

SCS ENGINEERS

March 22, 2013
File No.

Susan J. Pelz, P.E.
Solid Waste Section Southwest District
Florida Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Dept. Of Environmental Protection
MAR 26 2013
Southwest District

Subject: Corrective Action Plan - Phase 3 Expansion, Central Landfill
Citrus County Central Landfill, Lecanto, Florida

Dear Ms. Pelz:

On behalf of the Citrus County Solid Waste Management Division (SWMD), SCS Engineers (SCS) is submitting the required documentation in compliance with Specific Condition C.6.b. of the Citrus County Central Class I Landfill Operation Permit No. 21375-018-SO/1. Citrus County must submit a written detailed notification of the event and within 30 days must implement a Corrective Action (CA) Plan. Citrus County has already initiated a CA Plan even though the construction repairs won't start until next month. This report presents a proposed CA Plan for the damaged liner resulting from the March 9, 2013 fire at the Phase 3 area.

A fire broke out overnight on Saturday March 9, 2013. Fire rescue was dispatched to the scene and observed the northwest end of the open cell (Phase 3) at the landfill to be engulfed in flames. This impacted an area of trash that was buried approximately one week prior and a portion of the liner, leachate pipes and electrical control boxes. The raintarp that covered that slope was also impacted.

The fire in the waste was extinguished by smothering it with soil using heavy equipment. The area was continually monitored for flare-ups and re-ignition. The portion of the fire that impacted the liners was fought by the fire department using water.

While the cause of the fire is still unknown, the State Fire Marshal who inspected the scene Monday morning (March 11, 2013) didn't find any signs of wrongdoing. Employees present when the Fire Marshall was on-site indicated that he felt spontaneous combustion was the cause.

The fire started in the waste and due to wind direction made its way up the side slope of the landfill. Approximate side-slope system damaged was a 100-foot wide by 300-foot long swath of raintarp and liner. It also damaged components of the pumping system primarily the wiring and the cover plate on the northern most riser (detection riser). The fire and the repairs will



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not affect the operation of the landfill. In the interim, trash will be buried in Phase 2 of the landfill until the repairs are made.

Citrus County immediately contacted the Florida Department of Environmental Protection (FDEP) regarding the Phase 3 fire. FDEP indicated that they would be onsite Tuesday March 12, 2013 to conduct an inspection.

Citrus County installed liner cover in the damaged area to prevent erosion of the side slopes until such time as the repair can be initiated.

On March 11, 2013, SCS met with the County to evaluate the extent of damage in order to initiate a corrective action plan as required by the permit. SCS personnel reported damage on parts of the liner, control panels, wiring, air release valves, and meters. Other than at the top, there was no external damage observed to the riser pipes. SCS made arrangements with Comanco, Inc., the contractor that constructed Phase 3, to meet at the site on March 14 to conduct further investigation into the damage.

On March 13, 2013, Florida Controls were on site to test the Phase 3 leachate pumps to see if they are in working order. The pumps appeared to be in working condition. Utilities and Florida Control temporarily wired the southernmost Phase 3 primary leachate pump and resumed pumping leachate from the sump. The pump is currently running in automatic mode.

The County engaged Jet Clean to be on-site March 14, 2013, to video the riser pipes from the surface to the sump to determine if any internal damage can be identified in the risers. Video confirmed that water levels were below the top of the pump. Internally no damage to the riser pipes was observed. The jet clean camera was able to advance to the bottom of the sump in the Phase 3 primaries and secondary to approximately 165 ft below grade. It is noted that the layer of select sand installed over the riser pipes during construction protected the risers from fire damage. The only damage at that location was the destruction of the raintarp.

On March 14, 2013, SCS met with Comanco and the County to examine the liner system. The County had previously constructed a soil berm at the toe of the slope that proved to be a protection for the liner system. The berm and some waste was pulled away from the liner utilizing a track hoe to exposed the liner in order to evaluate the extent of the damage below grade. The result of this process confirmed that the fire did not impact the liner below the soil level at the bottom of the slope. The County surveying crew surveyed the fire impact area.

To continue the CA process SCS is working with Comanco to prepare a list of all repairs to restore the site to the original permitted level. Based on this effort the County will contract for the repairs. Replacement material will be as per the original construction requirements including conformance testing and seam testing. Anticipated steps include cleaning the area of impacts, removal of damaged liner system components, re-wiring the pumping system,

replacement of electrical conduit and junction boxes, replacing leachate piping, valves, meters, and air relief valves, returning the slope grades to the design level using clean sand fill, and replacing the liner components. Citrus County and SCS will closely monitor the repairs to ensure the repairs meet the requirements of the permit and the plans originally approved by FDEP.

SCS is currently working on preparing the documents to define the specific work to be done. SCS and Comanco will provide for construction and Construction Quality Assurance (CQA) of the materials. Seam testing and conformance testing will be conducted by TRI. Comanco will be responsible for providing replacement sand on the side slope around the pump riser pipes.

Representative pictures of the fire damage are attached at the end of this report. Please don't hesitate to contact us should you have any questions or need additional information.

Sincerely,



Dominique H. Bramlett, P.E.
Project Manager
SCS ENGINEERS



C. Ed Hilton, Jr., P.E.
Vice President
SCS ENGINEERS

DHB/CEH:dhb

Attachments

Cc: Ken Frink, Assistant County Administrator, Citrus County
T. Casey Stephens, Director, Solid Waste, Citrus County
Steve Morgan, FDEP

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ATTACHMENT A
REPRESENTATIVE PHOTOGRAPHS

Corrective Action Plan – Phase 3 Expansion, Central Landfill
Citrus County Central Landfill, Lecanto Florida
Report of Fire Damage Photos



Photo 1: Date: 3/14/13
Phase 3 side slope riser pipes.

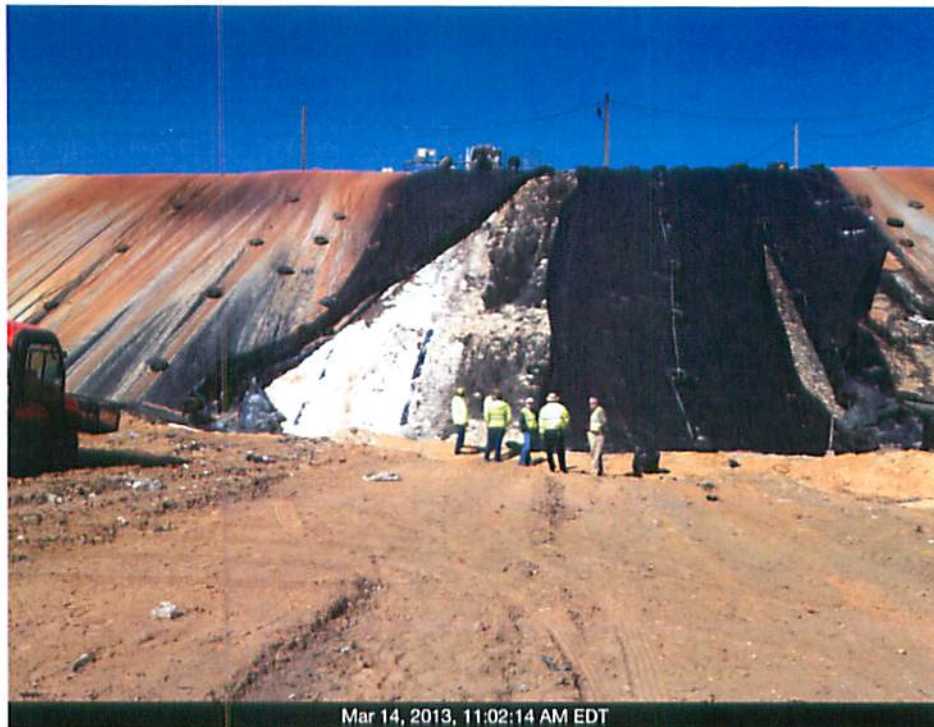


Photo 2: Date: 3/14/2013
Phase 3 side slope. Rain tarp is pulled back to expose damaged area.

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Photo 3: Date: 3/14/2013
Panoramic view of Phase 3 side slope.



Photo 4: Date: 3/14/2013
Northwest corner of Phase 3.

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Date: 3/14/2013

Photo 5:

Panoramic view of Phase 3 side slope in preparation of excavating cover and waste at the base of the slope in an attempt to determine if fire damage occurred below current waste levels.



Date: 3/14/13

Photo 6:

Intermediate cover and waste pulled back utilizing a track hoe and the liner exposed to evaluate the extent of the damage below grade. The fire did not impact the liner below the soil.

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Photo 7: Date: 3/14/2013
Phase 3 side slope riser 24" diameter pipe.



Photo 8: Date: 3/14/2013
Phase 3 detection pump riser controls.