November 30, 2018

Mr. Bryce Bird
Director
Utah Division of Air Quality (UDAQ)
P.O. Box 144820
Salt Lake City, UT 84116
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RE: Comments on the Amendments to State Implementation Plan (SIP) Subsection IX. Part H

Dear Mr. Bird and UDAQ staff:

Tesoro Refining & Marketing Company LLC (Tesoro), respectfully submits the following comments on the Notice of Change in Proposed Rule: Revisions to Section IX, Control Measures for Area and Point Sources, Part H, Emission Limits and R307-110-17, Section IX, Control Measures and Utah State Bulletin Number 2018-21, Rule 307-110-17, Notice of Change in Proposed Rule, DAR File No. 42976.

As owner and operator of the Salt Lake City Refinery, Tesoro is subject to the emission limitations and other requirements proposed in this rulemaking. In addition to the comments in this letter, Tesoro endorses and incorporates by this reference the comments submitted by the Utah Petroleum Association (UPA) to the same rulemaking action.¹

Stack Test Frequency for FCCUs
The revisions include an adjustment of the stack test frequency for FCCUs from every three (3) years to annually.² UDAQ previously described its rationale for a frequency of every 3 years in its response to comment H-53 from Western Resources Advocates as:

"The condition is being changed to a once every three year stack test; which, when combined with the CPMS monitoring requirement (IX.H.II.g.i.B.III), is sufficient to address EPA’s concern that emitting units are operating as designed."³

¹ Tesoro is a member company of UPA.
³ See also id., DAQ Response to Board Motion on SIP, p. 1 (providing UDAQ’s rational for why its selected a three-year testing frequency for certain sources in its proposed revisions to Part H and explaining to the AQB the “factors” that the agency evaluates as it conducts a site-specific evaluation of the necessary monitoring for a particular unit); 40 CFR § 64.3(c) (directing state regulators to “account for site-specific factors including the applicability of existing monitoring equipment and procedures, the ability of the monitoring to account for process and control device operational variability, the reliability and latitude built into the control technology, and the level of actual emissions relative to the compliance limitation” when determining monitoring for a unit).
Tesoros supports this response by UDAQ that testing once every 3 years is sufficient to ensure the FCCU is operating as designed. Each stack test has inherent safety risks which outweigh the potential benefit of annual stack testing. The test location for this source is elevated 200' in the air and requires ideal weather conditions and special safety precautions. Additionally, the continuous compliance demonstration using CPMS ensure operation consistent with equipment design and within the emission limits established by the SIP. Following the installation of the Wet Gas Scrubber, the two most recent stack tests showed results that were less than 50% of the emission limit. During the stack test, control device operating parameter limits are established which must be then be monitored continuously and reported when exceeded. Annual testing would provide no additional compliance assurance nor reduced emissions.

Monitoring for FCCUs
Tesoros previously submitted the comments included below in the August 15, 2018 comments submittal:

**H.1.g.i.B.III.**
Tesoros suggests the following edits to H.1.g.i.B.III. since CPMS should not be used to determine source-wide emissions, and the CPMS are specifically required on the control device.

"No later than January 1, 2019, each owner or operator of an FCCU shall install, operate and maintain a continuous parameter monitor system (CPMS) to measure and record control device operating parameters from the FCCU for determination of source-wide particulate emissions as per the requirements of 40 CFR 60.105a(b)(1)."

**H.11.g.i.B.III.**
Tesoros suggests the following edits to H.11.g.i.B.III. since CPMS should not be used to determine source-wide emissions, and the CPMS are specifically required on the control device.

"No later than January 1, 2019, each owner or operator of an FCCU shall install, operate and maintain a continuous parameter monitor system (CPMS) to measure and record control device operating parameters for determination of source-wide PM2.5 emissions as per the requirements of 40 CFR 60.105a(b)(1)."

UDAQ response H-14 and H-22 indicated agreement with the comment on H.11.g.i.B.III as noted below. However, its not clear if UDAQ responded to the comment related to H.1.g.i.B.III:

43 The suggested edit for IX.H.11.g.i.B.III – UDAQ agrees with this comment. This is essentially the same
44 comment also submitted by another commenter although with slightly different wording and a different
45 suggested resolution. As there are four listed refineries potentially affected by any change in the language
46 of this requirement, UDAQ needed to consider all comments. Please see UDAQ’s response to comments
47 H-14 and H-15 for details on the final resolution of this matter.

UDAQ’s proposed version of the SIP does not include UDAQ’s proposed revisions as detailed in UDAQ’s response H-14. Nor does UDAQ’s response address Tesoro’s original comment that CPMSs should not and cannot be used to determine source-wide emissions.

As currently proposed subsections IX.H.1.g.i.B.III and IX.H.11.g.i.B.III require CPMS to measure operating parameters for determining source-wide particulate matter emissions. This appears to be in error, as CPMS are required under NSPS 3a to measure and record operating parameters of control devices such as power input, pressure drop, liquid feed rate, exhaust gas flow rate, coke burn-off rate, as well as
FCCU hours of operation—not emissions. This provision also appears to conflict with Subsection IX.H.2.d.1.A. that provides for the use of stack tests (not CPMS operating parameters) for determining emission factors for source-wide particulate matter emissions.

Tesoro resubmits the comments as noted above for IX.H.1.g.i.B.III and IX.H.11.g.i.B.III because the specific issues that Tesoro and UPA (see 8/15/18 UPA comments) commented on have not been addressed.

Clarification on BACT for NOx Emissions for Cogeneration Units
As Tesoro’s previously submitted BACT Assessment explained, even assuming that SCR was a technically feasible control, it could not be installed in a sufficiently timely manner so as to constitute BACT. Furthermore, and as indicated by UDAQ’s Technical Support Document, the ability of SCR to effectively reduce NOx emissions is dependent on the emission exhaust temperature to the SCR. Even for an exhaust temperature that is within a nominally acceptable range for SCR, the ability of SCR to achieve a higher level of NOx reduction (i.e., 90%) will be compromised if the exhaust temperature falls outside of the narrower temperature range required for optimal control performance. To date, Tesoro has not conducted the necessary, additional analysis to definitively determine the capabilities of SCR for application to the cogens, including an assessment of the temperature regime upstream of the evaporator and economizer where an SCR could potentially be located.

Thank you for the opportunity to provide comments. Tesoro will continue to support UDAQ in their efforts to attain for the PM$_{2.5}$ standards. Should you have any questions regarding these comments, please do not hesitate to contact me.

Sincerely,

Amber Larsen
EH&S Manager, Tesoro Salt Lake City Refinery

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4 40 C.F.R. § 105a(b)(1).
6 See PM2.5 SIP Evaluation Report: Tesoro Refining & Marketing Company LLC, Salt Lake City Nonattainment Area, UDAQ, Major Source Review Section (July 1, 2018).
7 See BACT Assessment, submitted by Tesoro Marketing and Refining Company LLC and Tesoro Logistics Operations LLC (submitted under cover dated December 8, 2017).