

SOUTH COAST AQMD
CLERK OF THE BOARDS
2024 FEB 23 PM 4:38

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

IV
3/7/24
RV
4/30/24

PETITIONER: GOODRICH CORPORATION CASE NO: 6253-1

FACILITY ID: 11998

FACILITY ADDRESS: 11120 S Norwalk Blvd
[location of equipment/site of violation; specify business/corporate address, if different, under Item 2, below]

City, State, Zip: Santa Fe Springs, CA 90670

1. TYPE OF VARIANCE REQUESTED (more than one box may be checked; see Attachment A, Item 1, before selecting)

INTERIM SHORT REGULAR EMERGENCY EX PARTE EMERGENCY

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).

<u>Mark Ruiz</u>	<u>Sandra Perez</u>
<u>Associate Director of Operations/Site Lead</u>	<u>Env. Health & Safety Manager</u>
<u>11120 S. Norwalk Blvd</u>	<u>11120 S. Norwalk Blvd</u>
<u>Santa Fe Springs Zip 90670</u>	<u>Santa Fe Springs Zip 90670</u>
<u>(562)906-7342 Ext.</u>	<u>(562)906-6534 Ext.</u>
<u>Fax ()</u>	<u>Fax ()</u>
<u>E-mail mark.a.ruiz@collins.com</u>	<u>E-mail sandra.m.perez@collins.com</u>

3. RECLAIM Permit Yes No Title V Permit Yes No

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.

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]

4. **GOOD CAUSE:** Explain why your petition was not filed in sufficient time to issue the required public notice. (Required only for Emergency and Interim Variances; see Attachment A, Item 4)

The petition was not filed in sufficient time to issue the required public notice due to an unanticipated and temporarily undetected equipment malfunction. Specifically, a malfunction of a solenoid valve in a carbon ceramic vapor deposition (CVD) furnace resulted in production gas bypassing the process boilers where it is normally combusted. The gas instead vented to the emergency flare where it was combusted, as designed. The event resulted in an exceedance of the operating limit (13 hours per 12-month rolling) in the emergency flare permit (#G30825).

Basis for Variance Request: There is a possibility that, within the next 12-months, another incident could occur that would result in the need to use the emergency flare. For example, on February 16th, the flare operated for 10 minutes in connection with a short duration boiler shutdown. Goodrich Corp is requesting an interim and regular variance to operate the emergency flare beyond the current 13hour limit.

5. Briefly describe the type of business and processes at your facility.

The Goodrich Corporation facility on Norwalk Blvd in Santa Fe Springs manufactures carbon brakes and other components for aircraft. Carbon fiber textile material is received by the facility where it is prepared for the brake production process. The furnace deck process includes densification, heat treatment, and coating. The machine shop process includes machining and hardware assembly.

6. List the equipment and/or activity(s) that are the subject of this petition (see Attachment A, Item 6, Example #1). **Attach copies of the Permit(s) to Construct and/or Permit(s) to Operate for the subject equipment. For RECLAIM or Title V facilities, attach *only* the relevant sections of the Facility Permit showing the equipment or process and conditions that are subject to this petition. You must bring the entire Facility Permit to the hearing.**

Equipment/Activity	Application/Permit No.	RECLAIM Device No.	Date Application/Plan Denied (if relevant)*
Emergency Flare	G30825	N/A	N/A

*Attach copy of denial letter

7. Briefly describe the activity or equipment, and why it is necessary to the operation of your business. A schematic or diagram may be attached, in addition to the descriptive text.

The Emergency Flare line is used as a backup air pollution control system to exhaust process gas from ceramic vapor deposition furnaces during emergencies. During normal operations, the furnace waste process gas is combusted through onsite boilers. SCAQMD permits for these furnaces have conditions that require the furnaces to vent to an oil scrubber and boiler while in operation for VOC and toxic air contaminant (TAC) control. Without the emergency flare, there is a potential for direct venting of process gases to the atmosphere. The flare ensures safe combustion of these gases.

8. Is there a regular maintenance and/or inspection schedule for this equipment? Yes No
 If yes, how often: Annually Date of last maintenance and/or inspection August 10 2023
 Describe the maintenance and/or inspection that was performed.

This is the annual preventative maintenance procedure:
 FLARE:
 _____ MANDATORY PER PERMIT: REPLACE 2 PILOT TCs AS NEEDED
 _____ MANDATORY PER PERMIT: REPLACE 1 BODY TCs AS NEEDED
 TC SAP VENDOR#51335 OMEGA ENGINEERING CO PART#HKQIN-14U-24
 TC TYPE K, 32 to 2100°F
 _____ CHECK PERMIT PRESENCE. REPLACE IF MISSING OR UNREADABLE.
 _____ CHECK TEMPERATURE TRANSMITTERS 13-TI-113A,B, AND C AND SURE EACH FUNCTIONING AND CORRECT.
 CALIBRATE TRANSMITTERS AS NEEDED.
 _____ ENSURE ALL EQUIPMENT FUNCTIONING AND NO LEAK IS DETECTED. USE HANDHELD AROUND FLARE BASE AND FLAME ARRESTOR.
 _____ 1. INSPECT PILOT TIP FOR VISIBLE DEFORMATIONS AND WELD CRACKS. REPLACE IN KIND IF NECESSARY.
 _____ 2. INSPECT IGNITION LINES FOR LOW POINTS AND SAGGING.
 _____ 3. CHECK PILOT GAS ROTOMETER FOR 8 TO 10 SCFM OF FLOW.
 _____ 4. INSPECT MIXING AND IGNITING SIGHT GLASS OR CRACKS OR POOR VISIBILITY
 _____ 5. INSPECT LINE LEADING TO FLARE FOR CORROSION, PITTING OR BURNT PAINT. WRITE OBSERVATIONS HERE:

9. List all District rules, and/or permit conditions [indicating the specific section(s) and subsection(s)] from which you are seeking variance relief (if requesting variance from Rule 401 or permit condition, see Attachment A). Briefly explain how you are or will be in violation of each rule or condition (see Attachment A, Item 9, Example #2).

Rule	Explanation
Permit Condition No. 3	The equipment malfunction/ emergency event resulted in 16 total run time hours of the emergency flare exceeding the current 13 hour 12-month rolling limit set forth in the air permit. There is the possibility within the next 12 months another incident could occur which would necessitate operating the emergency flare again.

10. Are the equipment or activities subject to this request currently under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

11. Are any other equipment or activities at this location currently (or within the last six months) under variance coverage? Yes No

Case No.	Date of Action	Final Compliance Date	Explanation

12. Were you issued any Notice(s) of Violation or Notice(s) to Comply concerning this equipment or activity within the past year? Yes No

If yes, you must attach a copy of each notice.

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

If yes, you should be prepared to present details at the hearing.

14. Explain why it is beyond your reasonable control to comply with the rule(s) and/or permit condition(s). Provide specific event(s) and date(s) of occurrence(s), if applicable.

Due to equipment malfunction on 2/2/24 and 2/3/24 the emergency Flare was used for its permitted purpose. However, the flare was in-use for 16 hours, therefore exceeding the 13-hour, 12-month rolling period permit condition. For safety reasons, and compliance with AQMD permit G30825, Goodrich is required to have the Emergency Flare Line on standby for use should there be an upset condition with primary combustion boilers. (e.g., G71191, Permit Condition 4). Subsequently the flare must continue to be available for emergency use in order to maintain compliance with other SCAQMD issued permits. Operation of the flare will result in control of VOC and TACs from the waste gas. Excess emissions are limited to oxides of nitrogen (NOx) because the two boilers have control devices for NOx that the flare does not, i.e. selective catalytic reduction (SCR) and ultra-low NOx burners.

15. When and how did you first become aware that you would not be in compliance with the rule(s) and/or permit condition(s)? Provide specific event(s) and date(s) of occurrence(s).

On Saturday, 2/3/2024 a mechanic discovered that a solenoid valve failed in the process gas system causing process gas to be vented to the flare line, where it was combusted, instead of one of the boilers.

16. List date(s) and action(s) you have taken since that time to achieve compliance.

- Isolated system to stop flaring and replaced failed solenoid on isolation valve on 2/3/2024.
- Programmed additional failure alarms to all incoming boiler and flare valves to ensure detection and immediate action by staff that are present in a control room on a 24-hour-per-day basis on 2/5/2024.
- Reviewed facility records to confirm no similar incidents occurred in prior 12-month rolling period.

17. What would be the harm to your business during **and/or after** the period of the variance if the variance were not granted?

Economic losses: \$72,093,860

Number of employees laid off (if any): 110

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

The flare is an essential safety and air pollution control for the site's manufacturing operations. Without back-up flaring capability, the site would be unable to safely manufacture carbon products, and so the facility would need to be shut down. The economic loss figures are therefore based on the shutdown of the facility through January of 2025, calculated using estimated sales and cost of goods sold applicable to the site for 2024. Shutdown of the facility would impact the local SFS/ Norwalk economy by layoff of the 110 Goodrich employees working at the site, not counting external suppliers which support the site.

Additionally, the site supports various commercial and military aircraft programs, including US Air Force programs. Some special processes to support products (including military program products) are unique to the Santa Fe Springs Goodrich facility and are not currently performed at other Goodrich facilities. Knowledge transfer and qualification of these commercial and military programs at other sites would take around 2 years to be initiated and completed. Until such transfers and qualifications are completed, Goodrich would be unable to supply products, resulting in Goodrich's inability to fulfill orders for these programs and potential customer claims. Additionally, delays in order fulfillment of military program components could reduce warfighter readiness and otherwise impact national security.

18. Can you curtail or terminate operations in lieu of, or in addition to, obtaining a variance? Please explain.

No, Goodrich is required to have a backup flare in full operation in order to run the essential proprietary carbon-carbon densification process. Goodrich plans to seek a permit revision in consultation with District staff to allow more than 13 hours of potential operation of the flare per rolling 12-month period.

19. 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, insert "N/A" here and skip to No. 20.

Pollutant	(A)	(B)	(C)*
	Total Estimated Excess Emissions (lbs/day)	Reduction Due to Mitigation (lbs/day)	Net Emissions After Mitigation (lbs/day)
NOx	0.396 lbs during day of event	NA	0.396 lbs during day of event

* Column A minus Column B = Column C

Excess Opacity: N/A %

20. Show calculations used to estimate quantities in No.19 or explain why there will be no excess emissions.

[YOU MAY ATTACH ADDITIONAL PAGES IF NECESSARY]

Under normal operation, the process gas passes through an AQMD permitted oil scrubber before it reaches the boilers for combustion. In emergencies, the back-up flare is used as a means to safely evacuate and combust process gases. The composition and volume of gases does not change from normal operation, only the device with which it is combusted. Combustion emissions are assumed to be the same through the boiler or emergency flare. NOx would likely be higher. The default emission factor for gas combustion is 130 lb/MMSCF.

Excess Emissions = Gas Burned (MMSCFH) x EF (lb/MMSCF)
Excess Emissions = 0.00102 (MMSCFH) x 130 (lb/MMSCF) x 3 hrs = 0.396 lbs

21. Explain how you plan to reduce (mitigate) excess emissions during the variance period to the maximum extent feasible, or why reductions are not feasible.

The facility conducted an internal investigation on detection and mitigation of flare usage and has or will implement the following:

1. Update alarms on all valves to instruct operators on recommended actions and possible causes for flare operation. (pop up window).
2. Modify flare alarm programming to detect scenario that occurred during the incident.
3. Shut down all furnaces in operation should a pathway to flare be opened during non-emergency scenario.
4. Modify flare timer programming to detect any possible pathways for process gas to enter flare line.
5. Evaluate Infra-Red camera as secondary source to trigger flare timer and alarms.

22. How do you plan to monitor or quantify emission levels from the equipment or activity(s) during the variance period, and to make such records available to the District? **Any proposed monitoring does not relieve RECLAIM facilities from applicable missing data requirements.**

Goodrich has flow, temperature, and valve positions on a 24/7 monitored control system. These measurements allow adequate monitoring and quantifying emissions.

23. 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, modifications or process changes to be made, permit conditions to be amended, etc., dates by which the actions will be completed, and an estimate of total costs.

1. Update alarm help on all valves to instruct operators on recommended actions and possible causes for flare operation. (pop up window). To be completed by 3/16/2024.
2. Modify flare alarm logic to detect scenario that occurred during the incident. To be completed by 4/1/2024.
3. Shut down all furnaces in operation should a pathway to flare be opened during non-emergency scenario. To be completed by 5/3/2024.

- 4. Modify flare timer programming to detect any possible pathways for process gas to enter flare line. To be completed by 3/8/2024.
- 5. Evaluate Infra-Red camera as secondary source to trigger flare timer and alarms. To be completed by 4/5/2024.
- 6. Goodrich plans to seek a permit revision in consultation with District staff to allow more than 13 hours of potential emergency operation of the flare per rolling 12-month period.

24. State the date you are requesting the variance to begin: 2/3/24; and the date by which you expect to achieve final compliance: 2/2/25.

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 (see Attachment A, Item 24, Example #3).

NA

25. 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.

Andrea Barlow 909-396-2500 Ext. _____
 _____ Ext. _____

If the petition was completed by someone other than the petitioner, please provide their name and title below.

Name	Company	Title
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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 23, 2024, at 11120 S. Norwalk Blvd. Santa Fe Springs, California


 _____ Mark Ruiz
 Signature Print Name

Title: Associate Director of Operations



PERMIT TO OPERATE

This initial permit must be renewed ANNUALLY unless the equipment is moved, or changes ownership.
If the billing for the annual renewal fee (Rule 301.f) is not received by the expiration date, contact the District.

Legal Owner
or Operator:

GOODRICH CORPORATION
11120 S NORWALK BLVD
SANTA FE SPRINGS, CA 90670-3885

ID 11998

Equipment Location: 11120 S NORWALK BLVD, SANTA FE SPRINGS, CA 90670-3885

Equipment Description :

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. EMERGENCY FLARE, JOHN ZINK, MODEL EEF-U-3, 3" FLARE TIP, 4.4 MMBTU/HR, PROCESS GAS FIRED, WITH A PROPANE PILOT AND A LIQUID SEAL DRUM.
2. EXHAUST SYSTEM WITH A COMMON BLOWER VENTING FOURTEEN CARBON CERAMIC VAPOR DEPOSITION FURNACES.

Conditions :

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THIS EQUIPMENT SHALL NOT BE USED MORE THAN 13 HOURS IN ANY ONE 12-MONTH ROLLING PERIOD.
4. THIS EQUIPMENT SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE EXITING FLUE GAS TEMPERATURE.
5. WHENEVER THIS EQUIPMENT IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES FAHRENHEIT SHALL BE MAINTAINED IN THE STACK AS MEASURED BY THE TEMPERATURE INDICATOR AND RECORDER.
6. THE EQUIPMENT SHALL BE EQUIPPED WITH A FLAME FAILURE ALARM WITH AN AUTOMATIC SYSTEM TO ISOLATE THE FLARE FROM THE CARBON CERAMIC VAPOR DEPOSITION FURNACE PROCESS GAS SUPPLY LINES, SHUT OFF THE BLOWER, AND NOTIFY A RESPONSIBLE PARTY OF THE SHUTDOWN.
7. THE EQUIPMENT OPERATING THERMOCOUPLE SHALL BE LOCATED IN THE FLAME BODY.

ORIGIN: J.



PERMIT TO OPERATE

8. THE TOTAL FLOW RATE OF PROCESS GASES FROM THE CVD FURNACES TO THIS FLARE SHALL NOT EXCEED 12,000 DRY STANDARD CUBIC FEET PER HOUR.
9. ANY BREAKDOWN OR MALFUNCTION OF THE EQUIPMENT RESULTING IN THE EMISSION OF RAW GAS SHALL BE REPORTED TO THE SCAQMD WITHIN ONE HOUR AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
10. THE EQUIPMENT OPERATOR SHALL MAINTAIN ADEQUATE RECORDS FOR THIS EQUIPMENT TO SHOW COMPLIANCE WITH CONDITION NUMBERS 3, 5, AND 8. ALL RECORDS SHALL BE PREPARED IN A MANNER THAT IS ACCEPTABLE TO THE DISTRICT, SHALL BE RETAINED ON THE PREMISES FOR AT LEAST TWO YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST OF THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE.

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR COPY SHALL BE POSTED ON OR WITHIN 8 METERS OF THE EQUIPMENT.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT CANNOT BE CONSIDERED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF OTHER GOVERNMENT AGENCIES.

EXECUTIVE OFFICER

By Dorris M. Bailey/RL01

4/17/2014

ORIGINAL



SOUTH COAST AQMD
CLERK OF THE BOARDS
2024 FEB 23 PM 4: 50

ROBERT L. HINES
rhines@fbm.com
D 415.954.4935

February 23, 2024

Via Federal Express and Email (pdf)

Faye Thomas, Clerk of the Boards
South Coast Air Quality Management
District – Hearing Board
21865 Copley Drive
Diamond Bar, CA 91765
Email: clerkofboard@aqmd.gov

**Re: In the Matter of Goodrich Corporation
Petition for Variance (Interim and Regular)
SCAQMD Hearing Board Case No. 6253-1**

Dear Ms. Thomas:

On behalf of Goodrich Corporation (“Goodrich”) this letter accompanies one original and nine (9) copies of the Petition for Variance for filing with the Hearing Board. Please return a date-stamped/endorsed copy of the Petition in the enclosed, pre-stamped return envelope. We understand that an invoice will be issued once the Petition has been filed.

We look forward to hearing from your office regarding a date for the hearing. If you have any questions or need more information, please let me know. Thank you for your courtesy and cooperation.

Sincerely,

Robert L. Hines

RLH:af

Enclosures

One Bush Street, Suite 900 · San Francisco, CA 94104 · P: 415.954.4400 · F: 415.954.4480

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