From: Jim Christiansen

To: "Durden, Brian"

Cc: "Ramaley, Seth"; "Parker, Eric (FL)"; "EFuller@coj.net"; Peter Walls; "Danny Armour"; "Butler, Homer"; "Schroer,

Jeffrey"; "Maher, Jim"; "Kallemeyn, Thomas"; "Webber, Heather"; "Dilmore, Cory"; "Foster, Jeffrey

(JSFoster@coj.net)"

Subject: RE: Trail Ridge Landfill Water Quality Notification

Date: Wednesday, March 28, 2018 2:17:00 PM

Attachments: <u>image001.png</u>

Mr. Durden –

We understand the Department's concerns. Trail Ridge Landfill (TRL) has continued to implement the agreed upon BMPs and the test results showing potentially elevated levels of metals in the new retention ponds were unexpected. CEC/TRL provided the notification to ensure the Department was aware of the potential issue in accordance with the solid waste permit. We are currently reviewing the data, discussing potential causes, planning resampling, and evaluating other next steps. To address your request, we are providing the data for iron, mercury, lead, hardness, and turbidity at SW-4 and SW-7:

SW-4. Sample taken in pond near outfall structure. Pond was not discharging at time of sample and pond was isolated from system due to construction. Iron 1,900 ug/L; Mercury 0.049 I ug/L; Lead 7.5 ug/L; hardness 90,000 ug/L; turbidity 96.24 NTU.

SW-7. Iron 1,300 ug/L; Mercury 0.028 I ug/L; Lead was not detected (<2.9 ug/L); hardness 60,000 ug/L; turbidity 55.50 NTU.

"I" indicates the parameter was above the MDL but below the PQL.

There is currently no evidence to suggest these detections are related to the issue that has existed at SW-3. Phases 1-5 are largely capped and are almost entirely isolated from the new retention ponds. No ash has been accepted in Phases 1-5 for approximately 1.5 years and none that was accepted in the past remains exposed. No ash has been disposed of in Phase 6. A limited amount of contaminated soil associated with the City of Jacksonville ash project has been disposed of in Phase 6 since December 2017. This contaminated soil was managed in accordance with the solid waste permit. The soil was stockpiled on top of the landfill with silt fence surrounding the area, mixed 50/50 with mulch, and utilized for daily cover only on interior top slopes away from exterior slopes.

Importantly, high turbidity and the highest metals concentrations were found at SW-4, which does not receive any runoff from the landfill itself, but instead only receives flow from the perimeter interceptor ditch which captures shallow groundwater and surface water run-on flowing onto the Trail Ridge property from the west. This indicates that the detections are correlated with turbidity and suggest a non-landfill source. While it is true that SW-5 and SW-6 could be impacted from runoff from Phase 6, there are no obvious indicators of leachate impacts in adjacent wells or in that pond. It is possible that those points, as well as SW-7 which can receive discharge from both new retention ponds, were also impacted from upgradient non-landfill sources. On April 9th, 2018, in addition to other resampling, TRL intends to resample the surface water points for both dissolved and total metals, as well as chloromethane, and may perform additional investigatory sampling to

determine the source of the detections.

We will provide additional information in the semiannual report and after resampling. Please let us know if you have any additional questions or concerns.

Jim Christiansen
Project Director
Carlson Environmental Consultants, PC

Cell: 321-704-4162

From: Durden, Brian <Brian.Durden@dep.state.fl.us>

Sent: Friday, March 23, 2018 12:34 PM **To:** Jim Christiansen <jchristi@cecenv.com>

Cc: Ramaley, Seth <SRamaley@wm.com>; Parker, Eric (FL) <EParker1@wm.com>; EFuller@coj.net; Peter Walls <pwalls@cecenv.com>; Danny Armour <dsarmour@envirodepot.com>; Butler, Homer <Homer.Butler@dep.state.fl.us>; Schroer, Jeffrey <Jeffrey.Schroer@dep.state.fl.us>; Maher, Jim <Jim.Maher@dep.state.fl.us>; Kallemeyn, Thomas <Thomas.Kallemeyn@dep.state.fl.us>; Webber, Heather <Heather.Webber@dep.state.fl.us>; Dilmore, Cory <Cory.Dilmore@dep.state.fl.us>

Subject: RE: Trail Ridge Landfill Water Quality Notification

Mr. Chistiansen,

I am extremely concerned to learn that the elevated lead issue Trail Ridge Landfill has been experiencing in stormwater pond SW-3 may not be restricted to only that system and may now be affecting stormwater pond SW-4 and the edge of property discharge point located at SW-7 which discharged through Tator Farms next door, (see bullet point 3 attachment). Also, the lead level in stormwater ponds SW-1 (3.11 ug/L) and SW-3 (6.91 ug/L) both continue to exceed for lead (1.7 & 5 ug/L respectively standard) despite the agreed upon BMP's.

Please forward the surface water data for SW-\$ and SW-7 as soon as possible so that District staff may evaluate the data for any potential off-site impacts.



Brian Durden - Environmental Manager Northeast District Permitting Program Florida Department of Environmental Protection 8800 Baymeadows Way West, Suite 100 | Jacksonville, FL 32256

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email- Brian.Durden@dep.state.fl.us

From: Jim Christiansen <<u>jchristi@cecenv.com</u>>

Sent: Friday, March 23, 2018 10:49 AM

To: Durden, Brian < Brian.Durden@dep.state.fl.us >

Cc: Ramaley, Seth <<u>SRamaley@wm.com</u>>; Parker, Eric (FL) <<u>EParker1@wm.com</u>>; <u>EFuller@coj.net</u>;

Peter Walls < <u>pwalls@cecenv.com</u>>; Danny Armour < <u>dsarmour@envirodepot.com</u>>

Subject: Trail Ridge Landfill Water Quality Notification

Mr. Durden – Please see the attached notification submitted on behalf of Trail Ridge Landfill. If you have any questions, please contact Eric Parker or me directly at the numbers in the letter.

Thank you.

Jim Christiansen Project Director Carlson Environmental Consultants, PC

Cell: 321-704-4162

