

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING & COMPLIANCE DIVISION	APPL. NO. 458950	DATE 3/9/13	PAGE 1 of 2
	APPLICATION PROCESSING AND CALCULATIONS	PROCESSED BY J. West	CHECKED BY

**RULE 480: NATURAL GAS FIRED CONTROL DEVICES
PLAN (FOR NATURAL GAS SHORTAGE OR CURTAILMENT)**

SUMMARY: Evaluation of Rule 480 Natural Gas Fired Control Devices Plan. The Rule 480 Plan was submitted, as required by Rule 480(a)(1) to describe the steps taken during natural gas shortages or curtailments to limit emissions from equipment when the natural gas-fired control device is not able to operate on its regular fuel.

COMPANY INFORMATION

Company Name: Chevron Products Company, Facility ID No. 800030
Mailing Address: 324 W El Segundo Blvd, El Segundo, CA 90245
Equipment Location: 324 W El Segundo Blvd, El Segundo, CA 90245
Contact Person: Peter Allen (310) 615-4182

COMPLIANCE RECORD REVIEW

A query of the AQMD Compliance Database for the past two years (3/1/11 to 3/9/13) identified 9 Notice of Violations (NOV) and 4 Notices to Comply (NC) that were issued to the Chevron Refinery (Facility ID 800030). The compliance database indicates that the facility is currently in compliance with applicable rules and regulations.

FEE EVALUATION

The BCAT for Rule 480 plans is 666013 [Plan Rule 480(a)(1)], Schedule C. Fees of \$469.94 were paid when the application was submitted. No additional fees are due.

PLAN EVALUATION

The purpose of Rule 480 is to ensure that, when natural gas-fired control devices are unable to operate due to natural gas curtailment or shortages, emissions are not emitted to the atmosphere.

The Chevron El Segundo refinery has three natural gas-fired air pollution control devices: vapor extraction system F-6220 (C3806), vapor extraction system El Porto (C3805), and caustic treating plant thermal oxidizer F-807 (C3493).

Devices C3805 and C3806 are two vapor extraction systems operating in the refinery that use natural gas as supplemental fuel. These units are non-essential operating equipment and are operated intermittently as required by the extraction process. During a natural gas curtailment period, both the vapor recovery operation and the incinerators would be shut down. There would be no emissions to the atmosphere.

Device C3493 is a thermal oxidizer that combusts natural gas to control emissions from the caustic treating plant. The natural gas supplied to this unit is to supplement the fuel gas since the process stream contains insufficient heat content for combustion. Operation of the incinerator is necessary to ensure compliance with the Refinery NESHAP [40CFR63.643(a)(2)] requirement for destruction of emissions from miscellaneous process vents. Device C3493 receives vent gases from two devices: D771, a settler vessel in the Process 12, System 2 No. 3 Amine & Caustic Treater; and D3037, a separator vessel in the

 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING & COMPLIANCE DIVISION	APPL. NO. 458950	DATE 3/9/13	PAGE 2 of 2
	APPLICATION PROCESSING AND CALCULATIONS	PROCESSED BY J. West	CHECKED BY

Process 12, System 22 No. 4 Caustic Treating Plant. Both devices list C3493 in the “connected to” column of the equipment description section of the facility permit. In Section E, Administrative Condition No. 4 states that “The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit.”

During a natural gas curtailment period, the thermal oxidizer would be shut down, and the process gas normally sent to the thermal oxidizer will be stopped by an automatic “chopper valve” that will remain closed until natural gas is restored. In the event that natural gas cannot be restored, plant production will be curtailed or shutdown to meet applicable AQMD rules and permit conditions, such as Administrative Condition No. 4.

COMPARISON OF RULE 480 PLAN SUBMITTAL TO REQUIREMENTS

The Rule 480 plan submitted by the facility was compared against the plan requirements. A summary of the plan checklist is provided below in **Table 1**. For each applicable plan requirement, compliance with the plan requirement is assessed via a checkmark in the “yes” or “no” column, and remarks are provided with details from the facility’s plan.

Table 1. Checklist for Rule 463 Inspection & Maintenance Plan

Rule 480 Plan Requirement [463(a)(1)]	Compliance?		Remarks
	Yes	No	
A plan which will cause the equipment or source generating the emissions to be taken out of service during a natural gas shortage or curtailment, until approved fuel is restored to the Air Pollution Control Device	√		Facility will shut down thermal oxidizer C3493 during a natural gas curtailment. The facility will curtail or shut down the plant sending process gas to the thermal oxidizer if natural gas cannot be restored. Facility will shut down the two vapor extraction systems and associated incinerators C3805 and C3806 during a natural gas curtailment

Table 1 indicates that the facility has submitted all of the necessary information for the Rule 480 Plan, and is in compliance with the plan requirements.

RECOMMENDATIONS

The Rule 480 Plan submitted by Chevron has been evaluated and found to comply with the applicable requirements specified in the rule. Approval of this plan, and inclusion in Section I of the facility’s Title V Facility Permit is recommended, subject to the following conditions:

1. Implementation of this plan shall be in accordance with all data and specifications submitted with this application under which this approval is granted unless otherwise noted below.
2. In the event of a natural gas curtailment or shortage, Chevron Products Company shall discontinue or curtail production as necessary to ensure compliance with all the AQMD Rules and Regulations and Permit Conditions.