US ecology

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RECEIVED JUL - 3 2019

June 28, 2019

Ms. Natalie Creed
Hazardous Waste Bureau Chief
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706

RE: US Ecology Idaho (USEI) Site B – IDD073114654
June Monthly Progress Report on Recovery Actions Related to the November 17, 2018 Explosion at the USEI Site B Facility ("Incident")

Dear Ms. Creed:

As requested in IDEQ's letter dated December 18, 2018, USEI is hereby submitting the monthly progress report for June 2019. This report details the activities undertaken in the recovery process for the month of June. This report covers activities from May 25 through June 21, 2019. The next report will cover activities from June 24 through July 26, 2019.

Throughout the month USEI has performed various operations to evaluate the facility and bring it back to a state of compliance following the Incident. The actions taken during the month are outlined below.

After receiving approval from IDEQ on February 7, 2019, USEI began receiving loads of bulk material for direct landfill on February 8, 2019. During April, USEI provided IDEQ with a PE certification for the Stabilization Facility as well as a certification that all ancillary equipment needed for solidification operations was available. IDEQ subsequently provided an authorization, dated April 11, 2019, allowing USEI to resume solidification operations at the Outdoor Stabilization Facility. On May 31, 2019, USEI provided IDEQ with an additional Class 2 Permit Modification and Request for Temporary Authorization (RTA) to undertake hazardous waste treatment operations. DEQ provided approval for the RTA in a letter dated June 6, 2019. At this time USEI is receiving limited quantities of hazardous waste for treatment, storage, and/or disposal. The first shipments of hazardous waste for treatment were received on June 17, 2019. Thirty-seven batches of waste have been treated and placed in the landfill since the last report.

USEI has received the following wastes since the last report:

- Tankers for solidification and disposal: 10
- Tankers for neutralization and disposal: 2
- RTF tankers for neutralization and disposal: 4
- Loads of bulk solids for direct disposal: 150
- Drum loads: 33

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Inspections – Inspections have been performed and documented as required; any area that could not be inspected due to structural damage or due to other safety factors was noted on the inspection form.

Leachate Management – USEI has completed leachate inspections and removed accumulated leachate as required. Removed leachate has been filtered through the leachate treatment system and has been discharged to site surface impoundments for evaporation. Leachate levels for all areas continue to be in keeping with levels associated with normal operations.

Precipitation – Collected precipitation has been monitored and removed from container storage and RCRA tank areas as needed. All precipitation removed from these areas was discharged to the site surface impoundments for evaporation. Accumulated precipitation is removed from Pad 7 as area conditions allow. Regular removal of liquids from the area will commence once USEI's contractor ESI completes work on the building.

Collected precipitation from the Indoor and Outdoor Stabilization facilities has been collected and added to Tank #2 as needed. Sampling of the stored water was performed on June 18, 2019. Sample results had not been received by close of business on June 21, 2019. No water was discharged from the tank from May 25 through June 21, 2019.

On January 30, 2019 the sumps for Mix Bin #1 (MBT 1) were accessed for sampling. It was noted that the caps had been blown off both ports and that a large amount of water was present in both the primary and secondary sumps. The water level was not measured but was estimated to be approximately 18 inches deep. During the month of May, operations to prepare the Containment Building for demolition were carried out and many of the hazards that were previously present were removed. On May 21, 2019 the primary and secondary sumps for the Mix Bins were pumped and the following amounts were removed from the sumps:

- MBT 1 Primary – 100 gallons
- MBT 1 Secondary – 300 gallons
- MBT 2 Primary – 25 gallons
- MBT 2 Secondary – 100 gallons

All removed liquid was placed into Tank #2 for storage until laboratory analysis of the tank contents are complete. The sumps were not checked for the presence of liquids and no liquids were removed during the current month.

Container Management – Containers that became damaged or degraded as a result of the Incident are being managed appropriately by being covered, repackaged, or overpacked as needed. USEI has prepared and shipped loads of containers off-site to continue decreasing the container inventory on site. Since the last report, two loads of material were shipped off-site; one load was shipped to US Ecology in Beatty, NV, and one load was shipped to the Stablex facility in Quebec, Canada.

Removal of containers that were within the debris side of the Containment Building at the time of the Incident began on April 15, 2019. A copy of the Safe Work Plan for removal of the containers was submitted to IDEQ via email on April 15, 2019. At this time, all containers have been accessed and removed from the building. All damaged containers were repackaged or overpacked and moved out of the building to other permitted storage areas around the site, with the exception of one batch of sixty drums, which were removed from the building and shipped to the Beatty, NV facility for treatment and disposal. Removal operations were completed on May 13, 2019. A total of 623 containers were removed from the Containment Building. Inophos waste that was staged in Sort Floor 2 when the Incident occurred was placed into a roll-off bin for storage. During the current reporting period, the bin was moved to Pad 5 for storage so that decontamination of the steel structure of the Containment Building could commence.

Treatment bins at the Outdoor Stabilization Facility that were in process at the time of the Incident were covered on December 21, 2018. The in-process bins remained covered while treatment operations were suspended. The bins were placed back into the treatment process once the RTA was approved. At this time treatment of one bin has been completed. The material was analyzed and found to meet LDR's and was disposed. The other two bins of material remain in process while USEI waits to receive results of cyanide sampling on the material. Once it is confirmed that the material meets LDR's, it will be solidified and disposed.

Evidence Material –Evidence from the Incident remains in secure storage at Container Storage Area 1 (CSA 1) at this time. This includes tagged debris pieces, various split samples that have been collected, empty drums from the back of the haul truck at the Containment Building, containers of burnt magnesium (WSID # 29857-0) and floor sweeps (WSID # 29853-0), overpack drums of magnesium fines (the material involved in the explosion, WSID # 29856-0), and drums of material retrieved from the bottom of MBT 1 prior to decontamination of the Containment Building beginning. All remaining containers of magnesium material from Reade Manufacturing Company, the company whose waste stream was being treated when the explosion occurred, remain on site at this time. (b) (6), (b) (7)(A), (b) (7)(C) [redacted] the timeframe for storage of these materials is unknown at this time. USEI personnel and the contractor for Capital Environmental (the broker of the material involved in the incident) accessed the secure storage area on June 10, 2019 so that the contractor could see/photograph the evidence material. The contractor was allowed to view/photograph all items that were accessible at ground level, but was not granted access to evidence that was stored inside roll-off bins in the secure area. USEI personnel also accessed the secured area on June 13, 2019 to re-cover containers after one of the tarps came loose.

Baker Risk has received analytics for all samples collected, and has determined the cause of the Incident. Representatives of the internal investigation team met with IDEQ on May 14, 2019, to discuss the findings of the investigation. The final investigation report will be completed by July 22, 2019.

Cleanup Material – Cleanup of debris continued through the current month. Gathered tin and larger pieces of foam insulation have been placed into roll-off bins; small pieces of foam were

bagged and then placed into roll-off bins. The bins were placed into storage at CSA 1. The majority of material outside the footprint of the Containment Building has been cleaned up at this time. Additional material will continue to be cleaned up as it is identified. During May, all containers inside the debris portion of the Containment Building were removed. All damaged containers were repackaged or overpacked. Debris material covering the floor on the stabilization side of the building was also removed. Removal of the debris from the stabilization side was completed on May 17, 2019. The excavator involved in the incident remains in the building at this time, but the majority of other debris has been removed. Operators followed a safe work plan while removing the debris and containers from the building. Additional cleanup within the fenced area around the Containment Building was also completed in May. This cleanup effort was undertaken once further observation of the building was completed, to ensure that the area was safe. Additional roof material consisting of large pieces of sheet metal and foam insulation was removed from the top of PCB 4 (east side of Containment Building) and macro-encapsulated during the week of June 17, 2019. The material blew from the top of the Containment Building during inclement weather and landed on top of the PCB cell. USEI will prepare and submit an updated Closure/Post Closure Plan (Attachment 9) to IDEQ in a Class [1]1 Permit Modification, showing steps to be taken for partial closure of the Containment Building by July 2, 2019. All cleanup materials will be handled in accordance with the updated Closure Plan, once approved by IDEQ.

Material from MBT 1 was removed on June 6, 2019 by USEI's contractor H2O. The material was removed using sweeping/shoveling rather than with mechanical means. The material was placed into drums and is being stored within the fenced storage area at CSA 1 with other evidentiary materials that are being stored there.

USEI has continued monitoring the area outside the fence for additional foam material. No additional material was identified during the last inspection of the fence. Small amounts of additional material continue to be picked up as they are identified. USEI personnel will continue monitoring the fence line on a weekly basis to ensure material is not exiting the facility.

Facility Structures – The Containment Building sustained major damage in the Incident and will need to be repaired/rebuilt. An initial evaluation of the structure by the insurance company and a structural engineer was performed on the stabilization side of the Containment Building on January 29, 2019. Steel and other building debris have been removed so the slab and foundation can be further evaluated. The Debris Side will also be evaluated further since debris and containers have been removed and the pad is visible for inspection. US Ecology has retained ABCO Engineers to act as project managers on the removal/closure and reconstruction of the Containment Building facility. Contact information for ABCO Engineers was provided to Mr. Lon Stewart via email on February 27, 2019. ABCO provided the bid package to four potential bidders; all four bidders attended the bid walk on June 5, 2019. The contract was awarded to JC Constructors, Inc. of Meridian, ID on June 21, 2019. Demolition is currently scheduled to begin on July 15, 2019.

USEI's contractor H2O began decontamination of the Containment Building on June 3, 2019 and completed work on June 11, 2019. Decontamination of the building began on the debris side

with pressure washing of all accessible steel components on that side. Areas on the stabilization side of the building that had large amounts of scale were sand-blasted to remove the scale material prior to pressure washing. Horizontal surfaces were scraped and vacuumed to remove accumulated dust and bird droppings prior to pressure washing. Sand-blasting and pressure washing activities were directed into the footprint of the building during cleaning. A total of approximately 700 gallons of water was used in the washing process. This minimal amount of water evaporated away before it could be collected for storage and treatment. The used sand-blast media and vacuumed solids associated with the decontamination process were collected and placed into a roll-off bin. The weight of the collected material is 11,180 pounds. The material will remain in storage at CSA 1 until it can be stabilized.

The chain link fencing remains intact around the Containment Building, the administration building complex, and the secured area in CSA 1.

The site vehicle wash building was removed January 8, 2019. Water to the truck wash area was restored on January 16, 2019. Up to January 16, 2019 a portable water source was needed to operate the pressure washer. The contract for reconstruction of the Truck Wash building has been awarded to Bideganeta Construction, Inc. of Mountain Home, ID. The project is scheduled to begin on July 8, 2019.

Pad 7 was evaluated by USEI's contractor ESI so that all materials needed for repair could be ordered. ESI began dismantling the roof and walls of the building on April 15, 2019. Removal of the metal sheeting, foam insulation, and metal girders was completed on April 24, 2019. All repair materials were received on May 10, 2019. ESI returned to the site to begin repair operations on May 13, 2019. Structural repairs were completed June 17, 2019. USEI's electrical contractor began the electrical installation to the building on July 18, 2019 and is tentatively scheduled to complete the installation by July 3, 2019.

During repairs to the metal structure of the Pad 7 building, ESI's subcontractor removed a portion of the concrete curbing in Subcell 7G for installation of the east emergency exit door. USEI will include changes to the containment volume with the next permit modification for the facility which will also include all changes to site administration structures, truck scale location, and changes to the stabilization building. The new liquid volume which can be stored in the subcell will be calculated and implemented prior to storage activities resuming in the building.

The site water system was partially evaluated/repaired on January 16, 2019. Broken lines at the administration/decon areas were capped during the evaluation and repaired on January 16. All water tanks were thickness-tested on February 6, 2019 and found to be functional. Water to the Outdoor Stabilization Facility was restored April 19, 2019. USEI has received a quote for reconstruction of the Pump House building. USEI's insurance adjuster has given their approval to proceed with the rebuild of the building. This project has also been awarded to Bideganeta Construction. The project start date is unknown at this time.

The site decontamination facilities and field tech office were damaged during the Incident and had to be removed along with other buildings in the administration complex. USEI has awarded

the contract for construction of a new decontamination building, to be located near the location of the previous men's decontamination facility, and a new field tech office, to be located in the location of the old receiving/laboratory building, to Bideganeta Construction as well. The decontamination facility project is scheduled to begin in July. The start date for the field tech office is unknown at this time.

The Old Shop/Quonset hut was previously reported to be minimally damaged. The building was shored up by USEI's contractor NorthStar on January 16, 2019. The building was evaluated by USEI's insurance adjuster on January 29, 2019 and was determined to be a total loss. The building will continue to be used for storage of items until repairs to the New Shop are complete. Items will be removed to the New Shop once repairs are completed by USEI's contractor. During the week of March 18th the wood-framed offices and conference room upstairs and on the east end of the Quonset hut were removed and placed into Landfill Cell 15. The outer shell of the Quonset hut remains in place at this time. The plan at this time is to replace the metal siding on the Quonset hut and continue to use it for maintenance storage. Repairs to the Quonset hut began the week of May 5, 2019 and were completed May 14, 2019. USEI personnel will paint the outside of the building at a future date.

Repairs to the civil defense siren were completed and the siren was tested on April 23, 2019. The siren is now functional and was added to the list of emergency equipment with the current Class 2 permit modification.

The Outdoor Stabilization Facility office is currently being used to house the fingerprint lab in the near term. A tentative design for the site laboratory has been drawn up. The new laboratory building will be located south of the main administration office in the new office complex, located near the front gate. Manufacture of the lab building is projected to be complete by the end of August 2019.

A portable shower/toilet unit located in the temporary administration trailer area was put into service on January 10, 2019. The unit contains four separate shower/toilet/sink stations. An additional unit with men's and women's restroom stations (toilets/sinks only) is present in the area and is functional.

Facility Personnel – Since USEI's last report one employee has left employment with USEI. An updated facility employee list is included with this letter.

If you have any questions regarding the content of this letter or require additional information, please call me or Rebecca Hogaboam at (208) 834-2275.

Regards,

Noel A. Bailey
Technical Manager

cc: Barbara McCullough, EPA Region 10
Albert Crawshaw, IDEQ
Peter Purchase, IDEQ
Brian Gaber, IDEQ
Garrett Bright, IDEQ
Andrew Marshall, USE

Enclosure

	Team Member	Hire Date	Title
	Transfer, Storage, Disposal Facility		
1	BAILEY, NOEL	12/29/2003	Technical Manager
2	CERECERES, TINO	5/15/2006	Approvals Coordinator
3	CLARK, DAVID	4/8/2013	Customer Service Specialist
4	CLARK, SHILO	9/17/2018	Security Guard
5	EVENS, JASON	3/6/2017	General Manager
6	HALL, STEPHANIE	6/1/2006	Chemist
7	HARLAN, RACHEL	9/4/2018	Receiving Coordinator
8	HOGABOAM, REBECCA	6/1/2015	EH&S Compliance Manager
9	JENSEN, JUSTIN	2/16/2015	Rad Safety Specialist
10	LAWSON, AYLA	8/21/2017	Receiving Coordinator
11	LAWSON, DEVANI	10/22/2007	Lab Tech
12	LIVINGSTON, SOPHIE	7/21/2008	Transportation Clerk
13	LUTRELL, JENNIFER	12/8/2014	Customer Service Specialist
14	MAGERS, JUDITH	6/14/2006	Office Administrator
15	SCHMITZ, CORIAN	2/28/2005	Receiving Lead
16	SCHWAGER, ELIZABETH	4/26/2010	HR Generalist
17	SIMPER, KARLITA	6/13/2011	EH&S Compliance Specialist
1	BIRMINGHAM, JACK	5/12/2003	Operations Supervisor
2	CHRISTIANSEN, RICK	8/2/1992	Sr Operator
3	CUTLER, ROBERT	8/26/2010	Senior Operator
4	FERRELL, CASEY	8/19/2002	Lead Operator - landfill
5	HAZELL, LEE	7/25/2011	Operator
6	HERRERA, FREDY	1/11/2016	Operator
7	IRELAND, JOSEPH	9/28/2007	Mechanic
8	LEONARD, CHET	5/1/2006	Senior Operator
9	LINDQUIST, ROBERT	9/1/1999	Mechanic Supervisor
10	POLLARD, RICKEY	4/15/1987	Operator
11	ROBERSON, KENNETH	9/6/1988	Operation Manager
12	ROGERS, BENJAMIN	6/20/2006	Operator
13	WHITTED, DALE	6/28/2005	Mechanic
14	WILSON, DANIEL	1/17/2011	Senior Operator
15	WOODRUFF, DANE	10/31/2005	Operator

	Rail Facility		
1	HASTINGS, JONNY	7/16/2018	Mechanic
2	LOPES, JOAO	9/4/2007	Operator
3	MONASERIO, JOSH	7/25/2005	Lead Operator
4	MORENO, ANDREW	12/2/1996	Operations Supervisor/ Rail Forman
5	SPENCER, JUSTIN	9/25/2007	RTF Operations Supervisor
6	WININGS, ANDY	7/25/2011	Operator

1	Jim Handcock	Field Services, RAD	Casual worker
2	Bruce Camoron	Field Services, RAD	Casual worker

***updated June 2019**