Message

From: Michael Ritorto [mritorto@rouxinc.com]
Sent: 4/12/2018 9:28:26 PM
To: Gunnar Emilsson [EmilssonGR@cdmsmith.com]; Cirian, Mike [Cirian.Mike@epa.gov]
Subject: RE: Comments to date

Thanks Gunnar, much appreciated.

Looking forward to a good discussion next week.

Michael Ritorto, P.G. – NY | Principal Hydrogeologist/Office Manager
209 Shafter Street, Islandia, NY 11749
Main: 631-232-2600 | Direct: 631-630-2370
Email: mritorto@rouxinc.com | Website: www.rouxinc.com

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From: Emilsson, Gunnar [mailto:EmilssonGR@cdmsmith.com]
Sent: Thursday, April 12, 2018 5:12 PM
To: Cirian.Mike@epa.gov; Michael Ritorto <mritorto@rouxinc.com>
Subject: FW: Comments to date

Mike and Mike:

I had our hydrogeologist, Sean Coan, review DEQ's request for 5 additional monitoring wells under the Phase II SAP. Below is his assessment. I concur with Sean's findings.

We can discuss further during next week's call.

Gunnar Emilsson, P.G., P.E., BCEE
Project Manager
CDM Smith
50 West 14th St., Suite 200, Helena, MT 59601
T: (406) 441-1422 F: (406) 449-7725 M: (406) 431-3982
emilssongr@cdmsmith.com
cdmsmith.com

From: Coan, Sean
Sent: Thursday, April 12, 2018 3:03 PM
To: Emilsson, Gunnar <EmilssonGR@cdmsmith.com>
Cc: Formanek, Erin <formanekek@cdmsmith.com>
Subject: RE: Comments to date

Gunnar,

See my responses to DEQ-proposed well locations as sub-bullets:

Section 4.6 describes the installation of seven new monitoring wells. The DEQ recommends two additional wells to better define potential impacts on the western residential area

- one midway between MW-057 and MW-059
    - Not necessary. Proposed well CFMW-069 will serve to monitor GW quality between these wells. Also, the current understanding of GW flow at the facility shows that the direction of inferred flow is in the SE'ly direction toward the river. Proposed CFMW-069 will assist in improving GW flow definition in this area.
- one 700 feet North of MW-057
    - Not necessary. Current understanding of GW flow direction is to the SE in the vicinity of CFMW-057. Also, wells in the CFMW-056 cluster, CFMW-057 cluster, and CFMSW-059 cluster have been ND for cyanide, and below the fluoride MCL during all monitoring rounds. *The caveat here is that the -057 cluster lacks a well screened in the upper hydrogeologic zone – Roux has proposed a well completed in this zone (CFMW-057B) as part of the Phase II investigation. If this well showed impacts, an up/cross-gradient well to the north would become valuable.*

the DEQ recommends three additional wells to better define the nature and extent of the cyanide/fluoride plume

- one midway between MW-045 and MW-047,
    - Limited value – could add definition to the 200 µg/L cyanide contour and 2000 µg/L fluoride contour. That being said, concentrations in the CFMW-045 and CFMW-047 well clusters remained fairly consistent over the 4 sampling rounds presented in the GW-SW Report.
- one 500 feet West of MW-054
    - Valuable - would add definition to the westerly extent of the cyanide and fluoride plumes proximal to Flathead River.
- one 500 feet Northeast of MW-037)
    - Potentially valuable – would definition to the easterly extent of the cyanide and fluoride plumes up and cross-gradient to the main plant area. This location came up during discussion in the joint EPA/DEQ/CFAC technical meeting as potentially valuable, but likely difficult to install.

Let me know if you have any questions or would like to discuss.

Thanks,
-Sean

From: Cirian, Mike <Cirian.Mike@epa.gov>
Sent: Wednesday, April 04, 2018 8:59 AM
To: Roux IT <mritorto@rouxinc.com>
Cc: Andrew Baris <abaris@rouxinc.com>; John.Stroiazzo@glencore.ca; Steve Wright - CFAC <swright@cfaluminum.com>; Emilsson, Gunnar <EmilssonGR@cdmsmith.com>
Subject: Comments to date

Hello Michael,

Attached are the comments I have received so far. Below are the comments I received from DEQ. I should be receiving comments from Brian S. and David B. by 4/12/18.

Feel free to call if you have any questions,
Mike

The DEQ has reviewed the Phase II site Characterization Sampling and Analysis Plan, dated February 28, 2918 and the CDM comments, dated April 2, 2028, on the Plan.
The DEQ generally agrees with the CDM comments on the proposed phase II SAP, with the following specific emphasis:

Section 6.3.1, page 40 defined the basis for the RIFS.

The main objectives of phase II are to generate the data needed for the risk assessments and to generate the data for evaluation of remedial action options.

Section 4.2, pages 16-17 well defines the specific tasks involved in phase II.

The extensive RI, phase I data base should allow significant screening of COPCs and COPECs with final screening as part of the risk assessments when the phase II data is available.

It is understood that all monitoring wells (old and New) will be sampled twice as part of phase II.

Section 4.6 describes the installation of seven new monitoring wells. The DEQ recommends two additional wells to better define potential impacts on the western residential area (one midway between MW-057 and MW-059 and one 700 feet North of MW-057); the DEQ recommends three additional wells to better define the nature and extent of the cyanide/fluoride plume (one midway between MW-045 and MW-047, one 500 feet West of MW-054, and one 500 feet Northeast of MW-037). Thus 12 new wells (seven recommended by ROUX and five recommended by DEQ) would be installed, developed, and sampled.

Mike Cirian, PE
Libby On-site Project Manager
US EPA
108 East 9th Street
Libby, MT 59923
(406) 293-6194 Office