



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
RESEARCH TRIANGLE PARK, NC 27711

SEP 11 2017

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Safety, Security, Health & Environment  
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OFFICE OF  
AIR QUALITY PLANNING  
AND STANDARDS

Dear Mr. Reese:

I am writing in response to your letter dated August 7, 2017, requesting approval for use of alternative testing procedures to Methods 325A and 325B (40 CFR 63, Appendix A) for fence-line monitoring at certain ExxonMobil facilities. Your letter indicates that fence-line monitoring is required under 40 CFR 63, Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries (Subpart CC), for the following refineries:

ExxonMobil Baton Rouge Refinery 4999 Scenic Hwy Baton Rouge, LA 70805	ExxonMobil Beaumont Refinery 1795 Burt St Beaumont, TX 77701
ExxonMobil Baton Rouge Chemical Plant 4999 Scenic Hwy Baton Rouge, LA 70805	ExxonMobil Beaumont Chemical Plant 11440 Highway 90 Beaumont, TX 77713
ExxonMobil Baytown Refinery 2800 Decker Dr. Baytown, Texas 77520	ExxonMobil Billings Refinery 700 ExxonMobil Rd. Billings, MT 59101
ExxonMobil Baytown Chemical Plant 5000 Bayway Dr Baytown, Texas 77522	ExxonMobil Joliet Refinery 25915 SE Frontage Road Joliet, IL 60410
ExxonMobil Baytown Olefins Plant 5000 Bayway Dr Baytown, Texas 77522	

Your letter included several specific alternative testing and method clarification requests, including:

- 1) **Temperature and pressure corrections.** As an alternative to section 12.2 of Method 325B, equations 12.5 and 12.6, you requested use of a simplified equation to correct for temperature and pressure in the calculation of fence-line concentrations of target compounds.
- 2) **Sample Collection Timing.** You requested an alternative to the requirements of section 8.4.1 in Method 325A and section 63.658(e)(1) of Subpart CC that specify 14-day sampling periods as routine with provision for a minimum of 13 and a maximum of 15 days to allow for extenuating circumstances. You point out that it may not always be possible to comply with

the 13- to 15-day requirement and request that there be further provision for modifying the sampling period under extreme conditions such as a hurricane, blizzard, flooding, power failure, or other emergency which would not permit safe access to the samplers.

- 3) **Duplicate and Field Blank Samples.** As an alternative to Method 325A, section 8.5.5, you requested that facilities be allowed to collect one co-located duplicate sample and one field blank per sampling period for facilities with 19 or fewer monitoring locations. If there are 20 or more monitoring locations, you requested an alternative to collect two co-located duplicate samples per sampling period and one field blank per sampling period. You also requested comports clarification of the number and use of duplicate samples in sections 9.4 and 9.9 of Method 325B.
- 4) **Duplicate Sample Calculations.** Clarification for how co-located duplicate samples are used to calculate rule specified difference in concentration between the highest and the lowest measured concentration during a sampling period ( $\Delta C$ ) values.

The EPA plans to make several revisions to the fenceline monitoring requirements in Methods 325A and 325B as well as the related requirements in Subpart CC for petroleum refineries to facilitate implementation of the monitoring requirements. To expedite the availability of these planned revisions and facilitate implementation of the fenceline monitoring now being conducted, we are approving the following alternatives.

- **Temperature and Pressure Corrections**

Replacement of equations 12.5 and 12.6 in section 12.2 of Method 325B, with a single equation for temperature and pressure correction:

$$C_c = \frac{(m_{meas}) * 10^6}{U_{NTP} * \left[ \frac{T_{SS}}{298} \right]^{\frac{1}{2}} * t}$$

Where:

$C_c$  = The concentration of target compound at normal ambient temperature and pressure ( $\mu\text{g}/\text{m}^3$ ),

$m_{meas}$  = Mass of compound as measured on the sorbent tube ( $\mu\text{g}$ ),

$U_{NTP}$  = Diffusive uptake rate at normal ambient temperature and pressure (ml/min),

$t$  = Sampling duration (minutes), and

$T_{SS}$  = Average temperature during the collection period at the sampling site (K).

- **Sample Collection Timing**

When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (i.e., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed, but must occur as soon as safe access to sampling sites is possible. When the sampling period is adjusted outside the 13- to 15-calendar day range, the reason must be recorded and reported in the next routine reporting cycle. Otherwise, except as provided in paragraph 63.658(e)(3) of 40 CFR 63, Subpart CC, the frequency of sample

collection shall be once each contiguous 14-day sampling period, such that the beginning of the each 14-day sampling period begins immediately upon the completion of the previous 14-day sampling period.

• **Duplicate and Field Blank Samples**

In sections 8.5.5 and 9.3.1 of Method 325A, an allowance for field blank and field duplicate sample collection as follows:

- If there are 19 or fewer monitoring locations, collect at least one co-located duplicate sample per sampling period and at least one field blank per sampling period.
- If there are 20 or more monitoring locations, collect at least two co-located duplicate samples per sampling period and at least one field blank per sampling period.

To comport with the allowance above, in regard to sections 8.3.2 and 9.4 of Method 325B, we are clarifying that the following samples will be required:

- Laboratory blanks as specified in section 9.1.2 (one per analytical sequence minimum), and
- Continuing calibration verification sample (CCV) tubes as specified in section 10.9.4. (at least one per analysis sequence or every 24 hours).
- Duplicate samples must be analyzed and reported as part of method quality control. They are used to evaluate sampling and analysis precision. The concentrations for co-located duplicates will be averaged for the purpose of determining results required in 40 CFR 63, Subpart CC.

A copy of this approval letter must be included in the report for each testing program where these alternative testing procedures are applied. Should the alternative approvals authorized in this letter be superseded by formal actions to revise Method 325A, Method 325B, and/or 40 CFR 63, Subpart CC, this approval may be rescinded. Since these alternative procedures are applicable to all of the facilities subject to 40 CFR 63, Subpart CC, we will announce on EPA's Web site (<https://www.epa.gov/emc/broadly-applicable-approved-alternative-test-methods>) that our approval of this alternative is broadly applicable to fenceline monitoring under this subpart.

If you have any questions regarding this approval or need further assistance, please contact Ray Merrill at (919) 541-5225 or [merrill.raymond@epa.gov](mailto:merrill.raymond@epa.gov) or Robin Segall at (919) 541-0893 or [segall.robin@epa.gov](mailto:segall.robin@epa.gov).

Sincerely,



Steffan M. Johnson, Group Leader  
Measurement Technology Group

cc.

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