

From: Ingrid Wieser
To: Sergio Villalobos; William B - Mining Schnieders Jr
CC: Bo L Tran; dshaver@coalsource.com
Date: 2/22/2010 6:38 AM
Subject: Re: Crandall Canyon Iron Discharge Issue

Hi, Thanks Sergio for looking into those questions. I would be happy to speak with you directly. You can call me or email me to set up a specific time that I can reach you. Just to clarify, there are no endangered species in the affected area, but there are in the main streams which this stream is a tributary to. There also are sensitive fish species located in Huntington Creek. Thanks

Ingrid Wieser
801-538-5318

>>> Sergio Villalobos <svillalobos@nalco.com> 2/19/2010 9:00 AM >>>
Bill,

Do you think I can talk directly to Ingrid? She poses several questions, all of them good, but at the same time very time consuming since I have to retrieve the studies and determine the proper course or action(s). Additionally, she mentions 'endangered species' and this is a very different ball game ... so I'd need to ask her what endangered species are reported in that zone.

Thanks and best regards,

Sergio A. Villalobos, Ph.D.
Manager - Toxicology & Biocides
Corporate Quality & Product Registration
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T. 630.305.1398
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Skype ID: sergio.a.villalobos

Do your part to make us a less wasteful society and always consider your environmental responsibility.

William B - Mining Schnieders Jr/NV/US/Nalco
02/19/2010 09:54 AM

To
"Ingrid Wieser" <ingridwieser@utah.gov>
cc
dshaver@coalsource.com, Bo L Tran/NV/US/Nalco@NALCO, Sergio Villalobos/NV/US/Nalco@NALCO
Subject
Re: Crandall Canyon Iron Discharge Issue

Ingrid,

I apologize for the delay in getting back to you. I am forwarding your questions on to Sergio Villalobos our manager of toxicology.

Thanks

"Ingrid Wieser" <ingridwieser@utah.gov>
02/17/2010 04:35 PM

To
<wschniedersj@nalco.com>
cc

Subject
Crandall Canyon Iron Discharge Issue

Hi Bill- I have a couple of follow-up questions from some contacts at the fish and wildlife service for you regarding the chemical that you will be providing to the crandall canyon mine (Product 7763).

1. I am pretty sure that we discussed that there has been no testing on how long the chemical will persist in the stream/soil before breaking down. Can you estimate using the half life of the chemical or its active ingredients?
2. Since the chemical is used for binding with metals, is there any potential for the chemical to change the chemistry of the creek?
3. Here is a direct question from some contacts at the fish and wildlife service: "when we are dealing with sensitive or endangered species, the typical 96 hr LC or EC50 test just doesn't cut it. As a precautionary measure, a safety factor of at least 100-fold below the measured level of toxicity is applied to sensitive species. Still, this only addresses acute toxicity and nothing about subchronic or chronic toxicity. In this case, since so little is known about the toxicity of the flocculent and there are 2 orders of magnitude difference in the acute toxicity of flocculent depending on the exposed species, I would apply at least another safety factor of 10 to address potentiall chronic toxicity to sensitive fish species."

How difficult and time consuming would it be to conduct this additional testing?

Thanks so much! Let me know if you have any questions.