



MEMORANDUM

To: T.J. Ross

From: Don Kopec

Date: June 28, 2013

Re: Questions regarding CMAQ proposal DR13143957 – Indiana Harbor Belt Railroad Locomotive Fuel Conversion

T.J., thanks for your follow-up questions concerning the Indiana Harbor Belt CMAQ proposal. We forwarded your questions to the IEPA (the sponsor) and the railroad. Their responses are as follows:

- Q: I will provide my comments formally but at the least the use of CNG has to be monitored. Since the technology proposed allows for the use of 100% of diesel any public investment has require the use of CNG. What will happen is if the price of CNG exceeds that of diesel they will stop using CNG and I see no requirement that they use CNG to the maximum limit allowed by the technology. If locomotive engineers have the ability to turn off the CNG and use only diesel they will do so whenever they perceive they have a power problem due to the use of CNG instead of diesel. These dual fuel systems are problematic.
- A: The locomotives will be programmed so that they cannot run without CNG. There will be no physical means for a locomotive engineer to cut off the CNG. The program could in theory be changed, but it would require the manufacturer to do it. There is an ability to centrally override the CNG system (so that the unit can still be moved for repair). However, the locomotive equivalent of a black box will monitor the use of CNG, so we can ask, in our contract, for reporting on actual CNG use. This would enable IDOT to verify that the CNG system is being used, and to impose sanctions if need be.
- Q: Here is a link to the IH fleet. It shows all their locomotives were rebuilt in 2003 and 2004. I am confused as to the statement that they were running all pre 1965 engines. Is that possible even though they were rebuilt in Mexico 10 years ago?
- A: The locomotives were rebuilt to OEM specs in 2003. The OEM specs are from 1965, so the emissions of these rebuilt locomotives are those of a locomotive that was built in 1965 – pre-tier 0.

Q: Finally CMAQ should only be paying for the CNG component of the package just as they are with the trash trucks. It appears they want us to pay for the whole repower package. Am I right about that? If I am right they get new power plants for 40 year old equipment? I suspect these current units are all in need of power plant rebuilds and that is money they have to spend anyway so they are really not contributing any new money to this project.

A: (from CMAP) Yes, they are asking for assistance with a full repower. As stated by the railroad representatives and US EPA staff at the meeting, these locomotive engines can operate for many more years. Since there is no regulatory requirement that they be replaced, the railroad could chose to operate them as is; they do not have anything other than routine maintenance expenses to cover. Thus, it is in the interest of the region to assist with replacing the diesel engines, which are very far from meeting current emissions standards, thereby improving air quality.

Please let me know if you have further questions.