

**From:** [Rue, Alan \(ECY\)](#)  
**To:** [Rodriguez, Krystal \(ECY\)](#)  
**Subject:** RE: Castle & Cooke Aviation cleanup (ERTS 708791)  
**Date:** Wednesday, December 22, 2021 4:41:04 PM  
**Attachments:** [image002.jpg](#)  
[image003.jpg](#)  
[image006.jpg](#)

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Hi Krystal,

It makes sense to me that NWTPH-Dx is adequate for a release of Jet A fuel. NWTPH-Dx is the method that should be used to determine the presence and quantity of Jet A Fuel. The published method includes chromatograms of Jet A Fuel run by NWTPH-Dx, and not by NWTPH-Gx.

Alan Rue  
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Manchester Environmental Lab  
Washington State Department of Ecology  
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**From:** Rodriguez, Krystal (ECY) <krod461@ECY.WA.GOV>  
**Sent:** Wednesday, December 22, 2021 4:05 PM  
**To:** Rue, Alan (ECY) <arue461@ECY.WA.GOV>  
**Subject:** FW: Castle & Cooke Aviation cleanup (ERTS 708791)

Hello Alan,

I would like your input on whether analyzing soil samples using NWTPH-Dx is adequate for a release of Jet A fuel to soil. Ecology's petroleum remediation guidance recommends analyzing soil for diesel- **and** gas-range petroleum hydrocarbons, but this wasn't done during the cleanup of a site I'm currently reviewing.

Please let me know if you have time to review the emails below and attached. If so, I'd like your opinion on this.

Thanks, in advance! And happy holidays!

Krystal



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**From:** Mindy Graddon <[MGraddon@soundearthinc.com](mailto:MGraddon@soundearthinc.com)>  
**Sent:** Wednesday, December 22, 2021 10:56 AM  
**To:** Rodriguez, Krystal (ECY) <[krod461@ECY.WA.GOV](mailto:krod461@ECY.WA.GOV)>  
**Cc:** Chris Carter <[chrisc@soundearthinc.com](mailto:chrisc@soundearthinc.com)>  
**Subject:** RE: Castle & Cooke Aviation cleanup (ERTS 708791)

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expecting the attachment or the link**

Krystal,

Thank you for your email. We were able to confer with our laboratory that performed the analysis and the analytical method/process accounts for the lighter carbons. Friedman & Bruya explains this in the attached email and they also prepared the attached memo for another similar project. We recommend you contact Ecology's lab (Manchester) to provide better clarification on why the NWTPH-Dx analytical method is adequate for the known fuel type that was spilled. As for the potential for benzene, we have requested confirmation from the jet fuel supplier that the fuel used at the Castle and Cooke facility during the spill did not contain benzene. We will send you the documentation when we receive it. Let us know if the response from our lab will suffice to address Ecology's concerns with the analytical methods used.

Thanks,

Mindy Graddon, LG, PMP

Associate Geologist

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**From:** Rodriguez, Krystal (ECY) <[krod461@ECY.WA.GOV](mailto:krod461@ECY.WA.GOV)>  
**Sent:** Wednesday, December 8, 2021 10:08 AM  
**To:** Mindy Graddon <[MGraddon@soundearthinc.com](mailto:MGraddon@soundearthinc.com)>  
**Subject:** RE: Castle & Cooke Aviation cleanup (ERTS 708791)

Hi Mindy,

I apologize for taking so long to get back to you about the requirements for analyzing soil samples at Castle & Cooke Aviation Property. As I explained on the phone, I had a family emergency that took me out of the office soon after we last spoke and for quite a bit of November.

To recap, at the end of October I contacted you about lab analysis conducted on soil samples because the soil samples collected during excavation activities had been analyzed for diesel-range organics but not gasoline-range. Jet A fuel is a middle distillate that carries some lighter hydrocarbon chains similar to gasoline (see page 94 of Ecology's [Petroleum Guidance](#)). Unless you can prove the absence of shorter-than-C<sub>10</sub> hydrocarbon chains through documentation of the actual product released, soil samples must be analyzed for gas-range organics either qualitatively or quantitatively to prove a successful cleanup (per [MTCA Table 830-1](#)). If GRO are present, a lab must analyze confirmation soil samples quantitatively for BTEX and GRO compounds not covered by NWTPH-Dx. The Castle & Cooke Aviation Property is not currently eligible for a no further action recommendation, because the GRO data is missing.

I understand there's been a change of ownership on this property so I hope you can work with the former and current owner to collect this additional information. The bulk of the work has been done; we just need the last 1% to close this out. With a No Further Action at the Initial Investigation stage of MTCA, the site can remain off Ecology's contaminated sites.

Please let me know how you SoundEarth will move forward and if you have any questions.

Krystal

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**From:** Rodriguez, Krystal (ECY)  
**Sent:** Monday, October 25, 2021 4:40 PM  
**To:** 'Mindy Graddon' <[MGraddon@soundearthinc.com](mailto:MGraddon@soundearthinc.com)>  
**Subject:** Castle & Cooke Aviation cleanup (ERTS 708791)

Hi Mindy,

I just left you a message. I'd like to speak with you about doing a bit more sampling on the Castle & Cooke Aviation property in order to aim for a no further action determination.

Ecology recommends having soil samples analyzed for all ranges of petroleum hydrocarbons and BTEX, which doesn't appear to have been done.

Let me know when you have time to talk this week.

Krystal

