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Regulatory Order Worksheet (3/7/17)

<p>RESCIND RO No. 26</p>	<p>Source: Tesoro Refining & Marketing Company LLC 10200 March Point Road Anacortes, WA 98221</p>
<p>Permit Engineer: Lyn Tober</p>	<p>Contact: Shannon Logan NWCAA No.: 1006</p>

A. Project Description

NWCAA issued Regulatory Order (RO) 26 on August 22, 2000, regarding NOx Emission Reduction Credits (ERC) and the combustion of fuel oil in Crude Heater F-101.

Tesoro Refining & Marketing LLC (Tesoro) is asking that NWCAA rescind RO 26 because fuel oil is no longer being burned at the Anacortes Refinery which makes RO 26 irrelevant and obsolete. References to fuel oil combustion are being removed from the Air Operating Permit (AOP) during the ongoing renewal.

B. Fees

Because this is considered a "cleanup" as part of the AOP renewal process, only half of the NWCAA Order fees have been assessed. The Order fees assessed and amount paid are listed in the NSR Fee Worksheet kept in the electronic folder for this project.

C. Public Notice

In accordance with NWCAA Section 305.2, because RO 26 was an order to "establish or debit emission reduction credits (ERC)", a mandatory 30-day public comment period was required at issuance. Therefore, logically, and following the process for other similar actions, a public comment period will also be required to rescind RO 26.

A notice of the 30-day public comment period was posted on the NWCAA website on 5/***/23. The public comment period closed on 6/***/23. No public comments were received.

D. SEPA Review

Based on a Feb. 2015 opinion from attorney TC Richmond, SEPA review is not required for a regulatory order that limits emissions. Therefore, logically, SEPA review is also not required to rescind the permit.

(see Reference → SEPA Teams site for copy of TC's opinion:

<https://nwcleanairwa.sharepoint.com/:b:/s/Reference/ESnKITuY74hCoHXNm17ITHUBWwo1ZaUFggKUK6M4u-mC0w?e=NNIEDz>)

E. Relevant History

OAC 390 was originally issued for the Clean Fuels Project which included two 282.5 MMBtu/hr gas/fuel oil fired boilers. Note that at this time, Shell Oil Company (Shell) owned and operated the Anacortes Refinery. NOx emissions from the project were going to be offset by using 60 tons of ERCs and installing low-NOx burners elsewhere at the refinery thereby avoiding triggering PSD.

The project was modified and OAC 390a was issued for a 220 MMBtu/hr gas/fuel oil boiler (F-753). It was going to fire gas 50% of the time (28.9 tpy NOx) and then fuel oil 50% of the time (38.5 tpy NOx) resulting in 68 tpy NOx. In order to keep the NOx emissions below 39 tpy, the refinery was going to either utilize existing ERCs or install low-NOx burners on process heaters or boilers. OAC 390a limited fuel oil firing to 4380 hours per year and a requirement to retire 39 tpy NOx emission reduction credits. These ERCs could either be existing or new ERCs generated by installing low-NOx burners and/or relinquishing the ability to fire fuel oil.

Note that the file states that F-753 was never equipped to fire fuel oil so most references to fuel oil combustion were removed from the permit. However, without fuel oil combustion, that means the unit will fire gas 100% of the time resulting in an emission increase of 57.8 tpy NOx (2 x 28.9 tpy) so some offsets of some sort would still be required to avoid triggering PSD.

In a 9/12/95 letter to NWCAA where Shell:

- Requested issuance of 72 tons NOx ERCs due to using low NOx burners and relinquishing the ability to fire fuel oil in both F-101 and F-301.
- Used 28 tons of these ERCs to fire F-753 50% on gas (28.9 tons NOx) and 50% on fuel oil (38.5 tons NOx). Net project increase was 39.4 tons NOx. Leaving 44 tons ERCs.
- Will use additional ERCs to allow firing fuel oil in F-101 once figure out emission factor.

While there is nothing in the file that formalize these requests, this seems to resolve the PSD applicability issues for the Clean Fuels Project.

Low NOx burners were installed on F-101 and F-301. Per the 9/12/95 letter, the tested NOx emission factors while firing gas were 0.030 lb/MMBtu and 0.028 lb/MMBtu, respectively.

RO 26 was issued on 8/22/00, where Tesoro is "buying back" the ability to fire fuel oil in F-101. 35 tons NOx ERCs were retired to allow fuel oil burning in F-101 and relinquishing 8 tons, resolving the whole 44 tons generated in the 9/12/95 letter. Regardless, ERCs only have a 10-year lifespan.

I conducted a file review and found that none of the NSR projects within approximately 10 years after issuance of RO 26 relied upon these limits to avoid PSD or for any other reason.

With the rescinding of RO 26, the 5-year stack testing that was gap-filled in the AOP to demonstrate compliance with the RO 26 emission limits (AOP 013R1 Term 5.1.5) will also be eliminated. Note that subsequent to RO 26, F-101 triggered NSPS Ja applicability for NOx and now has a NOx CEMS installed. Also, OAC 1184 requires annual CO testing at F-101.

F. Emissions

Rescinding RO 26 will not allow any emissions increases.

Firing fuel oil is no longer allowed at F-101 or any heater at the Anacortes refinery. Should Tesoro wish to fire oil at the refinery, it will need to be reviewed as a new project under NSR.

RO 26 limited NOx emissions from gas fuel firing in F-101 to 21.6 tons per year NOx on a 12-month rolling basis. Note that F-101 is rated at 120 MMBtu/hr. Assuming the tested emission factor of 0.030 lb/MMBtu, the NOx PTE while firing gas is 15.8 tons per year. The 12-month total emissions reported monthly never exceeded this limit.

G. Review

Review		Date
NWCAA Engineering	Christos Christoforou	5/11/23
Source	Shannon Logan	5/23/23