



H.B. Case No.: 2025-04-M1

Petitioner: MANN + HUMMEL Water Fluid Solutions, Inc.

Permit No.: PTO 16120

Date Rec'd: 12/01/2025

Time Rec'd: 1638 hours

Filing Fee Paid: \$977.00

PETITION FOR VARIANCE

Type of Variance Requested:

Emergency _____ Interim¹ _____ 90-Day _____ Regular ✓

Length of Variance Requested: _____ Start Date _____

End Date _____

¹ A 90-Day or Regular Variance must be filed concurrently with an Interim Variance

1. PETITIONER INFORMATION

A. Please provide the name, address and phone number of the Petitioner.

Name: John Paolo Quinto
Address: 93 S. La Patera Lane
Galeota, CA 93117
Phone Number: (805) 803-3898

B. Please provide the name, address and phone number of the person authorized to receive correspondence regarding this Petition if different from response in 1.A.

Name: _____
Address: _____

Phone Number: _____

C. The Petitioner is (please check one):

- 1) An Individual ()
- 2) Partnership ()
- 3) Corporation ☒
- 4) Public Agency ()
- 5) Other Entity (please describe)

2. Location of equipment for which the variance is requested if different from response in 1.A.

6325 Lindmar Drive
Goleta, CA 93117

3. List any District permits that are applicable to the equipment subject to this variance request.

PTO 16120

4. Briefly describe the equipment that is the subject of this Petition.

Thermal Oxidizer

5. FINDINGS REQUIRED FOR THE GRANTING OF A VARIANCE

In order for the Hearing Board to grant a variance to a Petitioner authorizing the operation of a source in violation of any rule, regulation or order of the District, the Hearing Board is required to make "findings" in accordance with the requirements specified in California Health and Safety Code §42352, et. seq. and District rules and regulations. The Hearing Board's variance decision will take into consideration information you provide in this Petition. Please ensure your responses are complete and thorough. Please use additional pages as necessary.

- A. Please state 1) what District rule, regulation or order you either are or will be in violation of, and 2) the date said violation will or did occur. Include as appropriate the applicable permit conditions for which variance relief is being sought.

B. Please describe how compliance with the District rule, regulation or order listed in Section A above is beyond your reasonable control. In addition to any other relevant factors, please include in your discussion 1) what actions you have taken to comply or seek a variance, which were timely and reasonable under the circumstances.

C. Please describe how you would be impacted if you were required to immediately comply with the District rule, regulation or order the subject of this variance request. In addition to any other relevant factors, please discuss why such impacts would result in 1) an arbitrary or unreasonable taking of property, or 2) the practical closing and elimination of a lawful business.

D. If you were required to immediately comply with the District rule, regulation or order the subject of this variance request, please describe what impact, if any, that would have on air contaminants.

E. Please describe what consideration you have given to curtailing operations in lieu of obtaining a variance.

F. Please describe what steps and measures you will take to reduce excess pollutant emissions the maximum extent feasible during the requested variance period.

G. If requested to do so by the District, please describe how you will monitor or otherwise quantify and report to the District any pollutant emissions associated with the granting of your variance.

**6. SUPPLEMENTAL FINDINGS IF APPLYING FOR AN EMERGENCY VARIANCE
PURSUANT TO RULE 506 (EMERGENCY VARIANCE FOR BREAKDOWNS)**

A. Please provide the date and time the breakdown was reported to the District

Date: _____ Time: _____

B. Breakdown number (as provided by the District):

C. Please provide a description of the "breakdown condition", including equipment involved and the cause to the extent it is known.

D. Please describe why the continued operation of your facility in a "breakdown condition" is not likely to cause an immediate threat or hazard to public health or safety and will not interfere with the attainment or maintenance of any primary national ambient air quality standard.

7. Will the operation of the equipment subject to this variance result in violation of District Rule 303, Nuisance?

No, it will not result in violation of District Rule 303.


8. Please state whether or not any civil or criminal case involving the equipment subject to this variance is pending any court.

There are no civil or criminal case pending involving the equipment.

The undersigned is authorized to submit the above Petition on behalf of the Petitioner and further states under penalty of perjury that the above Petition, including any attachments and the items therein set forth, are true and correct.

DATE: 12/1/25

SIGNATURE:



TITLE:

HSE Specialist

PRINT NAME:

John Paolo Quinto

Variance Filing Fees: All variance Petitions must be accompanied by the requisite filing fee at the time of filing or include a letter from the Petitioner on company letterhead authorizing the District to debit the filing fee from the company's reimbursable account. You may also pay your filing fees by credit card using the attached form. Current variance filing fees may be found under Rule 210, schedule F, Sections 12a and 12b at <http://www.sbcapcd.org/fees.htm>

Credit Card Payment: The Variance Filing Fee may be paid with a credit card. Please use APCD Form -01C to pay via credit card. The form may be downloaded at: <http://www.sbcapcd.org/eng/dl/dl01.htm>

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A. Please state 1) what District rule, regulation or order you either are or will be in violation of, and 2) the date said violation will or did occur. Include as appropriate the applicable permit conditions for which variance relief is being sought.

1.

A. District Rule 206 – Conditional Approval of Authority to Construct or Permit To Operate, Condition 1 – Emission Limitations, Condition 2(d) IV – Removal Efficiency, Table 3 – Best Available Control Technology Requirements, Table 4 – Source Test Requirements, Condition 9, Condition 11(a)

- a) **District Rule 206** – Conditional Approval of Authority to Construct
- b) **Condition 1, Emission Limitations.** The mass emissions from the equipment permitted herein shall not exceed the values listed in Table 1 and Table 2. Compliance shall be based on the operational, monitoring, recordkeeping, and reporting conditions of this permit. Compliance with the pound per day (lb/day) emission limits for all solvents except for XXX in the ACM-VI line shall be demonstrated by dividing the monthly emissions by 21.7 days per month. Compliance with the pound per day (lb/day) emission limit for XXX in the ACM-V1 line shall be demonstrated by dividing the monthly emissions by the number of days that the tanks were rinsed with XXX in that month. Compliance with the ton per year (TPY) emission limit shall be demonstrated by compiling the monthly ROC emission records for the year. Emissions shall be calculated in accordance with the emission calculation formulas specified in Attachment B of the Engineering Evaluation of this permit.
- c) **Condition 2d IV: Operational Restrictions, Removal Efficiency.** The ROC removal efficiency across the thermal

oxidizer shall be greater than 98 percent (mass basis) or outlet stack ROC concentrations shall be <10 ppmv, whichever is attainable.

- d) **Condition 2d IV: Residence Time.** The minimum residence time of the solvent-laden process stream in the combustion chamber shall be 1 second, and the inlet flows of ventilation system air fed to the thermal oxidizer shall not exceed 750 cfm. If required, compliance with the residence time requirement shall be determined via source testing. Specifically, the combustion chamber volume (cubic feet) shall be divided through by the actual exhaust flow rate (cubic feet per second) observed during the source test.

- e) **Table 4 - Source Testing.** Table IV. See Table IV attached.

Table 4 - Source Test Requirements
FID 3640 MNUS: PTO 16120

Emission Test Point	Pollutants	Parameters	Test Methods	Limit
Water Scrubber Inlet and Outlet (DID #111707)	Reactive Organic Compounds (ROC)	Inlet and Outlet Concentration (ppmv) and Mass Rate (lb/hr)	EPA Method 18	95% DRE by mass ~ 10 ppmv ROC
Thermal Oxidizer Fuel Line (DID #109886)	-	Supplemental Fuel Consumption (scfm)	Calibrated meter	982 scfm
Thermal Oxidizer Inlet (DID #109886)	ROC	Flow Rate (scfm) Concentration (ppmv) Mass Rate (lb/hr)	EPA Method 2 EPA Method 308 EPA Method 308	750 scfm N/A N/A
Thermal Oxidizer Outlet (DID #109886)	ROC	Flow Rate (scfm) Concentration (ppmv) Mass Rate (lb/hr) Efficiency (%)	EPA Method 2 EPA Method 308 EPA Method 308 EPA Method 308	750 scfm N/A N/A 98%
Thermal Oxidizer Combustion Chamber (DID #109886)	-	Residence Time (seconds)	-	1 second

Notes:

1. Alternative methods may be acceptable on a case-by-case basis.
2. Performance testing of each emission control device shall be performed on an "as-found" basis.
3. All test results are to be reported at standard conditions (60° Fahrenheit, 1 atm).
4. All tests shall be performed on the frequency described in Condition 10 of this permit.
5. Hourly mass emission rates (lb/hour) require measurement of the exhaust stack velocity.
6. Destruction rate efficiency = $\{100 \times (\text{inlet mass} - \text{outlet mass})\} \div (\text{inlet mass})$
7. Residence Time (sec) = combustion chamber volume (cubic feet) \times 60 (sec/min) \div Outlet Flow Rate (scfm)

- f) **Table 3 – Best Available Control Technology Requirements.**
- g) **Condition 11 (a) – Source Testing.** Test shall be performed on annual schedule (anniversary date of April)

2. The Source Test Report dated November 6, 2024, revealed that our emissions for the thermal oxidizer exceeded the allowable limits due to deteriorated pipes of the heat exchanger. The deterioration was caused by the age and has been in operation for over 30 years. To my knowledge, the heat exchanger was installed in 1992.
- B. Please describe how compliance with the district rule, regulation or order listed in Section A above is beyond your reasonable control. In addition to any other relevant factors, please include in your discussion 1) what actions you have taken to comply with or seek a variance, which were timely and reasonable under the circumstances.

- **Compliance Beyond Reasonable Control:**

Mann+Hummel (MNUS) failed the Source Test for the outlet flowrate of the thermal oxidizer and ROC emissions. This prompted us to contact a third-party vendor to determine the condition of the thermal oxidizer. The thermal oxidizer was visually inspected on December 10, 2024, and had a scheduled inspection on January 13 and 14. The inspection report revealed that the heat exchanger pipes are deteriorated. It has been in place for 30 years, but due to the age of the oxidizer, pipes will naturally degrade due to constant pressure, heat, and exposure to environmental factors. The deterioration can be accelerated. The current thermal oxidizer has almost reached the end of its life cycle and must be upgraded.

- **Actions To Comply**

Since the thermal oxidizer is deteriorating, we obtained quotes from 5 different thermal oxidizer vendors. MNUS procurement team had to negotiate the terms and conditions to select the most suitable thermal oxidizer for the plant. With the assistance of our Environmental Consultant, an Authority to Construct 16423 was issued on November 7, 2025. However, MNUS requires additional time for the thermal oxidizer project since there have been delays with the lead times (20 weeks or longer) of purchasing some of the components such as the temperature control valve, combustion

burner, and flow control valve. The delay in thermal oxidizer selection also delayed structural and mechanical sub-contracting. For these reasons, the anticipated project completion for a new thermal oxidizer is approximately 15 months or more from the date the regular variance was granted.

- **Actions Taken To Seek Variance Relief**

To address this issue proactively, we have submitted a variance extension request to the District on November 19, 2025, explaining the circumstances and our planned corrective actions. We have also been in communication with district representatives (Aimee Long and Charlotte Mountain) to keep them informed of our progress and timeline for compliance.

C. Please describe how you would be impacted if you were required to immediately comply with the District rule, regulation or order the subject of this variance request. In addition to any other relevant factors, please discuss why such impacts would result in 1) an arbitrary or unreasonable taking of property, or 2) the practical closing and elimination of a lawful business.

The facility makes many different products through four distinct casting operations prescribed in our Permit to Operate 16120. The ACM Process is an integral part of our production and without that it would complete shut us down. This is because the ACM process is a necessary step in the far majority of products of the facility. Shutting down the ACM process would essentially shut down the other processes. The ACM process emissions are controlled by the thermal oxidizer sole as prescribed in the permit. Excess emissions are less than the taking of this lawful business.

Impact of Immediate Compliance with District Rule 206:

Immediate compliance with District Rule 206 would have a significant impact on our operations. Our facility has experienced an unexpected issue with the thermal oxidizer's heat exchanger, and we are actively working on the replacement. If we were to comply immediately, it would force the reduction of operations significantly and will put the company in a financial strain. Immediate compliance could potentially cut jobs and lead to lost clients if unable to fulfill those contracts which could lead to lost revenues.

Arbitrary or Unreasonable Taking of Property:

Requiring immediate compliance under these circumstances would amount to an arbitrary and unreasonable taking of property. The thermal oxidizer to control the emissions is a complex and specialized machine. If MNUS was to shut down or reduce the hours of operation, the company's assets would depreciate significantly. We would also be forced to incur financial penalties or fees under the rule.

Practical Closing and Elimination of a Lawful Business:

Immediate compliance with Rule 206 would result in the closure of our business. Additionally, it would result in layoffs, loss of clients and jeopardizing the livelihood of all MNUS employees. Penalties incurred and closing the facility for repairs could lead to the closure of the business permanently. MNUS contributes to the economy and provides jobs to the community which could be jeopardized if immediate compliance was to occur.

- D. If you were required to immediately comply with the District rule, regulation or order the subject of this variance request, please describe what impact, if any, that would have on air contaminants.

If MNUS were required to immediately comply with District Rule 206, there may be a slight decrease from actual conditions in ROC emissions from the source. Condition 2 (d) IV mandates a 98% reduction in ROCs through the thermal oxidizer, which is the required control efficiency. Currently, it is estimated that the thermal oxidizer is running at 97%. The latest Source Test show emissions less than 10 ppm by volume which is the lowest allowable limit. If we operate with an emission of 97%, M+H will adjust production such that we don't exceed the permit limits prescribed in Table 1 and 2 of the current facility permit.

Currently, MNUS does not meet the emission standards outlined in the most recent Source Test. Compliance with the stricter limits in the permit would necessitate the repair of the existing thermal oxidizer unit or the upgrading to a more efficient model. The replacement of a new thermal oxidizer will require time and resources for the permitting process and actual installation. The installation would have to occur during a complete shutdown of our Casting Department. Additionally, the immediate closure of casting operations would be a big financial burden to MNUS.

The facility makes many different products through four distinct casting operations prescribed in our permit to operate 16120. The ACM Process is an integral part of our production and without that it would complete shut us down. This is because the ACM process is a necessary step in the far majority of products of the facility. Shutting down the ACM process would essentially shut down the other processes. The ACM process emissions are controlled by the thermal oxidizer sole as prescribed in the permit. Excess emissions are less than the taking of this lawful business.

The goal of MNUS is to achieve full compliance and minimize emissions, but immediate compliance would impact air quality until the necessary control measures are in place.

- E. Please describe what consideration you have given to curtailing operations in lieu of obtaining a variance.

MNUS would consider the option of curtailing operations as an alternative to seeking variance under District Rule 206. It reduces emissions generated by the facility but at the same time could have a negative impact economically (reduced revenue), will have workforce implications (layoffs or reduced number of working hours), and environmental impacts if less efficient machines are used during the downtime.

The facility makes many different products through four distinct casting operations prescribed in our permit to operate 16120. The ACM Process is an integral part of our production and without that it would complete shut us down. This is because the ACM process is a necessary step in the far majority of products of the facility. Shutting down the ACM process would essentially shut down the other processes. The ACM process emissions are controlled by the thermal oxidizer sole as prescribed in the permit. Excess emissions are less than the taking of this lawful business

- F. Please describe what steps and measures you will take to reduce excess pollutant emissions the maximum extent feasible during the requested variance period.

MNUS has manipulated production schedules and orders to minimize excess emissions. This includes delaying long-term orders with membrane customers and/or slowing down production and operate so daily limits are not surpassed. The increased

emissions from the thermal oxidizer would be balanced by decrease in emissions from the other three permitted processes so that the facility daily limits are not in exceedances as prescribed by attachment B.

MNUS will continue to conduct periodic internal testing to verify the control in efficiency of the unit if not degrading and perform increased preventative maintenance within the ACM process and the thermal oxidizer. Monthly reports are prepared and sent to the District.

MNUS will delay implementation of additional contracts until the thermal oxidizer is replaced.

- G. If requested to do so by the District, please describe how you will monitor or otherwise quantify and report to the District any pollutant emissions associated with the granting of your variance.

MNUS has kept the District updated with the replacement of the thermal oxidizer. We have been maintaining thorough records and sending copies to the District and will continue to do so. To ensure we are on track, a third party gathers emissions data during the variance period.

In addition, we have been conducting thorough monitoring such as weekly recordkeeping of solvents and maintaining a weekly calculation of emissions of the ACM and calculated excess emissions due to the reduced control efficiency of the oxidizer. ACM solvent emissions and other processes will be calculated using the methodologies in Attachment B of the permit (See Attached). We will monitor other casting operations to ensure the resultant emissions are reduced correspondingly by the increase from the ACM process. The reduced controlled efficiency of the

thermal oxidizer is increasing ACM emissions by approximately 1 to 2 pounds per day of ROC.

Attachment B:

Permit to Operate 16120

ATTACHMENT B Emission Equations

CA-V1, PSF-V1 and PSF-V2 Solvent Emission Equations																													
Equation 1: Emissions of solvent X from the sewer = $[(NU_{H_2O} \times SF_X) + (NU_{H_2O}(1 - SF_X) \times CPe) \times Ce] \times Fe_X$																													
Equation 2: Emissions of solvent X from casting = $[NU_{H_2O} \times (1 - SF_X) \times (1 - CPe)] + [NU_{H_2O} \times (1 - SF_X) \times (CPe) \times (1 - Ce)]$																													
Total Solvent Emissions (lb/Month) = Equation 1 + Equation 2																													
Where:																													
C_e	Control efficiency of wet scrubber, equal to 0.99 (99%) for PSF-V1 and CA-V1 casting emissions, and 0.99 (99%) for PSF-V2 casting emissions																												
CPe	Capture efficiency, equal to 0.99 (99%)																												
Fe_X	Fraction of solvent x in sewer emitted as fugitives																												
SF_X	Fraction of solvent x that is disposed to the sewer in the casting process																												
NU_{H_2O}	Net monthly usage of solvent x in either the CA-V1, PSF-V1 or PSF-V2 line (lb) [(Beginning of Month Inventory + Monthly Purchase Amount) - (End of Month Inventory + HWM)]																												
HWM	Amount of solvent x from the CA-V1, PSF-V1 or PSF-V2 line that is recycled by hazardous waste manifest monthly (lbs)																												
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Notes: 1. All equations represent emission values as lbs on a monthly basis. Sum equations 1 and 2 for each solvent to obtain the total emissions of solvent x on a monthly basis. 2. Equation 1 calculates the fugitive emissions from solvents that have been sent to the sewer and includes solvent sent to sewer from the wet scrubber. Fraction Emitted (Fe) values found in the SOCR (Wastewater H2S Approval). 3. Equation 2 calculates the fugitive emissions of solvents during the casting process and takes into account the uncaptured emissions as well as the fraction of uncaptured emissions from the control device. 4. To determine the emissions of solvent x, divide the monthly emissions by 25.2 days per month. To obtain the annual emissions in TPD, sum the monthly emissions and divide by 200 (lb/day). 5. Due to the hazardous emissions of CH_2Cl_2 it is assumed that no CH_2Cl_2 is emitted into the atmosphere. 6. Amount of solvent sent to sewer in casting process (SF) for each casting line is assumed to be equal to the ratio used in PTO 14521. 7. The amount of solvent used to be recycled by hazardous waste manifest shall be verified by weighing each drum and analyzing for POC content according to the facility's MSDS-approved Solvent Recovery Plan. 8. No POC credit shall be received for recycling any drum containing sludge, paper or other solids. 9. Values including emissions for CH_2Cl_2 must be equal to 0.																													

6. N/A

7. Will the operation of the equipment subject to this variance result in violation of District Rule 303, Nuisance?

No, it will not result in violation of District Rule 303. We will maintain air Quality standards to prevent any impact in the environment and public Health.

8. Please State whether or not any civil or criminal case involving the equipment subject to this variance is pending any court.

There are no civil or criminal cases pending in any court involving the equipment.