CASCADE
ENVIRONMENTAL
MANAGEMENT

November 15, 2019

Kenzie Billings, PE
Air Toxics Project Manager
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

RE: ORRCO-IOI Klamath Falls Emission Inventory Submittal Deadline Extension Request

Dear Kenzie,

Thank you for your time and assistance with ORRCO-IOI's emission inventory project. We are submitting this formal request for an extension of our emission inventory submittal date. As we've discussed, there is significant benefit in obtaining more accurate emissions information for the combustion of fuel oil at the Klamath Falls facility.

In the final stages of preparing the emission inventory submittal, we noticed a few areas that may be of concern as we progress with the risk assessment process. For example, one metal of concern is arsenic. The quarterly fuel analysis reports show less than 1 ppm arsenic in the fuel oil while the emission factor used in the facility's permit review last year show emissions at least approximately 13 times higher, let alone all arsenic in the fuel is not expected to translate to emissions. Another example is lead. In this case, the fuel analysis suggests a higher potential emission as compared with the "permit" emission factor. Of course, lead may fall out in the ash to a greater degree than other metals, but source testing would help confirm actual emissions of the various metals.

Yesterday we sent residual fuel oil and distillate fuel samples to a laboratory for more extensive analytical tests on metals content. Only arsenic, cadmium, chromium, and lead are sampled quarterly. We have requested more metals be analyzed and all metals to be analyzed at lower detection limits than that conducted in the 2018 quarterly fuel analysis reports, where possible.

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We'd also like to have PCB and chlorinated compounds (extractable organic halides (EOX)) analyzed at better detection limits, if possible. While there are references to dioxin/furan being non-detect from distillate fuel combustion, there isn't as much information on dioxin/furan emissions from combustion of residual fuel oil (RFO). We'd like to ensure we can claim non-detect/zero emissions of these constituents and precursors, from RFO as well, if at all possible. Thus far, quarterly fuel oil samples have not shown PCB or EOX concentrations above the detection limits of 1.00 ppm and 200.0 ppm, respectively. If we find traces of EOX or PCBs at lower detection limits, we'd like the option to conduct source testing to assess actual emissions.

Based on the time needed for the above testing, could we obtain an extension of our deadline to submit the emission inventory to:

1. December 15th if we do not conduct source testing (basing emissions on just the enhanced fuel oil analyses) or
2. April 15th if we do conduct source testing (in talking with Thomas Rhodes and a local source testing firm, the earliest we could be scheduled for a source test is in February)

Of course, while these dates seem like a significant extension, time is needed to conduct laboratory analyses and source testing as well as preparing reports and incorporating the data into the emission inventory.

As we discussed, requesting a deadline extension allows for our efforts to be put into obtaining better emissions data and to minimize efforts with back-and-forth updates and revisions to the emissions inventory.

Thank you again for your time and help!

Best regards,

M.E. Piper

Marie E. Piper
Principal Engineer

cc: Thomas Rhodes, ODEQ
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