From: Okubo, Watson T
To: Nancy Rumrill/R9/USEPA/US@EPA
Cc: Licudine, Danilo L.
Subject: FW: Lahaina Seep Sampling and Analysis Plan
Date: 07/11/2011 11:38 AM
Attachments: Lahaina Seep Plan.doc

Hi Nancy,

Danny wanted to know if there is a need to analyze nitrate separately?

Watson

From: Licudine, Danilo L.
Sent: Monday, July 11, 2011 8:30 AM
To: Okubo, Watson T
Subject: Re: Lahaina Seep Sampling and Analysis Plan

Hi Watson,

Attached is the information you requested. By the way, since nitrate-nitrite nitrogen is gonna be analyzed anyway would there be a need to analyze nitrate separately? If nitrate has to be analyzed separately, the hold-time is 48 hours from sampling time and since samples are coming the following day we would only have an 8-hour window for analysis when samples arrive the following day. With combined nitrate-nitrite we can freeze the samples so hold-time is not an issue. Can we check this with EPA if it is really necessary to analyze for nitrate separately?

E-mail or call if you need more information regarding the lab analysis plan.

Danny

> ----- Original Message -----
> **From:** Okubo, Watson T
> **To:** Licudine, Danilo L.
> **Sent:** Wednesday, July 06, 2011 2:08 PM
> **Subject:** FW: Lahaina Seep Sampling and Analysis Plan
>
> Hi Danny,
>
> Can you add the analyte methods and QA procedures? You can disregard Enterococcus, turbidity, DO, Salinity, pH, and temperature. Thanks.
>
> Watson
>
> ---
>
> **From:** Nancy Rumrill [mailto:Rumrill.Nancy@epamail.epa.gov]
> **Sent:** Tuesday, July 05, 2011 4:48 PM
> **To:** Okubo, Watson T
> **Cc:** Sara Roser
> **Subject:** Lahaina Seep Sampling and Analysis Plan
>
> Hello Watson,
>
> Here's the template from our Quality Assurance Office necessary for the Lahaina seep sampling and

analysis planning. Can you work with the State lab to add the analyte methods and QA procedures? I've only included some of the generic background necessary for the monthly sampling and analysis for the following constituents:

Total Phosphorus
Total Nitrogen
Ammonia Nitrogen
Nitrate-Nitrite Nitrogen
Nitrate
Enterococcus
Biochemical Oxygen Demand
Total Suspended Solids
Turbidity
Total Dissolved Solids
Chlorophyll a
Disolved Oxygen
Salinity
Specific gravity
pH
Temperature

I plan to include the priority toxics later for the quarterly sampling. The County will be conducting effluent analysis for toxics that will help us to better target the toxics for EPA lab analysis.

I am out of the office from July 6 to the 9 and back in next week. Please review the template and determine where you may need additional help to complete the plan. I have not had enough time to work on getting this in better shape, but I will work on helping you through it, where needed, from our EPA lab and QA office next week when I get back.

Thank you, Nancy Rumrill
EPA, Region 9
Ground Water Office
415-972-3293