person	Date of Repair	Notes
Fence Section		Completing		
Repaired		Repair		
NW12	Patched hole in the fence	State Maintenance	3/25/15	
SW22A	Patched hole in the fence	State Maintenance	3/25/15	
NE35	Patched hole in the fence	State Maintenance	3/25/15	
NE34	Patched hole in the fence	State Maintenance	3/25/15	
SW6B	Patched hole in the fence	State Maintenance	3/25/15	
NW1A	Patched hole in the fence	State Maintenance	3/25/15	
NW10A	Patched hole in the fence	State Maintenance	3/25/15	
NW11	Removed RR utility pole leaning on fence	State Maintenance	Unknown	
NE15A	Patched hole in fence	State Maintenance	Unknown	
NE33	Removed fallen tree from fence	State Maintenance	Unknown	
SE02	Repaired washout	State Maintenance	Unknown	
SW12	Repaired washout, cleaned culvert inlet	State Maintenance	Unknown	
SW24	Patched hole in fence	State Maintenance	Unknown	
SE02	Total culvert replacement	Contractor	4/10/2015	

Appendix I

Final FY 2015 Third Quarter Land Use Control Inspection for RVAAP-05 Winklepeck Burning Grounds

Final

FY 2015 Third Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

> Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

> > Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



October 30, 2015

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188		
The public reporting burden for this collection c gathering and maintaining the data needed, and c information, including suggestions for reducing t 1215 Jefferson Davis Highway, Suite 1204, Arl penalty for failing to comply with a collection of i PLEASE DO NOT RETURN YOUR FO	f information ompleting and he burden, to ngton, VA 2 nformation if i RM TO TH	is estimated to average 1 hour d reviewing the collection of infor Department of Defense, Washin 2202-4302. Respondents shou it does not display a currently val IE ABOVE ADDRESS.	per response, incl mation. Send com ngton Headquarters Id be aware that no Iid OMB control nur	uding the tir ments regard Services, Di otwithstandir nber.	me for reviewing instructions, searching existing data sources, ding this burden estimate or any other aspect of this collection of irectorate for Information Operations and Reports (0704-0188), ng any other provision of law, no person shall be subject to any
1. REPORT DATE (DD-MM-YYYY)	2. REPC	DRT TYPE			3. DATES COVERED (From - To)
4. TITLE AND SUBTITLE	1				NTRACT NUMBER
					ANT NUMBER
				5C. PRC	OGRAM ELEMENT NUMBER
6. AUTHOR(S)				5d. PRC	DJECT NUMBER
				5e. TAS	SK NUMBER
				5f. WO	RK UNIT NUMBER
7. PERFORMING ORGANIZATION N	ame(s) an	ND ADDRESS(ES)			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGE	NCY NAM	E(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)
					11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY S	TATEMEN	Γ			
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF a. REPORT b. ABSTRACT c. Th	IIS PAGE	17. LIMITATION OF ABSTRACT	OF	19a. NAI	ME OF RESPONSIBLE PERSON
			PAGES	19b. TEL	EPHONE NUMBER (Include area code)

Final

FY 2015 Third Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



October 30, 2015

Place Holder for Ohio EPA Approval Letter

(Letter will be inserted upon approval)

DOCUMENT DISTRIBUTION

For the

Final FY 2015 Third Quarter Land Use Control Inspections, RVAAP-05 Winklepeck Burning Grounds

> Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Name/Organization	Number of Printed Copies	Number of Electronic Copies
Mark Leeper, ARNG-ILE Clean Up	0	1
Kevin Sedlak, ARNG and Katie Tait, OHARNG	0	0
Andrew Kocher, Ohio EPA Project Manager – NEDO-DERR	1	3
Justin Burke, Ohio EPA – CDO-DERR	0	Email w/o attachments0
Quyet La, USACE - Louisville	0	1
Administrative Record – RVAAP Restoration Program	2	2

ARNG-ILE = Army National Guard Environmental Programs Division

OHARNG = Ohio Army National Guard

Ohio EPA-NEDO-DERR = Ohio Environmental Protection Agency-Northeast District Office –Division of Environmental Response and Revitalization

Ohio EPA-CDO-DERR = Ohio Environmental Protection Agency-Central District Office –Division of Environmental Response and Revitalization

USACE = United States Army Corps of Engineers

RVAAP = Ravenna Army Ammunition Plant

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
bgs	Below Ground Surface
Camp Ravenna	Camp Ravenna Joint Military Training Center
EQM	Environmental Quality Management, Inc.
FWGWMPP	Facility-Wide Ground Water Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
IRP	Installation Restoration Program
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
МК	Mark
MRS	Munitions Response Site
MSG	Master Sergeant
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
PS	Professional Surveyor
PMP	Property Management Plan
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
UXO	Unexploded Ordnance
WBG	Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center (Camp Ravenna) / Former Ravenna Army Ammunition Plant (RVAAP) Quarterly Land Use Control (LUC) Inspection Form RVAAP-05 Winklepeck Burning Grounds

In accordance with the Camp Ravenna/former RVAAP Property Management Plan (PMP) dated August 2012 and Appendix A-1, an inspection of RVAAP-05 Winklepeck Burning Grounds (WBG) was conducted by <u>Don Trocchio</u> on <u>May 27 and 28</u>, and June 1, 2, 3, 4, 8, 9, 10, 11 and 15, 2015.

The quarterly inspections required by the PMP include the following:

- Review of LUC training and documentation as applicable to WBG.
- Evaluation of the Camp Ravenna perimeter fence to ensure that it is maintained in a manner that is protective and effective control and deters trespassers.
- Evaluation of activities at WBG to ensure that all activities executed within WBG are in compliance with Ohio Army National Guard (OHARNG) range safety regulations/standard operation procedure (SOP), established digging restrictions, and established exposure limits. All digging, intrusive activities, or excavation on the WBG Area of Concern (AOC) outside of the Unexploded Ordnance (UXO)/ Munitions and Explosives of Concern (MEC)-cleared areas within the Mark (MK) 19 Grenade Machinegun Range is prohibited with the following exceptions:
 - Routine maintenance of roads, ditches, culverts and activities listed in A-1.4 of the PMP (maintenance of targetry and associated lifting mechanisms, range maintenance activities including removal of practice rounds, vegetation management, compatible natural resource management activities, nuisance wildlife control, drainage maintenance, wetland delineation, grassland management, scientific research and sampling activities);
 - Ground surface repairs by authorized range personnel in support of authorized range activities; and
 - Digging along target array areas by authorized range personnel to a depth of 1 foot below ground surface (bgs).

This shall also include evaluation of required range signage. The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations.

- Evaluation of groundwater activities to ensure that any groundwater activities are being conducted in a manner consistent with established LUCs. Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent Facility-Wide Sampling and Analysis Plan (FWSAP) as part of the AOC-specific Installation Restoration Program (IRP) or Facility-Wide Ground Water Monitoring Program Plan (FWGWMPP).
 - 2. The abandonment and replacement of monitoring wells damaged by activities conducted on Camp Ravenna and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio Environmental Protection Agency (Ohio EPA) guidance, the most recent FWSAP, and applicable Ohio Administrative Code requirements.

LUC deficiencies or inconsistent land uses that are identified must be reported and identified on the quarterly inspection form/report. These deficiencies must also be reported immediately to the Army, along with suggestions on how to remedy the deficiencies.

Review of LUCs – Management/Effectiveness/Corrective Action

1. AOC Map

Is the AOC map current with respect to AOC boundaries, land activities, and prescribed LUCs?

The AOC map was reviewed on May 28, 2015 by Don Trocchio, Professional Surveyor (PS), and it is current with respect to AOC boundaries, land activities and prescribed LUCs.

2. Camp Ravenna Perimeter Fence

Is the Camp Ravenna perimeter fence and associated gates being maintained in order to be an effective and protective control and deter trespassers?

The perimeter fence is currently being maintained by OHARNG staff to ensure it is an effective and protective land use control. In FY 2014, over 4500' of the perimeter fence at the west end of the facility was replaced and/or had barbed wire repairs completed. Also in FY 2014, a large section of fence (posts and fabric) on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 was replaced. As observed during the FY 2015 3rd quarter inspection, the fence has been repaired at 8 locations since the previous quarterly inspection in February/March 2015. These locations are NW10A, NW12, NE31, NE34, NE35, SW6B, SW18 and SW22A. Attachment 1, Figure 1 Index Map and Summary Table, and associated Detail Sheets present the damaged fence areas and photographs of repaired areas.

3. Activities and Land Use

a.) This AOC is restricted from residential land use. Has residential use occurred? Have other land use changes occurred?

Based on an interview with OHARNG Range Control Staff (Master Sergeant [MSG] Rex Hufenbach) on June 11, 2015 at the OHARNG Headquarters Building, no residential land use has occurred. Additionally, there has been no change in land use at the AOC since the previous inspection.

b.) What activities have occurred at WBG since the last inspection?

The WBG/MK19 Range has been utilized for training purposes (i.e., MK19 Range firing/activities) since the last inspection. Additionally, mowing has occurred since the previous inspection. All activities are in accordance with designated LUCs/restrictions.

c.) Are activities (digging, range maintenance etc.) at WBG being conducted in compliance with OHARNG range safety regulations/SOP and established digging restrictions?

Based on an interview with MSG Rex Hufenbach on June 11, 2015, all activities within WBG are being conducted in compliance with OHARNG Range Safety Regulations/SOP and established digging restrictions. All activities are in accordance with those set forth in the PMP.

d.) Is the required range signage in place and functional? The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations. If not, describe what corrective actions will be undertaken?

MSG Rex Hufenbach stated all signage is placed at 200-meter intervals and found to be upright and intact and in conformance with Army regulations. Annual repairs for signage along the surface danger zone perimeter were conducted in May 2015.

- e.) Groundwater: Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent FWSAP as part of the AOC-specific IRP or FWGWMPP.

- 2. The abandonment and replacement of monitoring wells damaged by Installation activities, and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio EPA guidance, the most recent FWSAP and applicable Ohio Administrative Code requirements.
- f.) Have any groundwater activities been conducted and, if yes, are they within the established control parameters?

Facility-wide Ground Water Monitoring Well sampling is conducted by Environmental Quality Management, Inc. (EQM) on a semi-annual basis in this area. During an interview on June 15, 2015 with Mr. Scott Spesshardt of EQM, he stated that all Ground Water Monitoring activity is conducted in accordance with the FWGWMPP and the parameters for groundwater monitoring as set forth in the PMP, Appendix A-1. A facility-wide groundwater sampling event took place in March 2015. The next FWGWMPP sampling event is currently scheduled for July 2015.

4. Inspections and Reporting

a.) Inspections are required on a quarterly basis. Are quarterly inspections being completed?

Quarterly Inspections have been completed for FY 2013 and FY 2014. This is the third Quarterly Inspection to be conducted for FY 2015. All Quarterly Inspections for FY 2013, FY 2014 and FY 2015 were conducted in accordance with the approved PMP dated August 2012.

b.) An annual report is required. Has the annual report been completed and submitted?

The Final FY 2014 Annual Report was submitted on January 12, 2015 and approved on March 17, 2015.

5. Training (as applicable to WBG)

a.) Was LUC training (specific to WBG) being conducted as applicable? Describe the training (content/who attended/who provided/documentation of training).

LUC training is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and specific restrictions for WBG. Using units also receive an in-brief prior to firing on the range. Using units and tenant units at Camp Ravenna are not allowed down range. Environmental contractors who access WBG are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. They must read and sign the in-brief form. Training materials and rosters are on file in the Camp Ravenna Environmental Office. LUC training specific to WBG was held on March 3rd and 5th, 2015 for Camp Ravenna units/staff. US Army Corps of Engineer personnel received the LUC briefing on June 2, 2015 prior to accessing the southern portions of the Winklepeck Burning Grounds AOC to conduct their MEC probability assessment for the adjacent Open Demolition Area # 2 MRS. Training will be conducted for additional Camp Ravenna staff and contractors that missed the March training dates as needed.

b.) If training was not provided, explain why and what corrective actions were initiated?

N/A

6. Description of any observed/noted LUC violation(s):

The Camp Ravenna perimeter fence has 5 missing sections/openings/holes in the fence fabric and areas that are in disrepair as documented in this report. These areas have been assigned the following call-out numbers: NW1B, NW13, NE32, NE36 and NE37. See Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspection and attached Detail Sheets.

7. Date of Notification of LUC violation (if applicable):

The Army was notified via e-mail on June 3, 4 and 8, 2015 of four new fence defects discovered during the 3rd Quarter FY 2015 facility perimeter fence evaluation. These locations are NW13, NW1B, NW36 and NW37 (See Attachment 1, Figure 1 Index Map and Summary Table, and associated detail sheets).

8. Description of any corrective actions taken to remedy observed LUC violation(s) or recommended corrective actions:

As observed during the third quarter LUC inspection, the following perimeter fence defects were repaired: NE31, NE34, NE35, SW6B, SW18, SW22A, NW10A and NW12.

Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspections shows previous fence deficiencies that have been repaired and/or reported since the last inspection.

These efforts of the OHARNG staff to repair the identified deficiencies in the fence have improved the condition of the fence since the last inspection.

9. Additional Notes/Comments:

As requested by the Ohio EPA, WBG photographs taken during the LUC Inspection are included with this report (Attachment 2, Supplemental Detail Sheet No. 1).

Original Inspection Completed by:

Signature:	\rightarrow
Printed Name: Don Trocchio	
Title: Professional Surveyor	Organization: Vista Sciences Corporation
Date: June 23, 2015	

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

FY 2015 Third Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 1

Figure 1 Index Map FY 2015 Callout/Repair Summary Table Detailed Quadrant Maps

Figure 1 Index Map



WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 3rd Qtr. FY 2015

FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (4 locations)
- Repaired in FY2015 (25 Locations Total)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



SEE ATTACHED SUMMARY TABLE AND DETAIL SHEETS FOR EACH DESIGNATED CALLOUT LOCATION

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



FY 2015 Callout/Repair Summary Table

FY 2015 3rd QUARTER CALLOUT/REPAIR SUMMARY TABLE

Camp Ravenna Joint Military Training Center 3rd Qtr FY2015 LUC Inspection

Callout	Dete	Commente	US Su	rvey Ft
Callout	Date	Comments	Northing	Easting
NW1B	6/3/2015	repeat poacher hole (3)	571637	2356382
NW13	6/2/2015	poacher hole	570866	2353636
NE32	3/30/2015	12in tree has fallen on to the fence	563254	2384389
NE36	6/4/2015	poacher hole	572329	2379236
NE37	6/4/2015	poacher hole	572335	2380333
NE30	7/21/2014	poacher hole	571083	2382464
SE04		washout logged as type 2 on 2-27-14 0271 photo	558980	2377933
SE05	04/22/2014	washout below undamaged fence	550299	2358851
_				
SW14	4/14/2014	poacher hole in fence	549386	2334237
SW15		tree blow down	549438	2339580
SW16	7/15/2014	tree blow down/damaged fence	554267	2328362
SW17	7/15/2014	tree blow down/fence top damaged	556228	2328345
SW19	7/15/2014	tree blow down/top fence damaged	556581	2328342
SW20	7/15/2014	hole in bottom of fence below sign	559398	2330974
SW21	7/15/2014	hole at bottom of fence	559659	2331945
SW22	7/16/2014	poacher hole	560762	2335683
				0010000
NW11	11/26/2014	old abandoned rr utility pole leaning over top of fence	564883	2343968
	40/45/0044		500040	0000070
NE15A		poacher hole (repeat)	563240	2383872
NE33	12/15/2014	8in tree has fallen on to the fence	563257	2384533
SE02	12/16/2014	weekeut	EE1400	2361141
5602	12/10/2014	Washout	551498	2301141
SW12	11/10/2012	storm washout about 2 sections inlet needs cleared	552357	2330086
SW12 SW24			549402	2336086
30024	11/20/2014		549402	2330000
NE31	3/18/2015	utility pole fallen on top of fence	572684	2363973
	3/19/2015	poacher hole	573073	2366913
NE34		repeat poacher hole of undocumented repair	572016	2365/11
	3/19/2015	repeat poacher hole of undocumented repair	572916	2365711
NE35	3/19/2015			
NE35 SW6B	3/19/2015 3/17/2015	poacher hole in fence (repeat)	560708	2335572
NE35 SW6B SW18	3/19/2015 3/17/2015 7/15/2014	poacher hole in fence (repeat) hole under fence at culvert outlet	560708 556241	2335572 2328345
NE35 SW6B SW18	3/19/2015 3/17/2015	poacher hole in fence (repeat)	560708	2335572
NE35 SW6B	3/19/2015 3/17/2015 7/15/2014	poacher hole in fence (repeat) hole under fence at culvert outlet	560708 556241	2335572 2328345

REPAIRED 1ST QTR
REPAIRED 2ND QTR
REPAIRED 3RD QTR

NE (Northeast) Quadrant



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE31 dated 06/03/2015

PHOTO NE31 discovered 12/03/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL SHEET FOR **NE**31



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE32 dated 06/08/2015 showing partial repair

PHOTO NE32 discovered 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



TROCCHIO

"minim"



Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

DETAIL

Louisville District







LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE34 dated 06/03/2015

PHOTO NE34 discovered 03/19/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE35 dated 06/03/2015

PHOTO NE35 discovered 03/19/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE36 discovered 06/04/2015





DETAIL SHEET FOR NE36



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE37 discovered 06/04/2015





DETAIL SHEET FOR NE37

NW (Northwest) Quadrant
DETAIL SHEET FOR NW1B



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW1B dated 06/03/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR NW10A



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NW10A dated 06/02/2015

PHOTO NW10A discovered 03/18/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



minim

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NW12 dated 06/03/2015

PHOTO NW12 discovered 03/19/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NW13 discovered 06/02/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





 m_{mmm} Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



DETAIL FOR NW1 ω

SE (Southeast) Quadrant

(No Detail Sheets for FY 2015 3rd Quarter LUC Inspection Report)

SW (Southwest) Quadrant

DETAIL SHEET FOR SW6B



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO SW6B dated 06/01/2015

PHOTO SW6B discovered 03/17/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone



D Π SHE Ш 0 R SW6 Π

DETAIL SHEET FOR SW18



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO SW18 dated 06/01/2015

PHOTO SW18 discovered 07/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





DETAIL SHEET FOR SW22A



LAND USE CONTROL (LUC) INSPECTION 3rd QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO SW22A dated 06/01/2015

PHOTO SW22A discovered 03/17/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

Quarterly Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 2

Supplemental Detail Sheet No. 1

Supplemental Detail Sheet No. 1



SUPPLEMENTAL DETAIL SHEET NO.1 LAND USE CONTROL (LUC) INSPECTION PERIMETER FENCE INSPECTION 3rd QUARTER FY2015

PHOTO N0.2 06/10/2015

PHOTO N0.4 06/10/2015



PHOTO No.1 06/10/2015

PHOTO N0.3 06/10/2015

PHOTO IMAGES WITHIN THE WINKLEPECK BURNING GROUNDS (RVAAP-05)

Camp Ravenna Joint Military Training Center



Portage & Trumbull County

Ohio Army National Guard







Produced in June 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone

0	345	690			1,380 I			2,070 Feet
Bar Scale in Feet								



Camp Ravenna JMTC 1438 State Route 534 SW Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@vistasciences.com

MGRS 17T NF01946150 (NAD83)

Appendix J

Final FY 2015 Fourth Quarter Land Use Control Inspection for RVAAP-05 Winklepeck Burning Grounds

Final

FY 2015 Fourth Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



600 E. Montana Ave. Las Cruces, NM 88001

December 18, 2015

DISCLAIMER STATEMENT

This document is a work prepared for the United States Government by Vista Sciences Corporation. In no event shall either the United States Government or U.S. Army Corps of Engineers have any responsibility or liability for any consequences of any use, misuse, inability to use, or reliance on the information contained herein, nor does either warrant or otherwise represent in any way the accuracy, adequacy, efficacy, or applicability of the contents hereof.

Final

FY 2015 Fourth Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant Portage and Trumbull Counties, Ohio

Contract No. W912QR-13-C-0031

Prepared for:



U.S. Army Corps of Engineers Louisville District

Prepared by:



600 E. Montana Ave. Las Cruces, NM 88001

December 18, 2015

(Placeholder for Ohio EPA Approval Letter)

Final Document Distribution

Name/Organization	Number of Printed Copies	Number of Electronic Copies	
Mark Leeper, ARNG-ILE-CR	0	1	
Kevin Sedlak, ARNG – Camp Ravenna	0	0	
Katie Tait, OHARNG – Camp Ravenna	0	0	
Drew Kocher, Ohio EPA Project Manager – NEDO-DERR	1	3	
Justin Burke, Ohio EPA – CO - DERR	0	Email w/o attachment	
Quyet C. La, USACE – Louisville District	0	1	
Gail Harris, AR Manager – Camp Ravenna	2	2	

AR = Administrative Record

ARNG = Army National Guard

ARNG-ILE-CR = Army National Guard – Installations Logistics Environmental – Cleanup Restoration CO = Central Office

DERR = Division of Environmental Response and Revitalization

EPA = Environmental protection Agency

NEDO = Northeast District Office

OHARNG = Ohio Army National Guard

USACE = U.S. Army Corps of Engineers

LIST OF ACRONYMS AND ABBREVIATIONS

AOC	Area of Concern
ARNG-ILE	Army National Guard Environmental Programs Division
bgs	below ground surface
Camp Ravenna	Camp Ravenna Joint Military Training Center
EQM	Environmental Quality Management, Inc.
FWGWMPP	Facility-Wide Ground Water Monitoring Program Plan
FWSAP	Facility-Wide Sampling and Analysis Plan
IRP	Installation Restoration Program
LUC	Land Use Control
MEC	Munitions and Explosives of Concern
МК	Mark
MRS	Munitions Response Site
MSG	Master Sergeant
Ohio EPA	Ohio Environmental Protection Agency
OHARNG	Ohio Army National Guard
PS	Professional Surveyor
PMP	Property Management Plan
RVAAP	Ravenna Army Ammunition Plant
SOP	Standard Operating Procedure
UXO	Unexploded Ordnance
WBG	Winklepeck Burning Grounds

Camp Ravenna Joint Military Training Center (Camp Ravenna) / Former Ravenna Army Ammunition Plant (RVAAP) Quarterly Land Use Control (LUC) Inspection Form RVAAP-05 Winklepeck Burning Grounds

In accordance with the Camp Ravenna/former RVAAP Property Management Plan (PMP) dated August 2012 and Appendix A-1, an inspection of RVAAP-05 Winklepeck Burning Grounds (WBG) was conducted by <u>Don Trocchio</u> on July 27 - 30, and August 3 - 6, 10 - 13, 2015.

The quarterly inspections required by the PMP include the following:

- Review of LUC training and documentation as applicable to WBG.
- Evaluation of the Camp Ravenna perimeter fence to ensure that it is maintained in a manner that is protective and effective control and deters trespassers.
- Evaluation of activities at WBG to ensure that all activities executed within WBG are in compliance with Ohio Army National Guard (OHARNG) range safety regulations/standard operation procedure (SOP), established digging restrictions, and established exposure limits. All digging, intrusive activities, or excavation on the WBG Area of Concern (AOC) outside of the Unexploded Ordnance (UXO)/ Munitions and Explosives of Concern (MEC)-cleared areas within the Mark (MK) 19 Grenade Machinegun Range is prohibited with the following exceptions:
 - Routine maintenance of roads, ditches, culverts and activities listed in A-1.4 of the PMP (maintenance of targetry and associated lifting mechanisms, range maintenance activities including removal of practice rounds, vegetation management, compatible natural resource management activities, nuisance wildlife control, drainage maintenance, wetland delineation, grassland management, scientific research and sampling activities);
 - Ground surface repairs by authorized range personnel in support of authorized range activities; and
 - Digging along target array areas by authorized range personnel to a depth of 1 foot below ground surface (bgs).

This shall also include evaluation of required range signage. The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations.

- Evaluation of groundwater activities to ensure that any groundwater activities are being conducted in a manner consistent with established LUCs. Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:
 - 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent Facility-Wide Sampling and Analysis Plan (FWSAP) as part of the AOC-specific Installation Restoration Program (IRP) or Facility-Wide Ground Water Monitoring Program Plan (FWGWMPP).
 - 2. The abandonment and replacement of monitoring wells damaged by activities conducted on Camp Ravenna and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio Environmental Protection Agency (Ohio EPA) guidance, the most recent FWSAP, and applicable Ohio Administrative Code requirements.

LUC deficiencies or inconsistent land uses that are identified must be reported and identified on the quarterly inspection form/report. These deficiencies must also be reported immediately to the Army, along with suggestions on how to remedy the deficiencies.

Review of LUCs – Management/Effectiveness/Corrective Action

1. AOC Map

Is the AOC map current with respect to AOC boundaries, land activities, and prescribed LUCs?

The AOC map was reviewed on July 28, 2015 by Don Trocchio, Professional Surveyor (PS), and it is current with respect to AOC boundaries, land activities and prescribed LUCs.

2. Camp Ravenna Perimeter Fence

Is the Camp Ravenna perimeter fence and associated gates being maintained in order to be an effective and protective control and deter trespassers?

The perimeter fence is currently being maintained by OHARNG staff to ensure it is an effective and protective land use control. In FY 2014, over 4500' of the perimeter fence at the west end of the facility was replaced and/or had barbed wire repairs completed. Also in FY 2014, a large section of fence (posts and fabric) on the northern perimeter from the Trumbull/Portage County line west to just west of former Post 34 was replaced. As observed during the FY 2015 4th quarter inspection, the fence has been repaired at 4 locations since the previous quarterly inspection in May/June 2015. These locations are NW1B, NW13, NE36 and NE37. Attachment 1, Figure 1 Index Map and Summary Table, and associated Detail Sheets present the damaged fence areas and photographs of repaired areas.

3. Activities and Land Use

a.) This AOC is restricted from residential land use. Has residential use occurred? Have other land use changes occurred?

Based on an interview with OHARNG Range Control Staff (Master Sergeant [MSG] Rex Hufenbach) on August 11, 2015 at the OHARNG Headquarters Building, no residential land use has occurred. Additionally, there has been no change in land use at the AOC since the previous inspection.

b.) What activities have occurred at WBG since the last inspection?

The WBG/MK19 Range has been utilized for training purposes (i.e., MK19 Range firing/activities) since the last inspection. Additionally, mowing has occurred since the previous inspection. FWGWMPP groundwater monitoring wells located within WBG were sampled in July 2015. All activities are in accordance with designated LUCs/restrictions.

c.) Are activities (digging, range maintenance etc.) at WBG being conducted in compliance with OHARNG range safety regulations/SOP and established digging restrictions?

Based on an interview with MSG Rex Hufenbach on August 11, 2015, all activities within WBG are being conducted in compliance with OHARNG Range Safety Regulations/SOP and established digging restrictions. All activities are in accordance with those set forth in the PMP.

d.) Is the required range signage in place and functional? The range is required to be marked with signage in conformance with the requirements of the current Department of Army regulations. If not, describe what corrective actions will be undertaken?

MSG Rex Hufenbach stated all signage is placed at 200-meter intervals and found to be upright and intact and in conformance with Army regulations. Annual repairs for signage along the surface danger zone perimeter were conducted in May 2015.

e.) Groundwater: Groundwater use or extraction of groundwater located at or underlying the WBG AOC or any portion thereof is prohibited, except for the following:

- 1. The installation, development, purging, and sampling of new or existing monitoring wells in accordance with the most recent FWSAP as part of the AOC-specific IRP or FWGWMPP.
- 2. The abandonment and replacement of monitoring wells damaged by Installation activities, and wells no longer utilized as part of IRP or FWGWMPP activities, in accordance with Ohio EPA guidance, the most recent FWSAP and applicable Ohio Administrative Code requirements.
- f.) Have any groundwater activities been conducted and, if yes, are they within the established control parameters?

Facility-wide Ground Water Monitoring Well sampling is conducted by Environmental Quality Management, Inc. (EQM) on a semi-annual basis in this area. During an interview on August 13 15, 2015 with Mr. Kevin Sedlak (Restoration Project Manager, Army National Guard Environmental Programs Division [ARNG-ILE] Clean-up), he stated that all Ground Water Monitoring activity is conducted in accordance with the FWGWMPP and the parameters for groundwater monitoring as set forth in the PMP, Appendix A-1. A facility-wide groundwater sampling event took place in July 2015. The next FWGWMPP sampling event is currently scheduled for early 2016.

4. Inspections and Reporting

a.) Inspections are required on a quarterly basis. Are quarterly inspections being completed?

Quarterly Inspections have been completed for FY 2013 and FY 2014. This is the fourth Quarterly Inspection to be conducted for FY 2015. All Quarterly Inspections for FY 2013, FY 2014 and FY 2015 were conducted in accordance with the approved PMP dated August 2012.

b.) An annual report is required. Has the annual report been completed and submitted?

The Final FY 2014 Annual Report was submitted on January 12, 2015 and approved on March 17, 2015.

5. Training (as applicable to WBG)

a.) Was LUC training (specific to WBG) being conducted as applicable? Describe the training (content/who attended/who provided/documentation of training).

LUC training is provided annually to all Camp Ravenna staff and tenant units at Camp Ravenna. The LUC training is typically provided by Katie Tait and/or Tim Morgan, Camp Ravenna-Environmental. The training provides an overview of the history of the facility, the ongoing cleanup work, the location of the cleanup sites, any land use controls/restrictions on AOCs/Munitions Response Sites (MRS), and specific restrictions for WBG. Using units also receive an in-brief prior to firing on the range. Using units and tenant units at Camp Ravenna are not allowed down range. Environmental contractors who access WBG are also provided with an in-brief which informs them of the LUCs/restrictions at the AOC. They must read and sign the in-brief form. Training materials and rosters are on file in the Camp Ravenna Environmental Office. LUC training specific to WBG was held on March 3rd and 5th, 2015 for Camp Ravenna units/staff. US Army Corps of Engineer personnel received the LUC briefing on June 2, 2015 prior to accessing the southern portions of the Winklepeck Burning Grounds AOC to conduct their MEC probability assessment for the adjacent Open Demolition Area # 2 MRS. Ohio EPA personnel received the LUC briefing on July 22, 2015 prior to entering the site for environmental reconnaissance purposes. EnviroScience personnel received the LUC briefing on August 12, 2015 prior to entering the site for environmental reconnaissance purposes. Training will be conducted for additional Camp Ravenna staff and contractors that missed the March training dates as needed.

- b.) If training was not provided, explain why and what corrective actions were initiated?
 - N/A

6. Description of any observed/noted LUC violation(s):

The Camp Ravenna perimeter fence has 4 missing sections/openings/holes in the fence fabric and areas that are in disrepair as documented in this report. These areas have been assigned the following call-out numbers: NE10A, NE32, NE38 and SE2A. See Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspection and attached Detail Sheets.

7. Date of Notification of LUC violation (if applicable):

The Army was notified via e-mail on August 6, 10 and 11, 2015 of three new fence defects discovered during the 4th Quarter FY 2015 facility perimeter fence evaluation. These locations are NE38, NE10A, SE2A (See Attachment 1, Figure 1 Index Map and Summary Table, and associated detail sheets).

8. Description of any corrective actions taken to remedy observed LUC violation(s) or recommended corrective actions:

As observed during the fourth quarter LUC inspection, the following perimeter fence defects were repaired: NE36, NE37, NW1B and NW13.

Attachment 1 – Figure 1 Index Map to Facility Perimeter Fence Inspections shows previous fence deficiencies that have been repaired and/or reported since the last inspection.

These efforts of the OHARNG staff to repair the identified deficiencies in the fence have improved the condition of the fence since the last inspection. A repair log (Attachment 2) was received on August 4, 2015 from State Maintenance that lists fence repairs they completed since the 3rd Quarter LUC Inspection. The Camp Ravenna Repair Log is included in Attachment 2.

9. Additional Notes/Comments:

As requested by the Ohio EPA, WBG photographs taken during the 4th Quarter LUC Inspection are included with this report (Attachment 2, Supplemental Detail Sheet No. 1).

Original Inspection Completed by:

Signature:					
Printed Name: Don Trocchio					
Title: Professional Surveyor Organization: Vista Sciences Corporation					
Date: August 18, 2015					

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

FY 2015 Fourth Quarter Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 1

Figure 1 Index Map FY 2015 Callout/Repair Summary Table Detailed Quadrant Maps

Figure 1 Index Map



WINKLEPECK BURNING GROUNDS (WBG) RVAAP-05 LAND USE CONTROL (LUC) INSPECTION 4th Qtr. FY 2015



FIGURE 1 INDEX MAP TO FACILITY PERIMETER FENCE INSPECTION

Legend

LUC Inspection of Perimeter Fence

- Opening in fence (2'≥) and/or fabric missing/damaged (3 locations)
- Repaired (29 Locations Total)
- Gates (26 locations for reference only, no detail sheets) All gates appear to be maintained and are in working order
- \bigcirc Repair in progress (1 location)
 - Perimeter Fence Evaluated (29.8 miles)



SEE ATTACHED SUMMARY TABLE AND DETAIL SHEETS FOR EACH **DESIGNATED CALLOUT LOCATION**

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



Ohio Army National Guard







Produced in August 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District



FY 2015 Callout/Repair Summary Table

FY 2015 4th QUARTER CALLOUT/REPAIR SUMMARY TABLE

Camp Ravenna Joint Military Training Center 4th Qtr FY2015 LUC Inspection

Callout	Date	Comments	US Survey Ft		
		Comments	Northing	Easting	
IE10A		fence fabric and top rail damaged to permit access	563195	2380440	
IE32		12in tree has fallen on to the fence	563254	2384389	
VE38	8/5/2015	12in tree blow down on top of fence	563279	2385540	
SE2A	8/10/2015	washout 10x6 box culvert from debris plugged security cage	551498	2361141	
VE30	7/21/2014	poacher hole	571083	2382464	
SE04	11/25/2012	washout logged as type 2 on 2-27-14 0271 photo	558980	2377933	
SE04	04/22/2013	washout below undamaged fence	550299	235885	
SW14	04/14/2014	poacher hole in fence	549386	233423	
SW15	7/15/2014	tree blow down	549438	2339580	
SW16	7/15/2014	tree blow down/damaged fence	554267	2328362	
SW17		tree blow down/fence top damaged	556228	232834	
SW19		tree blow down/top fence damaged	556581	2328342	
SW20	7/15/2014	hole in bottom of fence below sign	559398	2330974	
SW21		hole at bottom of fence	559659	233194	
SW22	7/16/2014	poacher hole	560762	233568	
W11	11/26/2014	old abandoned rr utility pole leaning over top of fence	564883	234396	
IE15A	12/15/2014	poacher hole (repeat)	563240	238387	
VE15A		8in tree has fallen on to the fence	563257	238453	
NL JJ	12/13/2014		303237	2004000	
SE02	12/16/2014	washout	551498	236114	
SW12	11/10/2012	storm washout about 2 sections inlet needs cleared	552357	233008	
SW 12		poacher hole	549402	233608	
50024	11/20/2014		549402	2330000	
VE31	3/18/2015	utility pole fallen on top of fence	572684	2363973	
NE34	3/19/2015	poacher hole	573073	236691	
VE35		repeat poacher hole of undocumented repair	572916	236571	
SW6B		poacher hole in fence (repeat)	560708	2335572	
SW18		hole under fence at culvert outlet	556241	232834	
SW22A	3/17/2015	repeat poacher hole	560762	233568	
W10A	3/18/2015	repeat cut poacher hole in new fence	571046	235418	
W12		poacher hole	571617	235635	
				200000	
VE36	6/4/2015	poacher hole	572329	237923	
NE37		poacher hole	572335	238033	
	6/2/2015	repeat poacher hole (3)	571637	2356382	
VW1B VW13	0/3/2015	poacher hole	570866	235363	

REPAIRED 1ST QUARTER REPAIRED 2ND QUARTER REPAIRED 3RD QUARTER REPAIRED 4TH QUARTER NE (Northeast) Quadrant



LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE10A discovered 08/06/2015

PHOTO NE10A discovered 08/06/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP



DONALD TROCCHIO



Produced in August 2015 for:



 $u_{\mu\mu\nu}$

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE32 dated 08/05/2015 (In Progress)

PHOTO NE32 discovered 12/15/2014



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in August 2015 for:



"minim"

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District







LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE36 dated 08/04/2015

PHOTO NE36 discovered 06/04/2015





DETAIL SHEET FOR Z **ω** 6



LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NE37 dated 08/04/2015

PHOTO NE37 discovered 06/04/2015





DETAIL SHEET FOR Z ί 3 7



LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO NE38 discovered 08/05/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in August 2015 for:



 $u_{\mu_{\mu_{\mu}\mu_{\mu}\mu_{\mu}\mu_{\mu}\mu_{\mu}\mu_{\mu}}}$

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District





NW (Northwest) Quadrant

DETAIL SHEET FOR NW1B



LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NW1B dated 08/03/2015

PHOTO NW1B dated 06/03/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in August 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Π

TAIL

Louisville District





LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

REPAIR PHOTO NW13 dated 08/05/2015

PHOTO NW13 discovered 06/02/2015



Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP





Produced in August 2015 for:



"minimu

US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Ē

Louisville District



SE (Southeast) Quadrant

DETAIL SHEET FOR SE2A



LAND USE CONTROL (LUC) INSPECTION 4th QUARTER FY2015 PERIMETER FENCE INSPECTION

PHOTO SE2A discovered 08/10/2015

PHOTO SE2A discovered 08/10/2015





DETAIL SHEET FOR ິ Π 2A

SW (Southwest) Quadrant

(No Detail Sheets for FY 2015 4th Quarter LUC Inspection Report)

Camp Ravenna Joint Military Training Center Former Ravenna Army Ammunition Plant

Quarterly Land Use Control Inspection RVAAP-05 Winklepeck Burning Grounds

ATTACHMENT 2

Supplemental Detail Sheet No. 1

Camp Ravenna Fence Repair Log

Supplemental Detail Sheet No. 1



SUPPLEMENTAL DETAIL SHEET NO.1 LAND USE CONTROL (LUC) INSPECTION PERIMETER FENCE INSPECTION 4th QUARTER FY2015

PHOTO N0.2 08/11/2015



PHOTO No.1 08/11/2015

PHOTO N0.4 08/11/2015



PHOTO N0.3 08/11/2015

PHOTO IMAGES WITHIN THE WINKLEPECK BURNING GROUNDS (RVAAP-05)

Camp Ravenna Joint Military Training Center



Portage & Trumbull County LOCATOR MAP

Ohio Army National Guard







Produced in August 2015 for:



US Army Corps of Engineers

600 Dr. Martin Luther King Jr. Place Louisville, KY 40202

Louisville District

Projection Datum is NAD83, Ohio State Plane Rectangular Grid, North Zone





Camp Ravenna JMTC 1438 State Route 534 SW Newton Falls, OH 44444 Don Trocchio, PS don.trocchio@vistasciences.com

MGRS 17T NF01946150 (NAD83)

Camp Ravenna Fence Repair Log

Location of Fence Section	Description of Repair	Initials of person Completing	Date of Repair	Notes
Repaired	0	Repair		
NIALIB	REPAIRED IABRI/	REMRAL	7-8-15	
NE 26	KEPIQUEN FARRIC	Por Put	13-2-15	
NE 27	BEPLACED TABRIC	RMF BLS	Q-4-15	
NN 13.	KEPLALED FABRIC	RIF BIS	8.4-15	
<u> </u>	NERGICON TITORIC	NME PLO	0-7-15	
			r	
		1000-mmmana - 1000 mmmana - 11000 mmmana - 1		
		ng transport in the constant of the constant o		
			our -	
9411/1011/01/01/01/01/01/01/01/01/01/01/01				
1				

Appendix K

FY 2015 Perimeter Fence Defect Call Outs Identified and Repaired

-		US Survey Ft		Fiscal Year and	
				Quarter	Fiscal Year and
Callout	Comments	Northing	Easting	Identified	Quarter Repaired
NE10A	fence fabric and top rail damaged to permit access	563195	2380440	FY 2015 - 4 Qtr.	NC
NE15A	poacher hole (repeat)	563240	2383872	FY 2015 - 1 Qtr.	FY 2015 - 2 Qtr.
NE30	poacher hole	571083	2382464	FY 2014 - 4 Qtr.	FY 2015 - 1 Qtr.
NE31	utility pole fallen on top of fence	572684	2363973	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
NE32	12in tree has fallen on to the fence	563254	2384389	FY 2015 - 2 Qtr.	NC
NE33	8in tree has fallen on to the fence	563257	2384533	FY 2015 - 1 Qtr.	FY 2015 - 2 Qtr.
NE34	poacher hole	573073	2366913	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
NE35	repeat poacher hole of undocumented repair	572916	2365711	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
NE36	poacher hole	572329	2379236	FY 2015 - 3 Qtr.	FY 2015 - 4 Qtr.
NE37	poacher hole	572335	2380333	FY 2015 - 3 Qtr.	FY 2015 - 4 Qtr.
NE38	12in tree blow down on top of fence	563279	2385540	FY 2015 - 4 Qtr.	NC
NW1B	repeat poacher hole (3)	571637	2356382	FY 2015 - 3 Qtr.	FY 2015 - 4 Qtr.
NW10A	repeat cut poacher hole in new fence	571046	2354186	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
NW11	old abandoned rr utility pole leaning over top of fence	564883	2343968	FY 2015 - 1 Qtr.	FY 2015 - 2 Qtr.
NW12	poacher hole	571617	2356355	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
NW13	poacher hole	570866	2353636	FY 2015 - 3 Qtr.	FY 2015 - 4 Qtr.
SE02	washout	551498	2361141	FY 2015 - 1 Qtr.	FY 2015 - 2 Qtr.
SE2A	washout 10x6 box culvert from debris plugged security cage	551498	2361141	FY 2015 - 4 Qtr.	NC
SE04	washout logged as type 2 on 2-27-14 0271 photo	558980	2377933	FY 2014 - 1 Qtr.	FY 2015 - 1Qtr.
SE05	washout below undamaged fence	550299	2358851	FY 2014 - 3 Qtr.	FY 2015 - 1Qtr.
0200		000200	2000001		112010 1001
SW6B	poacher hole in fence (repeat)	560708	2335572	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
SW0B SW12	storm washout about 2 sections inlet needs cleared	552357	2330086	FY 2014 - 1 Qtr.	FY 2015 - 2 Qtr.
SW12 SW14	poacher hole in fence	549386	2330080		
				FY 2014 - 3 Qtr.	FY 2015 - 1Qtr.
SW15	tree blow down	549438	2339580	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW16	tree blow down/damaged fence	554267	2328362	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
	tree blow down/fence top damaged	556228	2328345	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW18	hole under fence at culvert outlet	556241	2328345	FY 2014 - 4 Qtr.	FY 2015 - 3 Qtr.
	tree blow down/top fence damaged	556581	2328342	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW20	hole in bottom of fence below sign	559398	2330974	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW21	hole at bottom of fence	559659	2331945	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW22	poacher hole	560762	2335683	FY 2014 - 4 Qtr.	FY 2015 - 1Qtr.
SW22A	repeat poacher hole	560762	2335683	FY 2015 - 2 Qtr.	FY 2015 - 3 Qtr.
SW24	poacher hole	549402	2336086	FY 2015 - 1 Qtr.	FY 2015 - 2 Qtr.

FISCAL YEAR 2015 LAND USE CONTROL INSPECTION SUMMARY TABLE Camp Ravenna Joint Military Training Center

NOTE: NC = Indicates Repair Not Yet Completed