

ORIGINAL

SOUTH COAST AQMD  
CLERK OF THE BOARDS

PETITION FOR MODIFICATION OF AN EXISTING VARIANCE  
BEFORE THE HEARING BOARD OF THE  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2024 FEB -2 PM 4: 01

Mod/Var Conds  
2/2/24  
RV  
3/14/24

PETITIONER: TORRANCE REFINING COMPANY LLC

CASE NO: 6060-20

\_\_\_\_\_

FACILITY ID: No. 181667

FACILITY ADDRESS :3700 West 190<sup>th</sup> Street  
[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

CITY, STATE, ZIP: Torrance, CA 90504

1. TYPE OF MODIFICATION REQUESTED

- (a)  **MODIFICATION/EXTENSION OF A FINAL COMPLIANCE DATE:** If you are operating under a variance and will not be in full compliance by the final compliance date, you may request an extension of the variance and a modification of the final compliance date. **A petition requesting such an extension must be filed at least 45 days prior to the existing final compliance date in order to meet the legal notice requirement.** (Hearing will be held approximately 45 days from date of filing--30-day published notice required.)
- (b)  **MODIFICATION OF VARIANCE CONDITIONS:** If you are unable to comply with one or more conditions of an existing variance, you may request a modification of variance conditions. (Hearing will be held approximately 21 days from date of filing--10-day published notice required)
- (c)  **MODIFICATION OF INCREMENTS OF PROGRESS:** If you are unable to comply with one or more increments of progress of an existing variance and additional time is required, you may request a modification of those increments of progress. (Hearing will be held approximately 21 days from date of filing--10-day published notice required.)
- (1)  **INTERIM AUTHORIZATION:** If compliance with an increment of progress cannot be achieved and you are unable to notify the Hearing Board at least 21 days in advance in order to schedule a noticed hearing, the Board can consider granting one extension of the increments of progress (interim authorization). **However**, an interim authorization cannot be granted: (1) for more than 30 days; or (2) to extend a final compliance date of an existing variance. (Hearing will be held approximately 2 working days from date of filing or the next available hearing date thereafter.)
- (d)  OTHER: Specify: \_\_\_\_\_

*Persons with disabilities may request this document in an alternative format by contacting the Clerk of the Board at 909-396-2500 or by e-mail at [clerkofboard@aqmd.gov](mailto:clerkofboard@aqmd.gov).*

*If you require disability-related accommodations to facilitate participating in the hearing, contact the Clerk of the Board at least five (5) calendar days prior to the hearing.*

[ALL DOCUMENTS FILED WITH CLERK'S OFFICE BECOME PUBLIC RECORD]

2. **CONTACT:** Name, title, company (if different than Petitioner), address, and phone number of persons authorized to receive notices regarding this Petition (no more than two authorized persons).

Michael S. McDonough  
Pillsbury Winthrop Shaw Pittman LLP  
725 South Figueroa St., Suite 3600  
Los Angeles, CA                      Zip    90017  
☎ ( 213 ) 488-7555                  Ext.  
Fax ( 213 ) 629-1033  
E-mail Michael.mcdonough@pillsburylaw.com

Craig Sakamoto  
Torrance Refining Company LLC  
3700 West 190<sup>th</sup> Street  
Torrance, CA                              Zip    90504  
☎ ( 310 ) 212-1884                  Ext.  
Fax ( 310 ) 212-4681  
E-mail Craig.Sakamoto@pbfenergy.com

3. List the equipment and/or activity that are the subject of this petition, if different from the existing variance. **(Attach copy of last minute order regarding this variance) Attached as Exhibit 3**

Equipment/Activity	Application/ Permit No.	RECLAIM Permit/Device No.	Date Application/Plan Denied (if relevant, attach copy of denial letter)
No change in equipment			

4. List all District rules, and/or permit conditions from which you are requesting variance relief, if different from the existing variance. *Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate the subject equipment **only if you are adding** a request for relief from permit conditions. If RECLAIM or Title V facility, attach only the relevant sections of the Facility Permit (for example, showing the equipment or process and conditions that are the subject of this petition).*

Rules	Explanation
No change in applicable Rules or permit conditions.	

5. Explain the steps taken since the last hearing to achieve compliance, including how you have met each of your existing variance conditions and/or increments of progress.

On December 15, 2023, Petitioner Torrance Refining Company LLC ("TORC") filed a petition for ex parte emergency, emergency and short variance relief ("Petition"), seeking to extend a deadline to complete annual source testing for the Torrance, California refinery ("Refinery") fluid catalytic cracking unit ("FCCU") under District Rule 1105.1 due to an unexpected breakdown of the connected CO Boiler. Because the Petition sought an extension for testing through February 14, 2024 and a March 2024 final compliance date, TORC sought an ex parte emergency variance for immediate relief, and a short variance for the relief needed through March 2024. On December 20, 2023, the Board granted an ex parte emergency variance providing immediate relief from December 19, 2023 to the January 11, 2024 date of the scheduled short variance hearing. Thereafter, on January 11, 2024, the Board acting on

consent granted a Short Variance ("Variance") and Alternative Operating Conditions ("AOC") resetting the FCCU source testing deadline to February 14, 2024 and extending the final compliance date of the variance to March 18, 2024. Copies of the relevant Minute Orders for the ex parte emergency variance and short variance are attached hereto as Exhibit 3.

Since the issuance of the Variance and AOC, the Refinery has taken all steps necessary to have the FCCU and associated equipment ready for the rescheduled February 13-14, 2024 source test. TORC was able to complete the repair of the CO Boiler on the evening of December 15, 2023, and no excess emissions have occurred to date while awaiting the scheduled source test dates. While the FCCU has continued operating during the Variance and AOC period, its emissions have been controlled in compliance with the permit and District rules by the 2C-25 Third Stage Separator Cyclone (Device No. C1590) ("TSS"); 2C-26-CY Fourth Stage Separator Cyclone (Device ID No. C2314) ("FSS"); 2D-1 electrostatic precipitator ("ESP") (Device ID No. C166); 2D-2 ESP (Device ID No. C165); 2D-17 ESP (Device ID No. C2283); 2D-18 ESP (Device ID No. C2284); and the selective catalytic reduction ("SCR") System (Device ID No. C1772). TORC also continued its usual monitoring of emissions using its permitted CEMS and other monitoring devices.

However, beginning on January 13, 2024, the Compressor 8K-1 turbine started demonstrating unexplained deterioration in axial thrust, thrust bearing temperature, and was producing less than demanded speed. These factors threatened to progress to levels that would trigger automatic compressor shutdown. Compressor 8K-1 is one of two compressors that support operation of the FCCU and must be operating at normal performance levels to allow the FCCU to maintain adequate FCCU feed rates (84 kbd) to run the Rule 1105.1 source test. Without Compressor 8K-1 available at full capacity, the Refinery is only able to maintain roughly 68-70 kbd feed rate in the FCCU, which is below the minimum FCCU feed rate for the source test (84 kpd).

TORC immediately began troubleshooting the Compressor 8K-1 issues to facilitate bringing the FCCU throughput to a level that would potentially allow the source testing to proceed as scheduled. The Refinery conducted X-rays of the steam system on January 16 and 17, 2024. The results of the X-rays showed no blockage in the steam system. A corporate subject matter expert suggested a possible water wash of the compressor system which would include temporary piping and developing a new procedure.

The Refinery was able to maintain Compressor 8K-1 at minimum operation while planning the water wash. But on January 27, 2024, at around 11:30 p.m., the Compressor automatically tripped offline. TORC personnel took steps to stabilize the FCCU unit by reducing FCCU feed rate. On January 29, 2024 TORC personnel determined an on-site repair was not feasible. They determined that a Compressor thrust bearing likely was broken, which was going to require TORC to send the Compressor 8K-1 turbine to the GE subcontractor offsite facility for an overhaul to correct the issue. Based on discussions with GE subcontractor, TORC determined that overhaul and repair of the turbine, and its return to the Refinery, would take at least until March 1, followed by a 6-7 day re-installation of the repaired turbine into Compressor 8K-1.

On January 31, TORC decoupled the ailing turbine from the 8K-1 Compressor. Since that time, TORC has worked expediently to remove the turbine and prepare for its transport to the offsite repair shop. GE's subcontractors also have committed to expediently diagnose and repair the Compressor turbine once received from the Refinery.

In the meantime, TORC also has been in discussions with the Rule 1105.1 FCCU source testing contractor (Montrose) about the first available date to reschedule the source test. Montrose has advised that, at this time, the earliest available reschedule date for the FCCU source testing will be the week of April 29, 2024.

Assuming GE can repair and return the Compressor turbine to the Refinery with no major delays or unexpected issues, and assuming the Compressor is then able to operate at its normal run rate, TORC anticipate completing the Rule 1105.1 source test the week of April 29, 2024. Of course, all timeframes discuss here are based on the best information available to TORC, GE and Montrose at this time, and

could be subject to change if the turbine repair issues are more or less complicated or time-consuming than expected.

In any event, this series of events will prevent TORC from meeting the February 14, 2024 source test deadline in Condition 1 of the current Variance and AOC conditions, and will place the expected final compliance date the Variance and AOC beyond March 18, 2024. Thus, TORC is requesting a modification of the Variance and AOC Condition 1 to change the Rule 1105.1 source test deadline to June 30, 2024, in an attempt to provide some margin for error and to avoid having to return to the Board for further relief if there are minor delays in completing the rescheduled source test due to issues with the equipment or with Montrose's availability. TORC also will be requesting a modification of the final compliance date for the variance and AOC to June 30, 2024, in order to allow for processing of source test data and transmittal to the District.

6. When did you first become aware that you would not be able to comply with the existing variance?

Date: January 29, 2024

7. What part(s) of the existing variance are you unable to comply with (final compliance date, specific increments of progress, and/or conditions)? For each part with which you cannot comply, provide an explanation.

For the reasons described in Section 5 above, an unexpected breakdown in the 8K-1 Compressor turbine has temporarily left the Refinery with only one working Compressor to support the FCCU while the broken turbine is shipped to the manufacturer for repair. With only one working Compressor, the FCCU cannot reach the 84 kbd throughput rate needed for the Rule 1105.1 source test. TORC expects the turbine to be fixed and returned to the Refinery by around March 1 or shortly thereafter, allowing the Refinery to restore the FCCU to a minimum 84 kbd throughput. Unfortunately, the soonest date the Rule 1105.1 source test contractor (Montrose) could reschedule the FCCU source test for was April 29, 2024.

As a result, it is beyond TORC's reasonable control to meet (a) the February 14, 2024 source test deadline in Condition 1 of the Variance and AOC, and (b) the March 18, 2024 final compliance date for the Variance and AOC, and now requests extensions of both of those dates for the reasons detailed above.

According, TORC is requesting that Condition 1 of the Variance and AOC be modified to read as follows:

1. Petitioner shall begin the required Rule 11051 annual source test no later than the week of April 29, 2024, and shall complete the test and transmit the results to the District no later than June 30 2024.

8. How do you intend to achieve compliance with the rule(s) and/or permit condition(s)? Include a detailed description of any equipment to be installed and/or modifications or process changes to be made, a list of the dates by which the actions will be completed, and an estimate of total costs.

TORC intends to achieve compliance with the requested amended timeframes by coordinating closely with GE to expedite the shipment of the Compressor 8K-1 turbine to GE for repair, by working with GE around the clock to diagnose and provide information necessary to repair the turbine as soon as possible, and to expedite the return and reinstallation of the repaired turbine. TORC also will continue to coordinate closely with Montrose to ensure that all equipment and processes are ready for the Rule 1105.1 source test the week of April 29, 2024. Once the source test is completed, TORC will continue to work with Montrose and the source testing lab to ensure source test results are processed and returned as quickly as possible, so that they can be transmitted to the District as quickly as possible.

9. State the date by which you expect to achieve final compliance: June 30, 2024

If the regular variance is to extend beyond one year, you **must** include a **Schedule of Increments of Progress**, specifying dates or time increments for steps needed to achieve compliance. See District Rule 102 for definition of Increments of Progress.

**Example:**

- Permit application(s) will be submitted to the District by June 1, 2001.
- Contracts for the purchase of emission control systems will be awarded by August 1, 2001.
- On-site construction will be completed by September 8, 2001.

List Increments of Progress here:  
N/A

10. Estimate excess emissions, if any, on a daily basis, including, if applicable, excess opacity (the percentage of total opacity above 20%) during the variance period. If the variance will result in no excess emissions, go to No. 11.

Pollutant	(A)	(B)	(C)*
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
N/A	N/A	N/A	N/A

\*Column A minus Column B = Column C

Excess Opacity: N/A %

11. Show calculations used to estimate quantities in No. 10, or explain why there will be no excess emissions.

As detailed above and in the original Variance and AOC Petitions, no excess emissions have occurred to date or are expected during both the original and requested extended Variance and AOC period.

12. Explain how you plan to reduce (mitigate) excess emissions to the maximum extent feasible. If no excess emissions, skip to No. 13.

N/A

13. Explain how you will monitor or quantify emission levels from the subject equipment or activity during the variance period and make such records available to the District. **Any proposed monitoring does not relieve RECLAIM facilities from missing data requirements.**

No excess emissions are expected during the Variance and AOC period. During the Variance and AOC period, TORC will continue its usual monitoring of emissions using its remaining operational permitted CEMS and other monitoring devices.

\_\_\_\_\_

14. What would be the harm to your business if the variance were not modified/extended as requested?

Economic losses: \$ Up to \$3.7 million per day if multiple Refinery process units are forced to shut down. See below.

Number of employees laid off (if any): Not anticipated unless TORC Is forced into an extended Refinery shutdown. See below.

Provide detailed information regarding economic losses, if any (anticipated business closure, breach of contracts, hardship on customers, layoffs and/or similar impacts).

The denial of the requested Variance and AOC modification would result in significant harm to TORC and the environment. If TORC is not allowed an extension to the Rule 1105.1 source testing deadline and final Variance and AOC compliance date to accommodate the delays caused by the unexpected breakdown of the Compressor 8K-1 turbine, TORC would be unable to conduct the required FCCU source test, which is the key unit responsible for production of refined petroleum products from the Refinery. Without a valid source test, TORC eventually would be required to shut down the FCCU, and with it, multiple process units that depend on the operation of the FCCU.

If these units are allowed to restart, it is likely that there would be excess emissions and flaring, causing additional noncompliance with the Title V Permit and District Rules. If the FCCU and these associated units are never allowed to restart, the Refinery eventually would be forced to shut down. Such a Refinery shutdown would cause the loss of business and goodwill, loss of jobs, likely cause breach of the Refinery's contracts, and upset the local and regional petroleum supply market.

15. List the names of any District personnel with whom facility representatives have had contact concerning this variance petition or any related Notice of Violation or Notice to Comply.


Inspector Paul Caballero Ext. 310-233-7002

16. Have you received any complaints from the public regarding the operation of the subject equipment or activity within the last six (6) months? No  Yes

Date of Complaint	Number of Complainant(s)	Nature of Complaint
N/A		

The undersigned, under penalty of perjury, states that the above petition, including attachments and the items therein set forth, is true and correct.

Executed on February 2, 2024, at Torrance, California

Signature 

Craig Sakamoto  
Print Name

Regulatory Strategist  
Title

17. SMALL BUSINESS and TABLE III SCHEDULE A FEES: To be eligible for reduced fees for small businesses, individuals, or entities meeting small business gross receipts criterion [see District Rule 303(h)], you must complete the following:

***Declaration Regarding Reduced Fee Eligibility***

1. The petitioner is

- a)  an individual, or
- b)  an officer, partner or owner of the petitioner herein, or a duly authorized agent of the petitioner authorized to make the representations set forth herein.

***If you selected 1a, above, skip item 2.***

2. The petitioner is

- a)  a business that meets the following definition of Small Business as set forth in District Rule 102: SMALL BUSINESS means a business which is independently owned and operated and meets the following criteria, or if affiliated with another concern, the combined activities of both concerns shall meet these criteria:

- (a) the number of employees is 10 or less; **AND**
- (b) the total gross annual receipts are \$500,000 or less **or**
- (iii) the facility is a not-for-profit training center.

**-OR-**

- b)  an entity with total gross annual receipts of \$500,000 or less.

3. Therefore, I believe the petitioner qualifies for reduced fees for purpose of filing fees and excess emission fee calculations, in accordance with Rule 303(h).

**BEFORE THE HEARING BOARD OF THE  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MINUTE ORDER**

TORRANCE REFINING COMPANY LLC  
3700 W 190TH ST  
TORRANCE CA 90504

Case No: 6060-20  
Facility ID: 181667

*Hearing Date: 01/11/2024 Hearing Type: Short & Alternative Operating Conditions (AOC)*

*Consent Calendar: Yes*

**HEARING BOARD ACTION**

**Action:** Granted                      **Starting Date:** \*12/19/2023                      **Ending Date:** 03/18/2024

\*The Short and AOC variance commences with the granting of the Ex Parte Emergency variance on the starting date noted above, and will continue for 90 days, or through the ending date listed above.

**RULES**

203 (b) {from Conditions D29.3, D29.4, and Administrative Conditions E.4 and E.8(first sentence) of its Permits}

1105.1(e)(2)(A)  
1105.1(e)(2)(E)

2004(f)(1) {from Conditions D29.3, D29.4, and Administrative Conditions E.4 and E.8(first sentence) of its Permits}

3002(c)(1) {from Conditions D29.3, D29.4, and Administrative Conditions E.4 and E.8(first sentence) of its Permits}

**EQUIPMENT DESCRIPTION**

**DEVICE/APPLICATION/PERMIT**

FCCU Regenerator, 2C-3	D151
CO Boiler2F-3	C164
Selective Catalytic Reduction (SCR)	C1772
Electrostatic Precipitator 2D-17	C2283
Electrostatic Precipitator 2D-18	C2284

**CONDITIONS**

**Variance Conditions**

1. Petitioner shall conduct the required Rule 1105.1 annual source test no later than February 14, 2024.



2. Petitioner shall notify the South Coast Air Quality Management District (AQMD) via email to Air Quality Inspector Paul Caballero at [pcaballero@aqmd.gov](mailto:pcaballero@aqmd.gov) of the date and time of the source test at least 10 days prior to the test date.
3. Petitioner shall notify the South Coast AQMD compliance personnel by calling 1-800-CUT-SMOG (Attn: Inspector Paul Caballero) at least forty-eight (48) hours prior to day of scheduled source test and at least two (2) hours prior to the scheduled start of the source test.
4. The Source Test shall be performed according to the approved Source Test Protocol.
5. Petitioner shall notify the Air Quality Inspector Paul Caballero ([pcaballero@aqmd.gov](mailto:pcaballero@aqmd.gov)) via electronic mail, and by calling 1-800-CUT-SMOG (Attn: Paul Caballero) to report Variance Notification within two (2) hours of achieving final compliance and completion of the AOC period.
6. Petitioner shall notify the Clerk of the Board in writing within five (5) days of achieving final compliance as referenced in Condition No. 5.
7. Petitioner shall pay all applicable fees to the Clerk of the Hearing Board, or the variance shall be invalidated pursuant to Rule 303(k), except for excess emissions fees if applicable, which shall be paid within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board.

#### AOC Conditions

1. Petitioner shall conduct the required Rule 1105.1 annual source test no later than February 14, 2024.
2. Petitioner shall notify the South Coast AQMD via email to Air Quality Inspector Paul Caballero ([pcaballero@aqmd.gov](mailto:pcaballero@aqmd.gov)), of the date and time of the source test at least 10 day prior to the test date.
3. Petitioner shall notify the South Coast AQMD compliance personnel by calling 1-800-CUT-SMOG (Attn: Inspector Paul Caballero) at least forty-eight (48) hours prior to day of scheduled source test and at least two (2) hours prior to the scheduled start of the source test.
4. The Source Test shall be performed according to an approved Source Test Protocol.
5. Petitioner shall notify the Air Quality Inspector Paul Caballero ([pcaballero@aqmd.gov](mailto:pcaballero@aqmd.gov)) via electronic mail, and by calling 1-800-CUT-SMOG (Attn: Paul Caballero) to report Variance Notification within two (2) hours of achieving final compliance and completion of the AOC period.
6. Petitioner shall notify the Clerk of the Board in writing within five (5) days of achieving final compliance as referenced in Condition No. 5.
7. Petitioner shall pay all applicable fees to the Clerk of the Hearing Board or the variance shall be invalidated pursuant to Rule 303(k), except for excess emissions fees if applicable, which shall be paid within fifteen (15) days of notification in writing that the fees are due, unless otherwise ordered by the Hearing Board.
8. In the event U.S. EPA objects to this AOC within the 45-day review period or in the response to a timely citizen petition, this AOC shall be ineffective to protect Petitioner from U.S. EPA or citizen enforcement under the federal Clean Air Act for any federally enforceable requirement.

#### **EXCESS EMISSIONS**

None

**Failure to comply in full with any and all conditions and increments of progress may result in modification or revocation of this order by the Hearing Board, and/or enforcement actions by the South Coast AQMD.**

**REMINDER**

In the event petitioner will be unable to comply with the final compliance date, a petition requesting a modification and extension of the variance may be filed. To meet notice requirements, the petition must be filed no later than **February 1, 2024**. In the event the hearing is not needed and taken off calendar, petitioner may request a refund of 50% of the filing fee, however, petitioner will be responsible for the publication fee.

**Present:** Cynthia Verdugo-Peralta, Chair  
Robert Pearman, Esq., Vice Chair  
Jery P. Abraham, M.D., MPH, CMQ  
Micah Ali  
Mohan Balagopalan

**Representing the Petitioner:** No Appearance

**Representing the Respondent:** No Appearance

**Petitioner's Exhibits:**

- #1 - Stipulation to Place Petition for Short Variance and Alternative Operating Condition on Consent Calendar
- \*\*#2 - Declaration of Valerie Tse
- #3 - Proposed Findings and Decision and Order Granting Short Variance and AOC

\*\*Entered into Evidence

**Motion:** Balagopalan/All 5-0

Board  
Review/Approval

  
Mohan Balagopalan

Dated 1/12/24

Prepared by Altheresa Rothschild

SOUTH COAST AQMD  
CLERK OF THE BOARDS

**SUPPLEMENT TO PETITION FOR MODIFICATION OF VARIANCE  
ALTERNATIVE OPERATING CONDITION (AOC)**

2024 FEB -2 PM 4:02

PETITIONER: TORRANCE REFINING COMPANY LLC

CASE NO: 6060-20

FACILITY ID: 181667

FACILITY ADDRESS: 3700 West 190<sup>th</sup> Street

CITY, STATE, ZIP: Torrance, CA 90504

Petitioner is requesting an Alternative Operating Condition (AOC) which will act as a permit revision to the Title V facility permit. Last Revision issued on December 23, 2022.

1. Are you located within 50 miles of an affected state or Indian reservation? No  Yes

State	Indian Reservation/Location

2. List below the SIP-approved or federally enforceable requirements from which you are seeking relief in the form of an AOC.

Device/Application No.	Explanation of Non-compliance	Applicable Rule	Date of Rule
FCCU Regenerator 2C-3 (Device No. D151) / AN 582075	Torrance Refining Company LLC ("TORC") is forced to seek an ex parte emergency variance and AOC because an unexpected shutdown of CO Boiler 2F-3 (Device ID No. C164) at the Torrance Refinery ("Refinery"), following state-mandated maintenance at the Refinery, will now prevent TORC from timely conducting a source test of the FCCU as required by District Rule 1105.1.	203(b)	1-5-1990 (12-3-2004 version pending approval);
CO Boiler 2F-3 (Device No. C164) / AN 582060		2004(f)(1);	4-6-2007;
Selective Catalytic Reduction ("SCR") System (Device No. C1772) / AN 595368		3002(c)(1)  (as to Permit Conditions D29.3 and D29.4, and	11-5-2010

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Electrostatic Precipitator 2D-17 (Device ID No. C2283) / AN 595363	While TORC hopes to identify and fix the root cause of the CO Boiler failure over the next week, this unfortunately will not occur in time to finish the Rule 1105.1 FCCU source test by the December 15 end of the source test vendor's availability window. The source test vendor informed TORC that the next available window it will have to conduct the source test will be February 13-14, 2024.	Administrative Permit Condition E.8 (first sentence only).	
Electrostatic Precipitator 2D-18 (Device ID No. C2284) / AN 595366	For this reason, TORC has determined that it will not be possible to conduct the source test by Friday, December 15, and it now is forced to seek Ex Parte Emergency Variance and AOC relief for an extension of time until March 1, 2024 to complete the CO Boiler source test. No excess emissions will occur during the period of the requested Variance and AOC.	1105.1(e)(2)(A), (e)(2)(E)	11-7-2003

EXAMPLE:

<i>Device/Application No.</i>	<i>Explanation of Non-compliance</i>	<i>Applicable Rule</i>	<i>Date of Rule</i>
D1	cannot use compliant printing ink	1130(c)	9-8-95
D17	cannot use compliant coating	1128(c)(5)(A)	2-7-92
D18	cannot test boiler for Rule 1146 CO compliance	1146 3004(a)(4)	5-12-94 8-11-95

3. List proposed AOC(s). Each AOC must contain the elements specified in Rule 518.2(g).

AOC #2 – Petitioner shall be subject to the entirety of Alternative Operating Condition (“AOC”) #1 issued in this matter, except for the following amended condition:

- Petitioner shall begin the required Rule 1105.1 annual source test no later than the week of April 29, 2024 and shall complete the test and transmit the results to the District no later than June 30, 2024.

4. Explain how operation under the AOC will not result in the source discharging such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or to the public, or which cause, or have a natural tendency to cause, injury or damage to business or property

Because no excess emissions or excess opacity are expected during the Variance and AOC, TORC does not anticipate that the activities will cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or could endanger the comfort, repose, health, or safety of any such persons or the public, or cause, or have a natural tendency to cause, injury, or damage to business or property.

[Redacted]

5. Explain how the AOC will not violate any NSPS, NESHAP or other standard promulgated by the U.S. EPA under Sections 111 or 112 of the Clean Air Act, or any District rule that substitutes for such requirements, any standard or requirement under Titles IV or VI of the CAA or any requirements where an AOC cannot be granted.

The equipment at issue in this Variance and AOC action are subject to 40 CFR Part 60, Subpart A, which requires that Petitioner maintain and operate the facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. The purpose of the Variance and AOC is to allow an extension of time to complete the FCCU source test required by District Rule 1105.1 and the Refinery Permit, and will not result in any excess emissions or changes in the existing level of control of emissions from the FCCU. Further, because no excess emissions or excess opacity are expected during the Variance and AOC period, TORC does not expect any exceedance of Subpart J H<sub>2</sub>S limits or other requirements. Accordingly, TORC will remain in compliance with Subpart A and J throughout the AOC period.

6. Explain how the excess emissions resulting from operation pursuant to the AOC would not, by themselves, cause an exceedance of a National Ambient Air Quality Standard

No excess emissions are anticipated as a result of extension of time for source testing that is the subject of the Variance and AOC Petitions, nor are any excess emissions anticipated as the result of the Variance and AOC.

7. Did the violation(s) result from a breakdown of technology? If Yes, explain below. If No, skip to No. 8.

- (A). Explain how the breakdown could not have been prevented through careful planning or design.

The request for modification of the AOC has been made necessary by an unexpected breakdown of the Compressor 8K-1 turbine in January 2024. Beginning on January 13, 2024, the Compressor 8K-1 turbine started demonstrating unexplained deterioration in axial thrust, thrust bearing temperature, and was producing less than demanded speed. These factors threatened to progress to levels that would trigger automatic compressor shutdown. Compressor 8K-1 is one of two compressors that support operation of the FCCU and must be operating at normal performance levels to allow the FCCU to maintain adequate FCCU feed rates (84 kbd) to run the Rule 1105.1 source test. Without Compressor 8K-1 available at full capacity, the Refinery is only able to maintain roughly 68-70 kbd feed rate in the FCCU, which is below the minimum FCCU feed rate for the source test (84 kpd).

TORC immediately began troubleshooting the Compressor 8K-1 issues to facilitate bringing the FCCU throughput to a level that would potentially allow the source testing to proceed as scheduled. The Refinery conducted X-rays of the steam system on January 16 and 17, 2024. The results of the X-rays showed no blockage in the steam system. A corporate subject matter expert suggested a possible water wash of the compressor system which would include temporary piping and developing a new procedure.

The Refinery was able to maintain Compressor 8K-1 at minimum operation while planning the water wash. But on January 27, 2024, at around 11:30 p.m., the Compressor automatically tripped offline. TORC personnel took steps to stabilize the FCCU unit by reducing FCCU feed rate. On January 29, 2024 TORC personnel determined an on-site repair was not feasible. They determined that a Compressor thrust bearing likely was broken, which was going to

require TORC to send the Compressor 8K-1 turbine to the GE subcontractor offsite facility for an overhaul to correct the issue. Based on discussions with GE subcontractor, TORC determined that overhaul and repair of the turbine, and its return to the Refinery, would take at least until March 1, followed by a 6-7 day re-installation of the repaired turbine into Compressor 8K-1.

Thrust bearings can and do fail from time to time, and TORC has observed no evidence at this time that the Compressor thrust bearing broke because of any shortcoming in unit planning or design.

- (B). Explain how the breakdown could not reasonably have been foreseen and avoided.

See answer to (A) above. The compressor operation is continually monitored and subject to audio-visual inspection daily, and had been running within its operating parameters until the breakdown. Based on past inspections of the system, TORC had no indication or warning that a breakdown was imminent.

- (C). Explain how at all times the equipment, including air pollution control equipment, or processes were maintained and operated in a manner consistent with good practice for minimizing emissions.

See answers to (A) and (B) above. At all times, TORC maintains its Refinery equipment in accordance with Federal and state regulations, industry standards, and best air pollution control practices, including performing routine scheduled and as-needed maintenance on the 8K-1 Compressor.

- (D). Explain how repairs were or will be made in an expeditious fashion using off-shift labor and overtime, to the extent practicable, to ensure that such repairs are made as expeditiously as practicable

After the unexpected breakdown of the 8K-1 Compressor turbine, TORC devoted significant resources – including bringing in representatives from the turbine manufacturer – to troubleshooting the issue to determine if the turbine could be repaired on site, or if not, mitigated enough to allow the FCCU to operate at adequate throughput rate to accommodate the source test as scheduled on February 14. Once TORC determined that it would not be able to repair the turbine at the Refinery, it made arrangements to ship the turbine to GE's repair subcontractor to diagnose, repair and return the turbine to the Refinery as quickly as possible. TORC also coordinated with the Rule 1105.1 source testing contract (Montrose) to find the next soonest available window to conduct the required source test, and will take all necessary steps to ensure that the FCCU and Compressor 8K-1 are ready for testing when Montrose conducts the rescheduled source testing during the week of April 29, 2024.

- (E). Explain how the breakdown is not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

See answers to (A) and (B) above.

8. If the violation(s) will occur during startup or shutdown, explain how the frequency and duration of operation in startup or shutdown mode will be minimized to the maximum extent feasible.

None of the violations at issue will occur during equipment startup or shutdown.

9. Prepare an Excess Emission Calculation Attachment (Attachment I) for each device, or group of similar devices, that is or will be operating in non-compliance. **You should check with the Clerk of the Board prior to filing this petition to determine if there are any credits available in the AOC SIP allowance bank for the relevant pollutants. If no credits are available, you must demonstrate mitigation to zero excess emissions**

10. Identify below any Emission Reduction Credit (ERC) certificates that you will voluntarily relinquish during the term of the AOC in the event that the SIP allowance bank is depleted and is unavailable for use.

ERC Certificate Information

ERC No.	Pollutant	Pounds/Day	Pounds/Month (30 x lbs/day)
N/A			

**\*If there are no AOC credits for the relevant pollutant(s) available in the SIP allowance bank, skip to No. 13.**

11. Explain how any emissions resulting from AOC and all other AOCs in effect will not exceed AOC credits held in the AOC Credit Bank.

N/A.

12. Based on the required attachments and calculations, summarize (in pounds) [1] the combined, monthly excess emissions, [2] mitigating emission reductions, and [3], ERC and/or emissions you are requesting to be withdrawn from the AOC SIP allowance bank, Charts 12(A) and 12 (B).

(A)

Pollutant	Month/Year (Example: 6/98)	[1] Excess Emissions From Attachments	[2] Mitigating Emission Reductions from Attachments	[3] ERC Emissions Relinquished
N/A	N/A	N/A	N/A	N/A

- (B) Using previous Chart, calculate total emissions required from bank, if available.

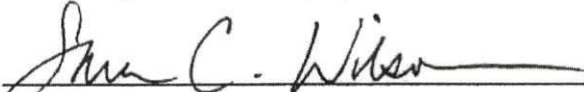
Pollutant	Emissions (pounds) Required from Bank (+1-2-3)
N/A	N/A

13. Prepare a Mitigation Measure Emission Calculation Attachment (Attachment II) for emission reductions that are feasible, to the maximum extent possible, during the period of the AOC; or explain why mitigation measures are not feasible.

N/A

I certify under penalty of law that I am the responsible official, or that official's designee, for this facility as defined in AQMD Regulation XXX and that based on information and belief formed after reasonable inquiry, the statements and information in this document and in all attachments are true, accurate and complete.

Dated: 2/2/2024

  
\_\_\_\_\_  
Signature of Responsible Official

Sara Wilson  
\_\_\_\_\_  
Print Name of Responsible Official

Refinery Manager  
\_\_\_\_\_  
Title of Responsible Official

Refinery Manager  
\_\_\_\_\_  
Title of Responsible Official

Refinery Manager  
\_\_\_\_\_  
Title of Responsible Official

Telephone: (310) 212-4500  
\_\_\_\_\_  
Telephone



**ATTACHMENT I**  
**EXCESS EMISSION CALCULATION**

PETITIONER: TORRANCE REFINERY CORPORATION LLC

CASE NO: 6060-20

FACILITY ID: 181667

Device/Application No.(s) D151 / 582075; C1590 / 582076; C2314 / 582076

- A. List all SIP-approved, federally-enforceable, emission limits, permit conditions, and other requirements for which an AOC is sought:

Requirement Violated	Rule Violated	Rule Date
TORC is forced to seek an ex parte emergency variance and AOC because an unexpected shutdown of CO Boiler 2F-3 (C164) at the Refinery, following state-mandated maintenance at the Refinery, will now prevent TORC from timely conducting an annual source test of the FCCU as required by District Rule 1105.1(e)(2)(A) and (e)(2)(E), and by Conditions D29.3 and D29.4 of the Permit.	203(b), 2004(f)(1) and 3002(c)(1) (as to Permit Conditions D29.3 and D29.4; and Administrative Permit Condition E.8 (first sentence only))	1-5-1990 (12-3-2004 version pending approval); 4-6-2007; 11-5-10.
This will also necessarily violate District Rules 203(b), 2004(f)(1), and 3002(c)(1), which generally require compliance with the permit; and the first sentence of Administrative Condition E.8, which requires all Refinery RECLAIM equipment to comply with all District Rules.	1105.1(e)(2)(A), (e)(2)(E)	11-7-2003

- B. Explain below how you can reduce emissions in excess of the federally enforceable emission limits from the affected devices to the maximum extent feasible during the period of the AOC.

No excess emissions are anticipated as a result of the extension of time requested in the Variance and AOC Petitions to conduct the FCCU source test, given that all required emissions control devices serving the FCCU will continue in operation in compliance with District Rules and the Permit during the Variance and AOC period.

- C. List the emission limits, activity levels and/or operating conditions that you propose to comply with in lieu of the AQMD requirement(s).

AOC #2 – Petitioner shall be subject to the entirety of Alternative Operating Condition (“AOC”) #1 issued in this matter, except for the following amended condition:

1. Petitioner shall begin the required Rule 11051 annual source test no later than the week of April 29, 2024, and shall complete the test and transmit the results to the District no later than June 30 2024.

D. Attach calculations of monthly excess emissions, done in accordance with Rule 518.2 (h)(1), from equipment subject to the AOC and summarize results here:

Pollutant	Month/Yr	Monthly Emissions (Pound)		
		[1] Based on Compliance with Rules, Existing Permit Conditions and Projected Activity Levels [518.2(h)(1)(A)]	[2] Based on Proposed Operating Conditions and Activity Levels [518.2(h)(1)(B)]	[3]* Excess Emissions (Difference)
N/A				

\*Column 1 minus Column 2 = Column 3

If your proposed emission limits, operating conditions or activity levels will vary by calendar month, provide numbers for each month from the first day of non-compliance, or the day the AOC petition is submitted, whichever is later, until the last day of non-compliance.

E. Propose below the procedures you will use to monitor, record, and report excess emissions.

AOC #2 – Petitioner shall be subject to the entirety of Alternative Operating Condition (“AOC”) #1 issued in this matter, except for the following amended condition:

1. Petitioner shall begin the required Rule 11051 annual source test no later than the week of April 29, 2024, and shall complete the test and transmit the results to the District no later than June 30 2024.

**ATTACHMENT II**  
**MITIGATION MEASURE EMISSION CALCULATION**

PETITIONER: TORRANCE REFINERY CORPORATION

CASE NO: 6060-18

FACILITY ID: 181667

A. Describe proposed mitigation measures that reduce emissions to maximum extent possible from equipment not in violation of an applicable requirement and the affected device/application no.(s):

No excess emissions are expected during the Variance and AOC period, given that all required emissions control devices serving the FCCU will continue in operation in compliance with District Rules and the Permit during the Variance and AOC period.

B. List proposed operating conditions and activity levels for each of the above affected activities or device/application no(s).

AOC #2 – Petitioner shall be subject to the entirety of Alternative Operating Condition (“AOC”) #1 issued in this matter, except for the following amended condition:

1. Petitioner shall begin the required Rule 11051 annual source test no later than the week of April 29, 2024, and shall complete the test and transmit the results to the District no later than June 30 2024.

C. Attach calculations of monthly emission mitigations, done in accordance with Rule 518.2 (h)(2)(D), from equipment not in violation of an applicable requirement and summarize results here:

Pollutant	Month/Yr	Monthly Emissions (Pound)		
		[1] Baseline Emission Rate	[2] Post Reduction Emission Rate X Activity Level	[3]* Intra-Facility Emission Reduction (Difference)
N/A				

\*Column 1 minus Column 2 = Column 3

If emissions reductions you are committing to will vary by calendar month, provide numbers for each month from the first day of non-compliance, or the day the AOC petition is submitted, whichever is later, until the last day of non-compliance.

D. Propose below the procedures you will use to monitor, record, and report mitigating emission reductions.

AOC #2 – Petitioner shall be subject to the entirety of Alternative Operating Condition (“AOC”) #1 issued in this matter, except for the following amended condition:

1. Petitioner shall begin the required Rule 11051 annual source test no later than the week of April 29, 2024, and shall complete the test and transmit the results to the District no later than June 30 2024.

(E: HB:Petitions:AOC Supplement: Revised October 5, 2007)