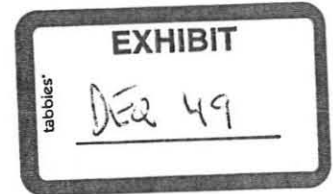


**Unknown**

**From:** Ken Schreuder  
**Sent:** Friday, April 01, 2011 8:35 AM  
**To:** 'Donald I Siegel'  
**Subject:** RE: Fremont County Sand Draw Landfill

Thanks. I've got Don Connell looking for an IME monitoring report.



**From:** Donald I Siegel [mailto:disiegel@syr.edu]  
**Sent:** Friday, April 01, 2011 8:34 AM  
**To:** Ken Schreuder  
**Subject:** Re: Fremont County Sand Draw Landfill

Inberg Miller did all the sampling.

On 4/1/11 10:28 AM, "Ken Schreuder" <[kschreuder@trihydro.com](mailto:kschreuder@trihydro.com)> wrote:

I was able to find contact information for both labs on the internet, and am sending them requests for information.

Did you collect the sample or did Inberg-Miller Engineers do it as part of the routine groundwater monitoring activities?

**From:** Donald I Siegel [mailto:disiegel@syr.edu]  
**Sent:** Friday, April 01, 2011 8:17 AM  
**To:** Ken Schreuder  
**Subject:** Re: Fremont County Sand Draw Landfill

Yes—will get it to you tomorrow. No problem.

On 4/1/11 10:16 AM, "Ken Schreuder" <[kschreuder@trihydro.com](mailto:kschreuder@trihydro.com)> wrote:

I am most interested in obtaining additional information regarding the isotope analysis. Do you still have contact information for Beta Analytics and University of Waterloo Environmental Isotope Labs?

**From:** Donald I Siegel [mailto:disiegel@syr.edu]  
**Sent:** Thursday, March 31, 2011 8:48 PM  
**To:** Ken Schreuder  
**Subject:** Re: Fremont County Sand Draw Landfill

Hi Ken,

I'm in DC at EPA and at other meetings this week. No, and am not a licensed PE or PG in Wyoming or any place else. I had the standard analyses done in contract labs in Wyoming sampled by a Inberg Miller, a professional engineering company. The isotope samples the engineering company sent to Beta Analytics and University of Waterloo Environmental Isotope Labs. I don't have chain of custody forms—they were passed back and forth to the labs. I send you what I have in my files as attachments. It would be a shame if because of these things, which were not anticipated when I did the work, the results will not be accepted or you cannot find a way to sign off on the analyses.

Don

10/30/2011



## memorandum



To: Don Connell, Fremont County SWDD  
From: Ken Schreuder, P.E., P.G.  
cc: \_\_\_\_\_  
Date: November 7, 2010  
Re: Updates for November 8, 2010 Board Meeting

The following information is provided to updated the Fremont County Solid Waste Disposal District (FCSWDD) on the status of various projects that are being managed by Trihydro Corporation (Trihydro).

### **Sand Draw Landfill / Permit / Project 09Y-001-002**

On November 5, 2010, a project status meeting was attended by Trihydro team members, Don Connell (FCSWDD), and Patrick Troxel (WDEQ). The following preliminary design plans were reviewed:

- Final Cover Design for the Original Area – The previous final cover design for the original 80-acre parcel is relatively flat (2% slope) over a relatively large distance (approximately three football fields). Due to concerns that the previous design may not be adequate to promote run-off and prevent ponding that may develop as a result of waste settlement, Trihydro increased the slope (4%) and revised the shape of the final cover system to reduce the lengths of the drainage paths by approximately one-half. Patrick Troxel indicated that he thought the proposed design was an improvement.
- Conceptual Design for the Expansion Area – As requested in the most recent WDEQ review of the January 2010 application, Trihydro developed conceptual design plans for the future development of the 137-acre expansion area, providing locations for up to four ponds, four large engineered containment system (ECS) cells (<1,000,000 CY capacity each) for municipal solid waste (MSW), and one to two unlined cells for construction/demolition waste (CDW). The location and design of the unlined cells was selected to facilitate developing a groundwater monitoring system that will be capable of distinguishing between potential impacts from MSW and CDW disposal units. Patrick Troxel indicated that the conceptual design plans provided a logical development and met the intent of the WDEQ's request for additional information.
- Excavation Plans for Phase I of the Expansion Area –The previous design of the initial excavation in the expansion area was intended to provide routine, intermediate, and final cover material for the original area, and provide a footprint for the first ECS cell. The previous design had the potential to exceed the 1,000,000 CY limit in WDEQ regulations which triggers the requirement for a leak detection system (LDS) below the ECS. The modified design prepared by Trihydro will limit the capacity of the ECS cell to less than 1,000,000 CY, and provide space for up to three ponds that can be used to manage leachate and/or stormwater. Trihydro noted that the cell footprint, which encompasses approximately 15 acres, would likely be lined in two or three parts, rather than all at once. The proposed locations of the ponds are at the lowest point of the facility to facilitate a gravity



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drain rather than a pressured discharge system. Patrick Troxel indicated that the excavation plans seemed reasonable and provides suitable locations for the initial ECS cell and leachate management ponds.

Based on the preliminary feedback provided by Patrick Troxel, Trihydro will proceed with finalizing the design plan highlighted above. Trihydro will also develop interim fill sequence and cross sections to provide direction for ongoing operations within the original area. The geotechnical analyses of soil samples collected last month are expected to be completed shortly, at which time a slope stability analysis of the revised final cover system design will be initiated.

#### **Shoshoni Landfill / Permit / Project 09Y-003-001**

The schedule for submitting the permit application for the Shoshoni Landfill was discussed during the November 5, 2010, a project status meeting. Patrick Troxel indicated that a draft Administrative Order on Consent (AOC) has been sent to the district to define a mutually-acceptable schedule for the submission of the permit application. An April 30 deadline was proposed by WDEQ, and Trihydro indicated that this schedule could be met. Due to the limited amount of time to address the outstanding issues at the Sand Draw Landfill, attendees at the meeting generally agreed that most of the work on the Shoshoni Landfill I application would be deferred until after the Sand Draw Landfill application is submitted.

#### **Sand Draw and Shoshoni Landfills / Monitoring / Project 09Y-001-003**

The report for the 2010 third quarter monitoring event at the Sand Draw Landfill was completed on October 15. Copies were provided to WDEQ and the FCSWDD. Although several volatile organic compounds (VOCs) were detected by the laboratory, all but one detection were estimated values below the laboratory reporting limit. The one VOC detected above the laboratory limit was in the equipment blank sample. Statistical analysis of the data noted several significant results for naturally-occurring geochemical parameters and metals, but no statistically significant results were noted for VOCs.

The additional quality assurance and quality control (QA/QC) samples collected during the 2010 third quarter monitoring event at the Sand Draw Landfill have been analyzed by two different laboratories, and Trihydro is in the process of completing data validation activities. A report summarizing the results of the additional QA/QC activities is expected to be finalized shortly.

The 2010 fourth quarter monitoring events at the Sand Draw and Shoshoni Landfills will be completed the week of November 8, and include groundwater samples from both facilities.

#### **Riverton Recycling Center / Design, Permitting, and Construction / Project 09Y-002-001**

The low bid for the water and sewer service, structural fill, methane venting system, concrete slab, and concrete blocks was \$81,960. The FCSWDD Board voted to award the project to Majors Equipment at the October 25, 2010 board meeting.



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In the process of preparing the final civil site design report, plans, and specifications for review by the City of Riverton, Trihydro discovered that the building manufacturer's engineering analysis will be limited to the structure, and not include the associated anchoring/foundation system. Trihydro's scope of work was specifically limited to the water and sewer service, structural fill, methane venting system, and concrete slab under the assumption that the building manufacturer would address all engineering issues relative to their structure. To address this issue, Trihydro has contacted a structural engineer who is familiar with the specific type of building that will be constructed, and is in the process of negotiating a contract for the required engineering analysis. Trihydro is proposing Task Change Order #4 to complete the additional scope of work.

Trihydro provided the associated contract documents to the FCSWDD for execution, as outlined by the current scope of work for this project. However, FCSWDD staff have indicated that they do not have the resources to prepare and execute the final contract documents with Majors Equipment, and have requested additional assistance from Trihydro. Trihydro is proposing Task Change Order #5 to complete the additional scope of work.

A topographic survey of the entire acreage leased by the FCSWDD from the City of Riverton for the Riverton Baler has been completed, and a base map is being prepared. Trihydro will be scheduling a meeting with the FCSWDD and the City of Riverton to review the operations and acreage associated with the existing composting program, and the conceptual layout of the composting operation within the permit boundary for the Riverton Baler.

#### **Questions and Additional Information**

Please let us know if you have any questions or need additional information. You can call me on my cell phone (307-330-7737) or send me an email ([kschreuder@trihydro.com](mailto:kschreuder@trihydro.com)).