From: Lyons, Ellen H CIV USARMY CEPOA (US)
To: "Buteyn, Douglas J (DEC)"
Subject: RE: testing for coal ash
Date: Tuesday, November 6, 2018 12:05:00 PM

Yes it does! Thank you!

Ellen Lyons
907-474-2169

-----Original Message-----
From: Buteyn, Douglas J (DEC) [mailto:doug.buteyn@alaska.gov]
Sent: Tuesday, November 6, 2018 11:34 AM
To: Lyons, Ellen H CIV USARMY CEPOA (US) <Ellen.H.Lyons@usace.army.mil>
Subject: [Non-DoD Source] RE: testing for coal ash

Hi Ellen:

If I understand correctly, you're interest is simply to know whether coal ash is physically present within the area of the pond. In my experience, coal ash does retain its color and structure in water so it seems to me that the most direct way to do that is a visual assessment. Assuming any coal ash in the pond is mixed with other sediments, I think your best bet is to submit sediment samples from the pond to a laboratory for microscopic assessment. Any coal ash particles in the sediment should be readily apparent and the analyst should be able to both confirm the presence of coal ash and provide an estimate (relative %) of how much coal ash is present. (This process was used to identify coal ash particles in dust samples collected as part of an EPA air quality assessment of the downtown power plant several years ago.) Alternatively, if there's a possibility that coal ash has been deposited in one or more distinct layers, using a drill rig to collect split-spoon samples should confirm the presence of such layers. Confirming the presence of coal ash using chemical tests would be more difficult because the the metallic elements in coal ash could also be present in the native soil. As such, my recommendation is to stick with the visual methods.

I hope this answers your questions.

Doug Buteyn
ADEC Solid Waste Program

From: Lyons, Ellen H CIV USARMY CEPOA (US) [Ellen.H.Lyons@usace.army.mil]
Sent: Tuesday, November 6, 2018 10:53 AM
To: Buteyn, Douglas J (DEC)
Subject: testing for coal ash

Hi Doug, I am still working on Northside Business Park permit modification. The Corps still has some issues with their proposal and we are working with the applicant to work them out. The Corps feels that coal ash, an introduced, non-native substrate is not ecologically suitable for a mitigation site. When we discussed this with the applicant, they stated they did not believe a significant amount was contained within the proposed pond area. I have photographs that suggest otherwise. The Corps suggested the applicant test for the presence of coal ash to support this claim. How the testing would be done and what constituents would be tested for was discussed. So I am wondering, how can you test to see if coal ash has made it into the pond? (The constructed one in the NE corner of the property). Does coal ash retain its sediment color and structure in water? Can you pick it out from the natural substrate? Or do you have to test for its presence another way? Is testing for its presence even a reasonable thing to do?

Do you have any ideas regarding this?

Thank-you,

Ellen Lyons
Project Manager, Regulatory Division
Alaska District, North Central Section, Fairbanks
(907) 474-2169