**To:** Scott Kluska[skluska@cteh.com]; Peronard, Paul[Peronard.Paul@epa.gov]; Rockeman, Karl H.[krockema@nd.gov]; dglatt@nd.gov[dglatt@nd.gov]
**Cc:** cmckissack@garner-es.com[cmckissack@garner-es.com]; Casey Anderson (canderson@garner-es.com)[canderson@garner-es.com]; MikeC@redriversupply.us[MikeC@redriversupply.us]; sradig@nd.gov[sradig@nd.gov]; Roberts, Kris D.[kroberts@nd.gov]; Gabel, Skye[sgabel@nd.gov]; MikeC@redriversupply.us[MikeC@redriversupply.us]
**From:** Tillotson, Steve J.
**Sent:** Thur 8/28/2014 8:28:39 PM
**Subject:** RE: Red River Supply - Concrete
Red River Supply Concrete Analysis Summary 20140828.pdf

Scott,

Here is the table of results I put together on the Concrete.


Steve Tillotson

Assistant Director

Solid Waste Program Manager

Division of Waste Management

North Dakota Department of Health

918 E Divide Ave - 3rd Floor

Bismarck ND 58501-1947

P: 701.328.5163

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Email: stillots@nd.gov

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Please Keep North Dakota Clean

**From:** Scott Kluska [mailto:skluska@cteh.com]
**Sent:** Thursday, August 28, 2014 3:06 PM

**To:** Tillotson, Steve J.; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us; Radig, Scott A.; Roberts, Kris D.; Gabel, Skye; MikeC@redriversupply.us
**Subject:** RE: Red River Supply - Concrete

Thanks for looking closer at this. We are moving ahead and coordinating the transportation of Pile #11 Concrete to Knife River's facility for recycling. Possibly another concrete recycler if Knife River cannot handle the volume.

Thanks again.

**Scott Kluska**

Sr. Consultant

Center for Toxicology and Environmental Health, LLC (CTEH)

5120 North Shore Drive

North Little Rock, AR 72118

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**From:** Tillotson, Steve J. [mailto:stillots@nd.gov]
**Sent:** Thursday, August 28, 2014 3:35 PM
**To:** Scott Kluska; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us; Radig, Scott A.; Roberts, Kris D.; Gabel, Skye
**Subject:** RE: Red River Supply - Concrete

Scott,

As we discussed, based on the analysis, the sample results for concrete pile #11 (samples 11a - 11h) average 103 ppm DRO, 115 ppm Motor Oil and Non-detect for GRO.

All other parameters measured were adequately low.

We would have no objection to processing and recycling this concrete as aggregate for use as road gravel and other beneficial uses synonymous with normal uses for recycled concrete aggreagate.

We understand Knife River was interested in the material if it is deemed clean enough.

The levels of DRO, MRO AND GRO are very low and we have no objection to processing and recycling this stockpile of about 1400 yards.

If you have any questions, give me a call or email.

Sincerely,

Steve Tillotson

Assistant Director

Solid Waste Program Manager

Division of Waste Management

North Dakota Department of Health

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**From:** Scott Kluska [mailto:skluska@cteh.com]
**Sent:** Thursday, August 28, 2014 10:40 AM
**To:** Tillotson, Steve J.; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us; Radig, Scott A.; Roberts, Kris D.; Gabel, Skye
**Subject:** RE: Red River Supply - Concrete
**Importance:** High

Steve,

Can you reply via email that the soil from the Red River Supply incident can go to the local E&P landfills? I am talking with them and given the previous issue with the product/debris piles and waste, they want something in writing indicating that the NDDH is allowing the soil to go to the E&P landfills. They said an email would be fine.

Thanks

**Scott Kluska**

Sr. Consultant

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**From:** Tillotson, Steve J. [mailto:stillots@nd.gov]
**Sent:** Thursday, August 28, 2014 11:08 AM
**To:** Scott Kluska; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us; Radig, Scott A.; Roberts, Kris D.; Gabel, Skye
**Subject:** RE: Red River Supply - Concrete

Thanks Scott,

Please get the soil analysis to us also as well as the estimated amounts. if you can put the data in an excel table, that would help.

As discussed, the scrap metal will have to be removed.

Regarding the concrete, I agree with Chris, the site down by the river appears to be in a flood plain, would likely be more like sand bar deposits with a high water table with flood waters lapping up to the site from time to time when the river is high.

For the Concrete, I assume the analysis was of each pile? ie 10, 11, 12 and 13? How much concrete is there in each pile?

Pile 11 was quite low.

What do you think about processing the concrete to aggregate? It may be more useful to Red River around it's main yards (and possibly others) if it were processed.

Processing would likely reduce the DRO levels .

Thanks, keep us posted.

Steve Tillotson

Assistant Director

Solid Waste Program Manager

Division of Waste Management

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Please Keep North Dakota Clean

**From:** Scott Kluska [mailto:skluska@cteh.com]
**Sent:** Thursday, August 28, 2014 9:36 AM
**To:** Roberts, Kris D.; Tillotson, Steve J.; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us
**Subject:** RE: Red River Supply - Concrete

Steve/Kris,

Also as a follow-up to the conversation we had with Steve last night RE: the characterization of the soil waste to one of the more local E&P landfills. Steve indicated that the # of samples as

well as the parameters to be analyzed is ultimately up to the receiving waste facility. They have requirements (# of samples and analytical parameters) that they have to meet in order to be in compliance with their permit. With that, I have reached out to 4 the local E&P landfills and have requested them to send me their analytical requirements to meet their permit specifications. Once I have those, we will collect and analyze the soil stockpile samples for acceptance into 1 or more facilities.

Please let me know if you have any additional comments in this matter.

Thanks

**Scott Kluska**

Sr. Consultant

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**From:** Roberts, Kris D. [mailto:kroberts@nd.gov]
**Sent:** Thursday, August 28, 2014 8:46 AM
**To:** Scott Kluska; Tillotson, Steve J.; Peronard.Paul@EPA.Gov; Rockeman, Karl H.; Glatt, Dave D.
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us
**Subject:** RE: Red River Supply - Concrete
**Importance:** High

Scott and Mike:

I looked over what you have on the concrete recycling. Sorry, but from the map you submitted, there is no way we can approve using that concrete in the location suggested. Those numbers for DRO and ORO are way too high, and you are not using the concrete as road base as you we thought. In addition, the location is darn near directly adjacent to open water.

Please work with Steve Tillotson and Karl Rockeman for anything further on this recycle/reuse issue. Road base, high and dry railroad spur ballast may be possible, but placing anything with this kind of analysis down near a water course is just out of the question.

Kris Roberts

Environmental Response Team Leader

ND Department of Health

Division of Water Quality

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kroberts@nd.gov

**From:** Scott Kluska [mailto:skluska@cteh.com]
**Sent:** Wednesday, August 27, 2014 7:48 PM
**To:** Roberts, Kris D.; Tillotson, Steve J.; Peronard.Paul@EPA.Gov
**Cc:** cmckissack@garner-es.com; Casey Anderson (canderson@garner-es.com); MikeC@redriversupply.us

**Subject:** Red River Supply - Concrete

Steve,

Per a discussion that Mike Crocker and I had with Kris Robertson this afternoon regarding the re-purposing of the concrete, I am following up with some additional details on the current status, sample analyses and the proposed re-purpose location on Red River Supply property.

## Current Status

There are currently 3 stockpiles of mainly concrete with and without rebar currently staged at the fire site. They are Piles 10, 11 and 12. Pile # 13 contains a mix of concrete and soil that was directly under the concrete that was collected when the smaller pieces of concrete were collected. Please see the attached diagram that depicts the stockpiles and their #'s.

## Sampling & Analyses

As with all of the solid waste streams, CTEH collected samples of the material and submitted it for waste characterization (Toxicity Characteristic Leachate Procedure (TCLP) including TCLP SVOCs EPA Method 8260, TCLP VOCs EPA Method 8270, TCLP Metals EPA 610, and Reactivity, Corrosivity and Ignitability (RCI) EPA 9045 and 1010). Composite samples were collected based on approximately one (1) per every 150 cyds of material. Each composite sample was comprised of 15 individual grab samples that were combined and homogenized. It should be noted that the surfaces of the concrete that were sampled were based on the areas that were potentially impacted whether by the fire or runoff of fire water/product. Therefore concrete chip samples were collected from the top surfaces and underside of the concrete slab pieces. As you know this could present the worst case scenario of any potential impact of the concrete. These thin layers of the concrete slabs that ranged in thickness from 4" to 8" that were stained could represent <0.1% of the total volume of concrete currently staged onsite awaiting to be potentially re-purposed. The remaining 99.9% is the solid non-impacted layer in-between. Attached are preliminary lab reports of the samples collected (final reports of all analyses are expected tomorrow, Thursday). As you will see there are samples with elevated Petroleum Hydrocarbons (DRO/ORO/GRO), but we feel the volume of actual impacted concrete is extremely minimal.

Please note that Stockpile 13 (with sample ID's of 0817WP13A, 0817WP13B, 0817WP13C and 0817WP13D) contains a mixture of concrete and soil and it is intended to be shipped to Clean Harbors Sawyer for disposal. This pile is not intended for re-purposing.

**Concrete Re-purposing Location**

As previously mentioned, Red River Supply would like to utilize or re-purpose the concrete debris on the Red River Supply – East Rail Yard located at 13315 50th Rd. NW, Williston, ND, 58801. This site is immediately to the East of the Red River Supply fire site. From site entrance to site entrance it is approximately 1 mile away. The proposed plan is to take the concrete to this Red River Supply rail yard and place it in an area for surface stabilization. One the concrete is spread out and crushed/compacted in-place, there will be additional stabilizing layers placed over the top of the concrete. i.e., soil, stone, asphalt, etc. The area will then be utilized for truck and or equipment parking and staging. Attached is a diagram showing where on the Red River Supply – East Rail Yard the concrete is proposed to be placed and utilized. As you can see this is a large site and currently an industrial setting / use.

Based on the lab results, the % of concrete that is actually impacted and the intend use. Red River Supply feels that by re-purposing the concrete in this manner, there is little to no potential adverse impact to the environment. This will also A.) reduce the # of trucks having to travel a longer distance to a landfill, B.) act as a recycling option and reduce the amount of waste going into landfills, and C.) reduce the overall costs of this incident that has adversely impacted Red River Supply.

You immediate consideration and reply/approval would be greatly appreciated in this matter. If you have any questions, or need additional information, please do not hesitate to ask.

Thanks again.

**Scott Kluska**

Sr. Consultant

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