

# CY 2008

Operations and Maintenance Trip Reports and Quarterly Effectiveness  
Evaluation Reports Time Critical Response Action for the Rocket Ridge  
Area at RVAAP-004-R-01 Open Demolition Area #2

### Trip Report

<b>Prime Contract No:</b>	E2M-S08-039		<b>Report No.</b>	5
<b>PIKA JOB #:</b>	08-53-134		<b>Date:</b>	12-16-08
<b>Project:</b>	Operation and Maintenance of the Sand Creek Barrier System			
<b>Environmental Conditions:</b>				
Weather Conditions (Bright Sun, Clear, Overcast, Rain, Snow):		Overcast		
Temperature:		22° F		
Wind (Still, Moderate, High):		Moderate		
Humidity (Dry, Moderate, Humid):		Dry		
<b>Field Activities:</b>				
<b>Description of debris inspection &amp; removal activities:</b> Removed leaves, sticks and mud from barrier. Numerous amounts of leaves on both screens. No MEC/MD found.				
<b>Barrier Integrity:</b> Barrier is operable, there are no gaps that would allow MEC/MD to pass through.				
<b>Assessment of any changes since previous visit:</b> Both screens appear to be bent more than at the previous inspection.				
<b>Repairs made or need to be made:</b> None at this time.				

**Remarks:**

Visitors: None

**Health and Safety**

Conducted health and safety meetings and task order meetings every morning, prior to commencement of activities.

Were there any lost time accidents this week? No  Yes .

If "yes", refer attached summary of incident or OSHA report.

**Quality Control**

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Major Problems and Resolution: None			
<b>Schedule for Next Month: Follow on inspection of barrier</b>			
SUXOS	Lew Kovarik	Project Manager	Brian Stockwell
UXO Safety Officer	Mel Lau		

# PHOTO LOG



Overview of Screens upon arrival



Overview of Screens upon arrival



Screens bowing



Cleaning Screens





Overview of barriers following cleaning operations.  
Note: Remaining debris seen on screens is frozen to the screens.

**Trip Report**

<b>Prime Contract No:</b>	E2M-S08-039		<b>Report No.</b>	4
<b>PIKA JOB #:</b>	08-53-134		<b>Date:</b>	11-19-08
<b>Project:</b>	Operation and Maintenance of the Sand Creek Barrier System			
<b>Environmental Conditions:</b>				
Weather Conditions (Bright Sun, Clear, Overcast, Rain, Snow):		Overcast		
Temperature:		26° F		
Wind (Still, Moderate, High):		Moderate		
Humidity (Dry, Moderate, Humid):		Dry		
<b>Field Activities:</b>				
<p><b>Description of debris inspection &amp; removal activities:</b> Removed numerous amounts of leaves and sticks from barrier. Recommend for future inspection/cleaning in late fall/early winter assign two additional persons to help with cleanup.</p>				
<p><b>Barrier Integrity:</b> Both screens slightly bent, but no breaks or cracks.</p>				
<p><b>Assessment of any changes since previous visit:</b> Both screens are bent more than the previous inspection.</p>				
<p><b>Repairs made or need to be made:</b> None at this time.</p>				

**Remarks:**

Visitors: None

**Health and Safety**

Conducted health and safety meetings and task order meetings every morning, prior to commencement of activities.

Were there any lost time accidents this week? No  Yes .

If "yes", refer attached summary of incident or OSHA report.

**Quality Control**

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Major Problems and Resolution: None			
<b>Schedule for Next Month: Follow on inspection of barrier</b>			
SUXOS	Lew Kovarik	Project Manager	Brian Stockwell
UXO Safety Officer	Mel Lau		

# PHOTO LOG



Overview of barrier upon arrival



Screens bowing.



Overview of barriers before demobilization

# Safety Training Attendance Log





PIKA SAFETY TRAINING ATTENDANCE LOG

Date: 11/19/08 Instructor(s): MEL LAU Time: 1030 Log No.: 4

Site Name & Location: Ravenna Army Ammunition Plant, Ravenna, OH

Contract No.: Task Order Number:

Site Supervisor or SUXOS: Lew Kovarik SSHO: MEL LAU

Training Provided: [ ] Initial Site Hazard Training [x] Daily Safety Briefing [x] Other: [ ] Weekly Safety Training [ ] Task/Hazard-specific Training

I. TRAINING TOPICS COVERED

Table with 4 columns: Topic, Status, Sub-Topic, Status. Rows include Planned Site Activities, Physical Safety Hazards, Biological Hazards, Heat or Cold Stress, Site Controls, Chemical Hazards, Routes of Chemical Exposure, Chemical Exposure Symptoms, Level of PPE, Types of PPE, Respirator Use, Decontamination Procedures, Emergency Procedures, First Aid Procedures, Buddy Team Procedures.

Other Topics:

II. TRAINING COURSE ATTENDEES

Table with 3 columns: Name (printed), Signature, Organization. Rows include Lew Kovarik, MEL LAU, Yazdi Hormozdi, and several empty rows.

III. TRAINING VERIFICATION

I certify that the personnel listed on this roster have received the safety and health training described above.

Signature of Site Safety and Health Officer

Signature of Sr. UXO Supervisor or Site Supervisor

# Visitor Sign-In Log



**Trip Report**

<b>Prime Contract No:</b>	E2M-S08-039		<b>Report No.</b>	3
<b>PIKA JOB #:</b>	08-53-134		<b>Date:</b>	10-23-08
<b>Project:</b>	Operation and Maintenance of the Sand Creek Barrier System			
<b>Environmental Conditions:</b>				
Weather Conditions (Bright Sun, Clear, Overcast, Rain, Snow):		Clear, sunny		
Temperature:		47° F		
Wind (Still, Moderate, High):		Still		
Humidity (Dry, Moderate, Humid):		Dry		
<b>Field Activities:</b>				
<b>Description of debris inspection &amp; removal activities:</b> Leaves, branches, silt/mud, and sticks. Removed debris from both screens.				
 <b>Barrier Integrity:</b> Good				
 <b>Assessment of any changes since previous visit:</b> Slight washout. Erosion on southern ends of both barriers.				
 <b>Repairs made or need to be made:</b> Placed rocks at south ends of both barriers to stop erosion.				

**Remarks:**

Visitors: Mark Patterson (RVAAP), and Daniel Zugris (e2M)

**Health and Safety**

Conducted health and safety meetings and task order meetings every morning, prior to commencement of activities.

Were there any lost time accidents this week? No  Yes .

If "yes", refer attached summary of incident or OSHA report.

**Quality Control**

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Major Problems and Resolution: None			
<b>Schedule for Next Month: Follow on inspection of barrier</b>			
SUXOS	Lew Kovarik	Project Manager	Brian Stockwell
UXO Safety Officer	Mel Lau		

# PHOTO LOG



Overview of Screens upon arrival



Cleaning Screen





Washout area at barrier



Washout area reinforced with rocks



Washout area at barrier



Washout area reinforced with rocks



Overview of barriers before demobilization

# Safety Training Attendance Log



# Visitor Sign-In Log



### Trip Report

<b>Prime Contract No:</b>	E2M-S08-039		<b>Report No.</b>	2
<b>PIKA JOB #:</b>	08-53-134		<b>Date:</b>	9-22-08
<b>Project:</b>	Operation and Maintenance of the Sand Creek Barrier System			
<b>Environmental Conditions:</b>				
Weather Conditions (Bright Sun, Clear, Overcast, Rain, Snow):		Clear, sunny		
Temperature:		68° F		
Wind (Still, Moderate, High):		Still		
Humidity (Dry, Moderate, Humid):		Dry		
<b>Field Activities:</b>				
<b>Description of debris inspection &amp; removal activities:</b> Leaves, branches, mud, sticks and rocks. Removed debris from both screens.				
<b>Barrier Integrity:</b> Both Barriers bowed slightly due to branches and leaves approximately 3-5" thick on the screens from bottom to top.				
<b>Assessment of any changes since previous visit:</b> Barrier screens slightly more bowed (no breaks or cracks in screen).				
<b>Repairs made or need to be made:</b> None.				



**Remarks:**

Visitors: Mark Patterson (RVAAP), Eileen Mohr (Ohio EPA)

**Health and Safety**

Conducted health and safety meetings and task order meetings every morning, prior to commencement of activities.

Were there any lost time accidents this week? No  Yes .

If "yes", refer attached summary of incident or OSHA report.

**Quality Control**

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
<p>Major Problems and Resolution:      None</p>			
<p><b>Schedule for Next Month: Follow on inspection of barrier</b></p>			
<p>SUXOS UXO Safety Officer</p>	<p>Lew Kovarik Mel Lau</p>	<p>Project Manager</p>	<p>Brian Stockwell</p>

# PHOTO LOG



Overview of Screens upon arrival



Cleaning Screen



Bowing of barrier



Overview of barriers before demobilization

# Safety Training Attendance Log



# Visitor Sign-In Log





**Trip Report**

<b>Prime Contract No:</b>	E2M-S08-039		<b>Report No.</b>	1
<b>PIKA JOB #:</b>	08-53-134		<b>Date:</b>	8-19-08
<b>Project:</b>	Operation and Maintenance of the Sand Creek Barrier System			
<b>Environmental Conditions:</b>				
Weather Conditions (Bright Sun, Clear, Overcast, Rain, Snow):		Overcast, light rain		
Temperature:		71° F		
Wind (Still, Moderate, High):		moderate		
Humidity (Dry, Moderate, Humid):		moderate		
<b>Field Activities:</b>				
<b>Description of debris inspection &amp; removal activities:</b> Leaves, branches, sticks and rocks. Removed debris from both screens.				
 <b>Barrier Integrity:</b> Second Barrier bowed slightly due to leaves, branches etc. Debris built up due to high water. Debris was up to top of both screens at the high water mark. North side of barrier had slight washout.				
 <b>Assessment of any changes since previous visit:</b> N/A				
 <b>Repairs made or need to be made:</b> Repaired washout with available rocks.				

**Remarks:**

Visitors: Mark Patterson (RVAAP), Irv Venger (RVAAP) Todd Fisher (Ohio EPA)

**Health and Safety**

Conducted health and safety meeting and task order meeting prior to commencement of activities.

Were there any lost time accidents this week? No  Yes .

If "yes", refer attached summary of incident or OSHA report.

**Quality Control**

Inspections Performed	Non-Conformances	Corrective Action (CA)	Follow-up on CA
Major Problems and Resolution: None			
<b>Schedule for Next Month: Follow on inspection of barrier</b>			
SUXOS UXO Safety Officer	Lew Kovarik Mel Lau	Project Manager	Brian Stockwell

# PHOTO LOG



Overview of Screens upon arrival



Cleaning Screen



Washout area at second barrier



Washout area reinforced with rocks



Ohio EPA inspection of Sand Creek Barrier



Overview of barriers before demobilization



# Safety Training Attendance Log



# Visitor Sign-In Log



## Quarterly Effectiveness Evaluation Report

### Sand Creek Barrier System

### Time Critical Response Action (TCRA) for the Rocket Ridge Area of Open Demolition Area #2

<b>Project No:</b>	4100-979-01	<b>QEE Report No:</b>	1
<b>Date of QEE Site Visit:</b>	23 October 2008		
<b>Time Period Covered by QEE Report:</b>	<b>From</b>	17 July 2008 (construction completion)	
	<b>To:</b>	23 October 2008	
<b>Dates of O&amp;M Trips During Period Covered by QEE Report:</b>	19 August 2008 (O&M Trip #1)		
	22 September 2008 (O&M Trip #2)		
	23 October 2008 (O&M Trip #3)		

#### Summary of O&M Activities Performed During QEE Report Period

**Materials found on the screens:** Leaves, branches, sticks, sediment, and rocks. No munitions-related materials were found on the screens.

**Barrier integrity:** Barrier screens are slightly bowed due to water pressure on leaves-covered screens. There is no damage to the barrier elements. Some limited scouring was observed at the south end of the barrier screens, on the creek bank.

**Other changes observed:** None.

**Maintenance performed:** Removed materials from the screens and filled the scoured area with rocks.

#### Barrier System Effectiveness Evaluation

##### **Barrier System condition:**

All posts, back braces, and anchor plates are intact and solidly anchored (Photos 1 and 2). Most of the screen panels have been slightly bowed by water pressure (Photo 3). During storm events, leaves build up on the screens, generating pressure that increases with water depth. As a result, the maximum screen deflection is observed at the top of the screens. The maximum deflection reaches 2 inches on the 3-inch opening barrier and 4 inches on the 1-inch opening barrier. The difference is due to the larger amount of leaves on the barrier with smaller grid opening. The screen panel deflection appears to have been stabilized within the first couple of months after construction. At the time of the QEE visit, before the O&M debris removal work, the leaves accumulated on the barriers were 7 - 8 inches deep (Photo 4).

Creek bank scouring was observed at the south end of each of the two barriers, where the creek is deeper and the creek bank is steep (Photo 5). The scouring features are located

## Quarterly Effectiveness Evaluation Report

### Sand Creek Barrier System

### Time Critical Response Action (TCRA) for the Rocket Ridge Area of Open Demolition Area #2

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#### Summary of O&M Activities Performed During QEE Report Period

**Materials found on the screens:** Leaves, branches, sticks, sediment, and rocks. No munitions-related materials were found on the screens.

**Barrier integrity:** Barrier screens are slightly bowed due to water pressure on leaves-covered screens. There is no damage to the barrier elements. Some limited scouring was observed at the south end of the barrier screens, on the creek bank.

**Other changes observed:** None.

**Maintenance performed:** Removed materials from the screens and filled the scoured area with rocks.

#### Barrier System Effectiveness Evaluation

##### **Barrier System condition:**

All posts, back braces, and anchor plates are intact and solidly anchored (Photos 1 and 2). Most of the screen panels have been slightly bowed by water pressure (Photo 3). During storm events, leaves build up on the screens, generating pressure that increases with water depth. As a result, the maximum screen deflection is observed at the top of the screens. The maximum deflection reaches 2 inches on the 3-inch opening barrier and 4 inches on the 1-inch opening barrier. The difference is due to the larger amount of leaves on the barrier with smaller grid opening. The screen panel deflection appears to have been stabilized within the first couple of months after construction. At the time of the QEE visit, before the O&M debris removal work, the leaves accumulated on the barriers were 7 - 8 inches deep (Photo 4).

Creek bank scouring was observed at the south end of each of the two barriers, where the creek is deeper and the creek bank is steep (Photo 5). The scouring features are located

approximately at the height of the screens, which indicates that they were produced during storm events. The scouring effects are limited by the rocks present in the bank and the root mass of the vegetation. During the O&M trips the scoured areas have been partially filled with rocks. The rocks and roots present in the creek bank, as well as the O&M repairs, have limited the extent of scouring and its impact on the barrier integrity.

**System operational effectiveness:**

In the first three months of operation, the Barrier System has effectively performed as designed (Photos 6 and 7).

**Repairs needed:**

No repairs are needed for the Barrier System elements. The monthly O&M trips will continue to focus on removing the debris accumulated on the screens and filling in any scoured areas on the creek banks.

**Personnel Present During QEE Site Visit**

e<sup>2</sup>M: Daniel Zugris

Other: Lew Kovarik (PIKA, O&M activities) and Mel Lau (PIKA, O&M activities), and Mark Patterson (RVAAP, Facility Manager)

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**Personnel Present During QEE Site Visit**

e<sup>2</sup>M: Daniel Zugris

Other: Lew Kovarik (PIKA, O&M activities) and Mel Lau (PIKA, O&M activities), and Mark Patterson (RVAAP, Facility Manager)



Quarterly Effectiveness Evaluation  
23 October 2008  
Photographic Log

## Quarterly Effectiveness Evaluation Report

### Sand Creek Barrier System

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	22 September 2008 (O&M Trip #2)		
	23 October 2008 (O&M Trip #3)		

#### Summary of O&M Activities Performed During QEE Report Period

**Materials found on the screens:** Leaves, branches, sticks, sediment, and rocks. No munitions-related materials were found on the screens.

**Barrier integrity:** Barrier screens are slightly bowed due to water pressure on leaves-covered screens. There is no damage to the barrier elements. Some limited scouring was observed at the south end of the barrier screens, on the creek bank.

**Other changes observed:** None.

**Maintenance performed:** Removed materials from the screens and filled the scoured area with rocks.

#### Barrier System Effectiveness Evaluation

##### **Barrier System condition:**

All posts, back braces, and anchor plates are intact and solidly anchored (Photos 1 and 2). Most of the screen panels have been slightly bowed by water pressure (Photo 3). During storm events, leaves build up on the screens, generating pressure that increases with water depth. As a result, the maximum screen deflection is observed at the top of the screens. The maximum deflection reaches 2 inches on the 3-inch opening barrier and 4 inches on the 1-inch opening barrier. The difference is due to the larger amount of leaves on the barrier with smaller grid opening. The screen panel deflection appears to have been stabilized within the first couple of months after construction. At the time of the QEE visit, before the O&M debris removal work, the leaves accumulated on the barriers were 7 - 8 inches deep (Photo 4).

Creek bank scouring was observed at the south end of each of the two barriers, where the creek is deeper and the creek bank is steep (Photo 5). The scouring features are located

## Quarterly Effectiveness Evaluation Report

### Sand Creek Barrier System

### Time Critical Response Action (TCRA) for the Rocket Ridge Area of Open Demolition Area #2

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	23 October 2008 (O&M Trip #3)		
<b><u>Summary of O&amp;M Activities Performed During QEE Report Period</u></b>			
<p><b>Materials found on the screens:</b> Leaves, branches, sticks, sediment, and rocks. No munitions-related materials were found on the screens.</p> <p><b>Barrier integrity:</b> Barrier screens are slightly bowed due to water pressure on leaves-covered screens. There is no damage to the barrier elements. Some limited scouring was observed at the south end of the barrier screens, on the creek bank.</p> <p><b>Other changes observed:</b> None.</p> <p><b>Maintenance performed:</b> Removed materials from the screens and filled the scoured area with rocks.</p>			
<b><u>Barrier System Effectiveness Evaluation</u></b>			
<p><b>Barrier System condition:</b>  All posts, back braces, and anchor plates are intact and solidly anchored (Photos 1 and 2). Most of the screen panels have been slightly bowed by water pressure (Photo 3). During storm events, leaves build up on the screens, generating pressure that increases with water depth. As a result, the maximum screen deflection is observed at the top of the screens. The maximum deflection reaches 2 inches on the 3-inch opening barrier and 4 inches on the 1-inch opening barrier. The difference is due to the larger amount of leaves on the barrier with smaller grid opening. The screen panel deflection appears to have been stabilized within the first couple of months after construction. At the time of the QEE visit, before the O&amp;M debris removal work, the leaves accumulated on the barriers were 7 - 8 inches deep (Photo 4).</p> <p>Creek bank scouring was observed at the south end of each of the two barriers, where the creek is deeper and the creek bank is steep (Photo 5). The scouring features are located</p>			

approximately at the height of the screens, which indicates that they were produced during storm events. The scouring effects are limited by the rocks present in the bank and the root mass of the vegetation. During the O&M trips the scoured areas have been partially filled with rocks. The rocks and roots present in the creek bank, as well as the O&M repairs, have limited the extent of scouring and its impact on the barrier integrity.

**System operational effectiveness:**

In the first three months of operation, the Barrier System has effectively performed as designed (Photos 6 and 7).

**Repairs needed:**

No repairs are needed for the Barrier System elements. The monthly O&M trips will continue to focus on removing the debris accumulated on the screens and filling in any scoured areas on the creek banks.

**Personnel Present During QEE Site Visit**

e<sup>2</sup>M: Daniel Zugris

Other: Lew Kovarik (PIKA, O&M activities) and Mel Lau (PIKA, O&M activities), and Mark Patterson (RVAAP, Facility Manager)

Quarterly Effectiveness Evaluation  
23 October 2008  
Photographic Log

## Quarterly Effectiveness Evaluation Report

### Sand Creek Barrier System

### Time Critical Response Action (TCRA) for the Rocket Ridge Area of Open Demolition Area #2

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<b><u>Summary of O&amp;M Activities Performed During QEE Report Period</u></b>			
<p><b>Materials found on the screens:</b> Leaves, branches, sticks, sediment, and rocks. No munitions-related materials were found on the screens.</p> <p><b>Barrier integrity:</b> Barrier screens are slightly bowed due to water pressure on leaves-covered screens. There is no damage to the barrier elements. Some limited scouring was observed at the south end of the barrier screens, on the creek bank.</p> <p><b>Other changes observed:</b> None.</p> <p><b>Maintenance performed:</b> Removed materials from the screens and filled the scoured area with rocks.</p>			
<b><u>Barrier System Effectiveness Evaluation</u></b>			
<p><b>Barrier System condition:</b>  All posts, back braces, and anchor plates are intact and solidly anchored (Photos 1 and 2). Most of the screen panels have been slightly bowed by water pressure (Photo 3). During storm events, leaves build up on the screens, generating pressure that increases with water depth. As a result, the maximum screen deflection is observed at the top of the screens. The maximum deflection reaches 2 inches on the 3-inch opening barrier and 4 inches on the 1-inch opening barrier. The difference is due to the larger amount of leaves on the barrier with smaller grid opening. The screen panel deflection appears to have been stabilized within the first couple of months after construction. At the time of the QEE visit, before the O&amp;M debris removal work, the leaves accumulated on the barriers were 7 - 8 inches deep (Photo 4).</p> <p>Creek bank scouring was observed at the south end of each of the two barriers, where the creek is deeper and the creek bank is steep (Photo 5). The scouring features are located</p>			

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**System operational effectiveness:**

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**Repairs needed:**

No repairs are needed for the Barrier System elements. The monthly O&M trips will continue to focus on removing the debris accumulated on the screens and filling in any scoured areas on the creek banks.

**Personnel Present During QEE Site Visit**

e<sup>2</sup>M: Daniel Zugris

Other: Lew Kovarik (PIKA, O&M activities) and Mel Lau (PIKA, O&M activities), and Mark Patterson (RVAAP, Facility Manager)

Quarterly Effectiveness Evaluation  
23 October 2008  
Photographic Log





Photo 1: Upstream barrier post and back brace



Photo 2: Anchor plate



Photo 3: Downstream (1-inch grid opening) screen deflection



Photo 4: 7 – 8-inch deep leaves accumulated on the screen



Photo 5: Scouring at south end of upstream (3-inch grid opening) barrier



Photo 6: Barrier System, looking downstream



Photo 7: Barrier System, looking upstream