TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 28, 2019

MR BRIAN DOSA
DIRECTOR OF PUBLIC WORKS
US DEPARTMENT OF THE ARMY
4612 ENGINEER DR
FORT HOOD TX 76544-5055

Re: Permit Amendment
Permit Number: 24538
Expiration Date: August 14, 2025
US Department of the Army
Surface Coating Facilities
Fort Hood, Bell County
Regulated Entity Number: RN101612083
Customer Reference Number: CN600126262

Dear Mr. Dosa:

This is in response to your letter received December 6, 2017 and your Form PI-1 (General Application for Air Preconstruction Permits and Amendments) concerning the proposed amendment to Permit Number 24538. We understand that you propose to modify the existing paint booth in Building 7013 and the four existing paint booths in Building 88027, remove references to FIN SC020, reauthorize the paint booth in Building 40009 (previously known as Building 40001), update the special conditions to reflect current modeling parameters and scenarios, and update the listing of active PBRs in Attachment I of the Special Conditions. Also, this will acknowledge that your application for the above-referenced amendment is technically complete as of December 21, 2018.

In accordance with Title 30 Texas Administrative Code (TAC) §116.116(b) and §116.160 and based on our review, Permit Number 24538 is hereby amended. This information will be incorporated into the existing permit file. Enclosed are revised general conditions (permit face), special conditions, and a maximum allowable emission rates table. We appreciate your careful review of the special conditions of the permit and assuring that all requirements are consistently met.

This amendment will be automatically void upon the occurrence of any of the following, as indicated in 30 TAC §116.120(a):

1. Failure to begin construction of the changes authorized by this amendment within 18 months from the date of this authorization.

2. Discontinuance of construction of the changes authorized by this amendment for a period of 18 consecutive months or more.

3. Failure to complete the changes authorized by this amendment within a reasonable time.

Upon request, the executive director may grant extensions as allowed in 30 TAC §116.120(b).

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission

should review the executive director's decision. According to 30 TAC §50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code §382.032, a person affected by the executive director's approval must file a petition appealing the executive director's approval in Travis County district court within 30 days after the **effective date of the approval**. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

You are reminded that these facilities must be in compliance with all rules and regulations of the Texas Commission on Environmental Quality (TCEQ) and of the U.S. Environmental Protection Agency at all times.

If you need further information or have any questions, please contact Ms. Stephanie Heath at (512) 239-5654 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,

Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

Enclosures

cc: Air Section Manager, Region 9 - Waco

Project Number: 278810

Texas Commission on Environmental Quality
Air Quality Permit

A Permit Is Hereby Issued To
US Department of the Army
Authorizing the Construction and Operation of
Surface Coating Facilities
Located at **Fort Hood, Bell County, Texas**
Latitude 31° 11' 42" Longitude −97° 44' 29"

Permit: 24538

Amendment Date: February 28, 2019

Expiration Date: August 14, 2025

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)] [1]
2. **Voiding of Permit**. A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1)the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of $5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress**. Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification**. The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements**. If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]
6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and

operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]

8. **Maximum Allowable Emission Rates**. The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)] [1]
9. **Maintenance of Emission Control**. The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC§ 116.115(b)(2)(G)]
10. **Compliance with Rules**. Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This** permit may not be transferred, assigned, or conveyed by the holder except as provided by rule. [30 TAC § 116.110(e)]
12. **There** may be additional special conditions attached to a permit upon issuance or modification of the permit. Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **Emissions** from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) §382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.
14. **The** permit holder shall comply with all the requirements of this permit. Emissions that exceed the limits of this permit are not authorized and are violations of this permit. [1]

[1] Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions
Permit Number 24538

1. This permit authorizes surface coating operations at Fort Hood located on U.S. Interstate 14, Bell/Coryell County. This permit covers only those sources of emissions listed on the maximum allowable emission rates table (MAERT) and those sources are limited to the emission limits and other conditions specified in the attached table. The annual rates are based on any consecutive 12-month period. **(02/19)**

2. This permit does not include the facilities authorized under Permits by Rule as listed on Attachment 1, nor does it cover the planned maintenance, startup, or shutdown (MSS) activities at the site, except as noted in the MAERT. Instead, these facilities and/or activities are authorized by a permit-by-rule (PBR) under Title 30 Texas Administrative Code (30 TAC) Chapter 106, standard exemption, exemption from permitting, or are a de minimis source listed under 30 TAC § 116.119. **(02/19)**

3. A copy of this permit shall be kept at the site and made available at the request of personnel from the Texas Commission on Environmental Quality (TCEQ) or any other air pollution control agency with jurisdiction. **(02/19)**

4. All equipment except aerosol cans that has the potential to emit air contaminants shall be identified and marked in a conspicuous location to correspond with the site plot plan and emission point numbers (EPN) on the maximum allowable emission rates table (MAERT).

Emission Limitations

5. Opacity shall not exceed five percent averaged over a six-minute period from each exhaust stack or vent emission point and the determination shall be made as follows: **(02/19)**

   A. Observe for visible emissions while each facility is in operation. Observations shall be made at least 15 feet and no more than 0.25 miles from the emission points. Up to three emission points may be read concurrently, provided that all three emission points are within a 70-degree viewing sector or angle in front of the observer such that the sun position is at the observer's back and can be maintained for all three emission points. Contributions from uncombined water shall not be included in determining compliance with this condition.

   B. Observations shall be performed and recorded quarterly. If visible emissions are observed from an emission point, corrective action shall be taken promptly to eliminate the cause of the visible emissions.

   C. The cause of the visible emissions and the corrective action taken to eliminate the cause shall be documented within one week of the first observation. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

   D. Alternatively, the presence of visible emissions may be determined using a computer-based photographic analysis system in accordance with the U.S. Environmental Protection Agency (EPA) Alternate Method 082 procedures. The camera and software shall be certified by EPA.

6. No visible emissions shall cross the property line at any time. This determination shall be made as follows. **(02/19)**

A. Observe for visible emissions while aerosol can spraying is ongoing. Observations shall be made along the property line nearest to the aerosol can usage area. Contributions from uncombined water shall not be included in determining compliance with this condition.

B. Observations shall be performed and recorded quarterly. If visible emissions are observed crossing the property line, identification of the source and cause of the visible emissions shall be conducted within 24 hours and documented.

C. Corrective action to eliminate the cause of visible emissions shall be taken promptly. Corrective action shall be documented within one week of first observation of the visible emissions. After corrective action has been taken, another visible emissions observation shall be performed and recorded to ensure the visible emissions have been eliminated.

7. Emissions shall be controlled such that they do not cause nuisance conditions, as defined in Title 30 Texas Administrative Code (30 TAC) §101.4. Additional controls or other corrective measures may be required if determined to be necessary by the Waco Regional Office of the Texas Commission on Environmental Quality (TCEQ).

8. The coatings used in the paint booths located within Buildings 7013, 88027, and 40009 shall comply with the individual volatile organic compound (VOC) content limits specified in § 115.421 less water and exempt solvents regardless of whether the facilities would otherwise be subject to § 115.421. Compliance with the individual VOC content limits shall be demonstrated on a monthly weighted average basis for all coatings and solvents “as mixed” and applied.

Operational Limitations

9. Surface coating operations include the application of surface coatings, the drying of surface coatings, all cleanup activities involving the use of solvent, the mixing of surface coatings, and the thinning of surface coatings using solvents. **(02/19)**

10. Except for aerosol application processes, all surface coating operations shall be restricted to the coating booth(s) and buildings and shall be performed according to the following requirements: **(02/19)**

A. High-volume, low-pressure spray guns, laminar airflow-pressure feed spray guns, or equivalent transfer efficiency application equipment shall be employed in all spray painting with the exception of aerosol cans. This equipment shall be operated and maintained within the limits set forth by the manufacturer.

B. The face velocity across each natural draft opening (NDO) on each coating booth, oven, and building shall be at least 100 feet per minute (fpm) during all surface coating and drying operations.

11. Each coating booth shall be equipped with a ventilation system that is designed to capture all emissions from the surface coating operations and shall be operated according to the following requirements. **(02/19)**

A. The ventilation system for each coating booth, except the paint booths located in Buildings 7013 and 88027, shall be equipped with filter pads designed or warranted to achieve a filter

efficiency of 99 percent or greater for particulate matter (PM). The Building 7013 paint booth shall be equipped with filter pads designed or warranted to achieve a filter efficiency of 99.97 percent or greater for PM. The Building 88027 paint booth shall be equipped with a three-stage filter system designed or warranted to achieve a filter efficiency of 99.84 percent or greater for PM.

B. The filter system shall be operated and maintained in accordance with the manufacturer's recommendations to assure that the minimum control efficiency is met at all times when the coating booth is in operation.

C. The holder of this permit shall install, calibrate (if applicable), and maintain a differential pressure gauge in the paint booths located in Buildings 7013 and 88027 to monitor pressure drop across the filter pads. If a monitoring device requires calibration, it shall be calibrated at least annually in accordance with the manufacturer's specifications and shall be accurate to within a range of ± 0.5 inch water gauge pressure (± 125 pascals) or a span of ± 3 percent. If a monitoring device requires to be zeroed, it shall be zeroed at least once a week.

D. The filter media differential pressure shall be maintained within the operating range specified by the manufacturer. Filters shall be replaced whenever the pressure drop reading across the filter media is outside the manufacturer's specified operating range.

E. Pressure drop readings shall be recorded at least once per day that the system is required to be operated.

F. Maintenance on the ventilation system, including filter replacement, shall be performed only when the facility being controlled is not in operation.

12. The ventilation systems for each paint booth shall include exhaust stacks that have no obstructions or restrictions to vertical exhaust flow. The exhaust stacks shall have a height (as measured from ground level to the discharge point) that is equal to or greater than the following: **(02/19)**

Building No.	Height (Feet)
Building 40009	38
Building 32023	36
Building 9576	36
Building 88027	45
Building 7013	58.6
Building 13065	52
Building 11057	44.75

13. Minimum in-booth drying times for painted vehicles/equipment/aircraft shall be 30 minutes for the booth in Building 40009, 45 minutes for the booths in Buildings 32023, 9576, 88027, 13065, and 11057; and 8 hours for the booth in Building 7013. **(02/19)**

14. Fuel for all paint booth intake air pre-heaters shall be pipeline-quality, sweet natural gas.

Material Usage Flexibility (02/19)

15. In addition to the approved materials, the use of new materials or products that meet all of the following sub-conditions are allowed**.** Pollutants from categories of air pollutants not currently authorized on the MAERT cannot be authorized using this special condition. This special condition does not authorize the use of any chlorinated or fluorinated compound when emissions are routed to a thermal control device.

    A. All the ingredients of the new material are known; i.e., the weight percentages of the ingredients add to 100 percent or more.

    B. The maximum hourly (short-term) or annual emission rates from new or existing air contaminant ingredients (aka air contaminants) shall not cause any increases in the short-term or annual emission rates as listed on the MAERT.

    C. Emissions from the new material shall only be from the emission points represented in the table provided in paragraph G(2) of this special condition.

    D. Any air contaminant in the new material is exempt from paragraphs E through H of this special condition if the air contaminant is currently authorized under this permit and the proposed emission rate from each EPN is less than or equal to the authorized emission rate from the same EPN.

    E. Any PM air contaminant in the new material is exempt from paragraphs F through H of this special condition if:

        (1) No specific short-term effects screening level (ESL) is included in the most current set of ESLs available through the TCEQ Toxicity Factor Database (must meet NAAQS); or

        (2) The air contaminant is not included in the most current set of ESLs available through the TCEQ Toxicity Factor Database.

    F. Any air contaminant in the new material is exempt from paragraphs G and H of this special condition if:

        (1) it is emitted at a rate and has a short-term ESL and an annual ESL as stated in the following table; or

Emission Rate (lbs/hr)	Short-term ESL (µg/m^3)	Annual ESL (µg/m^3)
≤ 0.04	≥ 2 and < 500	≥ 0.2 and < 50
≤ 0.10	≥ 500 and < 3,500	≥ 50 and < 350
≤ 0.40	≥ 3,500	≥ 350

        (2) it is not sprayed and it has at least one of the following physical characteristics:

            (a) a vapor pressure less than 0.01 mm Hg (0.0002 psi) at 68°F;

            (b) a boiling point at atmospheric pressure that is above 400°F (204°C), provided the compound is not heated above room temperature in the process; or

(c) a molecular weight that is above 200 g/g-mol, provided the compound is not heated above room temperature in the process.

G. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the short-term impacts are acceptable.

(1) Determine the emission rate of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.

(2) Multiply the emission rate of the air contaminant by the unit impact multiplier for each emission point from the following table to determine the off-property impact Ground Level Concentration $(GLC)_{MAX}$ for each emission point.

Emission Point / Grouping Number	Unit Impacts ($\mu g/m^3$ per lb/hr)
40009-3-1, 40009-3-2, 40009-3-3, 40009-3-4, 40009-3-5, & 40009-3-6	6.87
32023-1-1 & 32023-1-2	9.07
9576-1-1 & 9576-1-2	53.11
88027-1-1, 88027-1-2, 88027-2-1, 88027-2-2, 88027-3-1, 88027-3-2, 88027-4-1 & 88027-4-2	14.29
88027-1-F, 88027-2-F, 88027-3-F & 88027-4-F	19.55
7013A-1 & 7013A-3	84.63
7013A-1-F	137
13065-1-1 & 13065-1-2	15.33
11057-1A	5.77
AERO-HAA01	166.89
AERO-HAA02	23.77
AERO-CTE03 & AERO-DPW14	18.17
AERO-CTE04	32.17
AERO-CTE05	8.15
AERO-CTW06 & AERO-DPW15	388.30
AERO-CTW07	8.98
AERO-CTW08	2.75
AERO-DOL09	12.10
AERO-FHW11	13.22
AERO-DS212	21.52
AERO-DS213	126.55

(3) Sum the impacts from each emission point/emission point group to determine a total short-term off-property impact (Total GLC_{MAX}) for the new or existing air contaminant.

(4) Compare the total short-term off-property impact to the short-term ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the total off-property impact exceeds the short-term ESL, then a permit amendment is required to authorize the emission rate for the air contaminant.

Total $GLC_{SHORT} \leq ESL_{SHORT}$

Where:

Total GLC_{SHORT} = The sum of the short-term GLCs from each emission point.

ESL_{SHORT} = The short-term ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database and the date of the database retrieval or as specifically derived by the TCEQ Toxicology Division. The ESL shall be obtained in writing prior to the use of the new or increased air contaminant.

H. For all other new air contaminants or increases in existing air contaminants, the following procedure shall be completed to determine if the annual impacts are acceptable.

(1) Determine the annual emission rate (tpy) of each air contaminant including emissions of the same air contaminant (if an existing air contaminant) from the currently authorized materials that may be emitted at the same time from each emission point.

(2) Convert the annual emission rate to an hourly emission rate using 8760 hours per year and 2000 pounds per ton.

(3) Multiply the hourly emission rate (lb/hr) of the air contaminant determined in paragraph H(2) of this special condition by the unit impact multiplier for each emission point from the table provided in paragraph G(2) of this special condition to determine the off-property impact GLC_{MAX} for each emission point.

(4) Sum the impacts from each emission point to determine a total off-property impact (Total GLC_{MAX}) for the new or existing air contaminant.

(5) Multiply the total off-property impact (Total GLC_{MAX}) determined in paragraph H(4) of this special condition by 0.08 to determine the annual off-property impact (Annual GLC_{MAX}) for the new or existing air contaminant.

(6) Compare the annual off-property impact to the annual ESL for the air contaminant as shown below to determine if it is less than or equal to the ESL. If the annual off-property impact exceeds the annual ESL, then a permit amendment is required to authorize the emission rates for the air contaminant.

Annual $GLC_{MAX} \leq ESL_{ANNUAL}$

Where:

ESL_{ANNUAL} = The annual ESL of the new or existing air contaminant from the most current set of ESLs available through the TCEQ Toxicity Factor Database or as specifically derived by the TCEQ Toxicology Division.

National Security Emergency Conditions

16. Special Condition Nos. 13 and 15 and the MAERT may temporarily be exceeded in the event of a national security emergency, when the need for rapid response on the part of the permittee makes it impractical to meet the procedural requirements for amending this permit. This exclusion may be invoked:

    A. During emergencies that require physical or operational changes to the facilities that would trigger a permit amendment.

    B. When failure to invoke this national security exclusion could hinder the ability of permittee to comply with Presidential or Department of Defense Directives in a timely manner because of the time periods and/or public notice requirements in obtaining an amendment.

17. The following conditions shall be met by the permittee whenever the national security exclusion of Special Condition No. 16 is invoked:

    A. As soon as practicable, but no later than seven calendar days since invoking the conditions of Special Condition No. 16, the permittee shall notify in writing the TCEQ Waco Regional Office and the TCEQ Austin Office of Air, Air Permits Division of the use of this condition.

    B. If permittee seeks to rely on the temporary national security emergency exclusion for longer than 30 calendar days from the date of notice in Special Condition No. 17A, the responsible official or duly authorized representative shall seek authorization from the TCEQ Waco Regional Office and the TCEQ Air Permits Division in Austin. The authorization to continue use of the conditions of Special Condition No. 16 shall be required for each consecutive 30-day period following the initial notification date in Special Condition No. 17A.

    C. As soon as practicable, but no later than seven calendar days after the use of the conditions of Special Condition No. 16 are no longer needed, the permittee shall notify in writing the TCEQ Waco Regional Office and the TCEQ Austin Office of Air, Air Permits Division that the use of the temporary national security emergency exclusion has ceased.

    D. As soon as practicable, but no later than 45 calendar days after the date of notification in Special Condition No. 17C, the permittee shall provide a written report to the TCEQ Waco Regional Office and the TCEQ Austin Office of Air, Air Permits Division that describes the reasons for relying on the exclusion, the emission points affected, the amount of increased emissions, and other information needed to determine the nature and extent to which the source exceeded the MAERT.

        (1) Permittee need not submit an application for amendment to the TCEQ under Special Condition No. 16 if the physical or operational changes to the source resulted only in temporary modification; that is, a modification that lasts no longer than the period of national security emergency or 180 days.

(2) As soon as practicable, but no later than 45 calendar days after the date of notification in Special Condition No. 17C, the permittee shall submit an application for permit amendment in the event that the physical or operational changes made at the source in response to the national security emergency are not temporary and last more than 180 days.

Recordkeeping

18. General Condition No. 7 regarding information and data to be maintained on file is supplemented as follows and shall be used to demonstrate compliance with the special conditions and the MAERT:

A. Environmental Data Sheet (EDS) or similar documentation [including Safety Data Sheets (SDS)] for all paints and solvents used in the coating operations and all solvents used in the cleanup operations. The EDS or similar documentation for materials shall indicate the maximum composition of all constituents. **(02/19)**

B. The following data shall be used to produce a monthly summary that shows the pound per hour (lb/hr), pound per month (lb/mo), and annual (tons/yr) volatile organic compound (VOC), exempt solvent (ES), PM, PM_{10}, $PM_{2.5}$, ammonia, and HAP (lb/mo and tons/yr only) emission rates for each paint booth emission point/emission point grouping and aerosol can area on the MAERT:

(1) Monthly usage records of coatings and solvents. Monthly usage records of coatings and solvents shall be determined by inventory tracking or purchase records.

(2) Daily records of hours of operation of each paint booth and aerosol can use.

C. Monthly Summary.

(1) Monthly emission rates (lb/mo) for VOC, ES, PM, PM_{10}, $PM_{2.5}$, ammonia, and HAP shall be calculated as follows:

$$lb/mo = (U_1*X_1 + U_2*X_2 + U_3*X_3 + \ldots + U_n*X_n)*Y_{booth/fug/can/PM}$$

Where,

$U_1, U_2, U_3, .U_n$ - monthly usage records for the various coatings or solvents used in gallons per month

$X_1, X_2, X_3, .X_n$ - VOC, ES, PM, PM_{10}, $PM_{2.5}$, ammonia, and HAP content of the various coatings or solvents used in pounds per gallon

Y_{booth} - transfer efficiency × booth flash-off percent + overspray percent

Y_{fug} - transfer efficiency × fugitive flash-off percent

Y_{can} - 100 percent for aerosol cans

Y_{PM} - (1 - transfer efficiency) × (1 - filter efficiency) × (1 – fallout for PM, PM_{10}, $PM_{2.5}$)

(2) Hourly emission rates (lb/hr) for VOC, ES, PM, PM_{10}, $PM_{2.5}$, and ammonia shall be calculated as follows:

lb/hr = lb/mo (as calculated above) / H_m

Where,

H_m - sum of daily hours of operation of the paint booth(s) or usage of aerosol cans during the month in hours

(3) Annual emission rates for VOC, ES, PM, PM_{10}, $PM_{2.5}$, ammonia and HAP shall be calculated by adding the pounds per month calculated in (1) above to the sum of the pounds per month or the previous 11 months and dividing the sum by 2,000 pounds per ton.

D. A monthly summary shall be produced that shows annual emission rates for the air contaminants from each paint booth heater emission point/emission point grouping in tons per year for the rolling 12 previous months.

E. Records of manual visible emissions/opacity observations, and for the photographic method, photo records and analysis results plus documentation of EPA certification of camera and software as required by EPA Alternate Method 082. Also, records of corrective action taken to reduce opacity.

F. Records of the manufacturer's specifications for the spray application equipment employed by the facility. **(02/19)**

G. Manufacturer's documentation on PM control efficiency for the filters used in the coating booths. Documentation which shows the manufacturer's specified operating range and the procedures recommended for replacement of the filters. **(02/19)**

H. Records of the calibrations performed on each differential pressure gauge for the paint booths in Buildings 7013 and 88027. **(02/19)**

I. Records of the differential pressure readings across the filter pads for the paint booths in Buildings 7013 and 88027. **(02/19)**

J. Records of when filters were replaced for the paint booths in Buildings 7013 and 88027. **(02/19)**

K. Records and calculations demonstrating compliance with Material Usage Flexibility condition for the introduction of any new materials.

19. The records required by the special conditions shall be maintained in hard copy or electronic format and shall be maintained for at least five years rather than the two-year period specified in General Condition No. 7. The recordkeeping summary required shall contain examples of the calculations performed (including units, conversion factors, transfer efficiency, and emission factors), any assumptions made in the calculations, and the basis for those assumptions. These records shall be kept on-site and made available for review upon request by representatives of the TCEQ or any air pollution control agency with appropriate jurisdiction. **(02/19)**

Pollution Prevention

20. All surface coatings and solvents shall be stored in closed containers when not in use.

21. All paint gun cleanup shall be performed in a coating booth with the fans operating by discharging the cleaning solvent into closed containers. Alternatively, paint guns may be cleaned in an enclosed gun cleaner, which may be located outside of the coating booths. Any collected waste shall be placed in closed containers. **(02/19)**

22. Paint pots shall be covered while filled with solvent during cleaning. **(02/19)**

23. All waste paint, paint scrapings, solvents, and cleanup rags shall be stored in closed containers until properly removed from the site.

24. All coating and solvent spills shall be cleaned up immediately using appropriate procedures, and the associated waste materials shall be stored in closed containers until properly removed from the site.

25. Towels, rags, sponges, or other materials used for cleanup operations shall be placed into closed containers immediately after use. **(02/19)**

26. Paint booth filters shall be removed and disposed of in a manner that minimizes trapped PM from escaping into the atmosphere.

27. Used paint and aerosol cans shall be recycled or properly disposed. **(02/19)**

Date: February 28, 2019

Attachment 1 to Special Conditions
Facilities Authorized by Permit by Rule at the Site

Facility	PBR/SE	Registration
Engine Flush Operations	41	N/A (Claim)
Aircraft Wipe Cleaning and Coating Touchup	§106.433	N/A (Claim)
Aircraft Coating Touchup	§106.433	N/A (Claim)
Aircraft Wipe Cleaning	124	N/A (Claim)
Smokeless Gas Flare	§106.261	102853
Soldering, Brazing, Welding Equipment	§106.227	N/A (Claim)
Hand-Held and Manually Operated Machines	§106.265	N/A (Claim)
Comfort Heating Units	§106.102	N/A (Claim)
Closed Landfill	§106.534	N/A (Claim)
Sitewide Boilers	§106.183	N/A (Claim)
Wood Shops, Buildings 731, 4216, and 4313	§106.231	N/A (Claim)
Metal De-burring Tumbler, Building 88036	§106.313	N/A (Claim)
Petroleum Storage Tanks	§106.412	N/A (Claim)
Used Oil and Off-Spec Fuel Storage Tanks	§106.472	N/A (Claim)
Fuel Tanker Trucks Loading and Unloading	§106.473	N/A (Claim)
Spray Paint Booth, Building 1156	§106.433	24533
Fuel Storage and Dispensing, Building 88008	14, 51, 86, & 106	24583
Composite Repair, Building 6943	113	30861
Soil Remediation	§§106.533 & 262	41479
433 Degreasing Units Sitewide, Painting Operations at Buildings 88037 and 32040	§106.454	50528
Solvent Distillation/Reclamation Unit	§106.261	52124
Dry Parts Cleaning Oven	§106.495	52888
Sitewide Emergency Generators and Sitewide Water Cooling Towers	§106.511 & §106.371	54052
Surface Coating	§106.433	70014
Asbestos Brake Repair and Welding, Buildings 11057 and 40060	§106.261 & §106.262	70022
Fuel Tanker Cleaning Machine	§§106.183 & 262	76961
Can Crusher, Building 1346	§§106.261 & 262	98846
Engine Test Cells	§106.263	79646
Small Arms Safety Certification Unit	§§106.261 & 262	81233
Storage Tanks 60 and 61	§106.472	111603
Abrasive Blasting Booth, Building 7044	§106.452	107747
Spray Paint Booth, 22041 South Range Road	§106.433	131851
Heaters, Building 40009	§106.183	N/A (Claim)
Aerosol Can Crusher, Building 1346	§106.261 & 262	147753
Immersion Cleaner Operations at Logistics Readiness Center (LRC)	§106.4, 8, & 454	N/A (Claim)

Dated February 28, 2019

Emission Sources - Maximum Allowable Emission Rates

Permit Number 24538

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
40009-3-1, 40009-3-2, 40009-3-3, 40009-3-4, 40009-3-5, and 40009-3-6	Building 40009 Paint Booth 3 (SC002)	VOC	8.58	22.44
		PM	0.02	0.03
		PM_{10}	0.02	0.03
		$PM_{2.5}$	0.02	0.03
40009-F	Building 40009 Flashoff	VOC (4)	0.80	10.79
40009-3-7	Building 40009 Paint Booth 3 Intake Air Pre-heater	VOC (5)	0.04	0.16
		PM (5)	0.05	0.22
		PM_{10} (5)	0.05	0.22
		$PM_{2.5}$ (5)	0.05	0.22
		NO_x (5)	0.66	2.87
		CO (5)	0.55	2.41
		SO_2 (5)	<0.01	0.02
32023-1-1 and 32023-1-2	Building 32023 Paint Booth (SC001)	VOC	5.00	15.30
		PM	0.01	0.03
		PM_{10}	0.01	0.03
		$PM_{2.5}$	0.01	0.03
32023-1-F	Building 32023 Flashoff	VOC (4)	0.30	6.52
9576-1-1 and 9576-1-2	Building 9576 Paint Booth (SC013)	VOC	4.60	14.32
		PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
9576-1-F	Building 9576 Flashoff	VOC (4)	0.20	5.55

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
88027-1-1 and 88027-1-2	Building 88027 Paint Booth 1 (SC004)	VOC	12.14	9.80
		Exempt Solvent	12.04	10.57
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
88027-2-1 and 88027-2-2	Building 88027 Paint Booth 2 (SC005)	VOC	12.14	9.80
		Exempt Solvent	12.04	10.57
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
88027-3-1 and 88027-3-2	Building 88027 Paint Booth 3 (SC006)	VOC	12.14	9.80
		Exempt Solvent	12.04	10.57
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
88027-4-1 and 88027-4-2	Building 88027 Paint Booth 4 (SC007)	VOC	12.14	9.80
		Exempt Solvent	12.04	10.57
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
88027-1-F, 88027-2-F, 88027-3-F, and 88027-4-F	Building 88027 Flashoff	VOC (4)	2.60	16.80
		Exempt Solvent (4)	2.60	18.12

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
88027-1-1, 88027-1-2, 88027-2-1, 88027-2-2, 88027-3-1, 88027-3-2, 88027-4-1, and 88027-4-2	Building 88027 Booth Heaters (4 - 4.65 MMBtu/hr each)	VOC (5)	0.12	0.44
		PM (5)	0.12	0.60
		PM_{10} (5)	0.12	0.60
		$PM_{2.5}$ (5)	0.12	0.60
		NO_x (5)	1.84	8.00
		CO (5)	1.52	6.68
		SO_2 (5)	<0.01	0.04
7013A-1 and 7013A-3	Building 7013 Paint Booth and Air Heat Makeup Unit (1.25 MMBtu/hr (SC003)	VOC	12.45	9.77
		Exempt Solvent	13.66	13.16
		PM	<0.01	<0.01
		PM_{10}	<0.01	<0.01
		$PM_{2.5}$	<0.01	<0.01
		VOC (5)	<0.01	0.03
		PM (5)	<0.01	0.04
		PM_{10} (5)	<0.01	0.04
		$PM_{2.5}$ (5)	<0.01	0.04
		NO_x (5)	0.12	0.53
		CO (5)	0.10	0.45
		SO_2 (5)	<0.01	<0.01
7013A-1-F	Building 7013A Flashoff	VOC (4)	0.67	4.22
13065-1-1 and 13065-1-2	Building 13065 Paint Booth 1 (SC009)	VOC	4.60	14.32
		PM	0.01	0.02
		PM_{10}	0.01	0.02
		$PM_{2.5}$	0.01	0.02
13065-1-F	Building 13065 Flashoff	VOC (4)	0.30	5.55

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
13065-2	Building 13065 Paint Booth Heater	VOC (5)	0.02	0.08
		PM (5)	0.04	0.16
		PM_{10} (5)	0.04	0.16
		$PM_{2.5}$ (5)	0.04	0.16
		NO_x (5)	0.31	1.34
		CO (5)	0.07	0.29
		SO_2 (5)	<0.01	0.01
11057-1A	Building 11057 Paint Booth (SC017)	VOC	2.60	4.45
		PM	0.01	0.01
		PM_{10}	0.01	0.01
		$PM_{2.5}$	0.01	0.01
11057-F	Building 11057 Flashoff	VOC (4)	0.20	1.73
11057-1B	Building 11057 Paint Booth Heater	VOC (5)	<0.01	0.01
		PM (5)	<0.01	0.02
		PM_{10} (5)	<0.01	0.02
		$PM_{2.5}$ (5)	<0.01	0.02
		NO_x (5)	0.04	0.18
		CO (5)	<0.01	0.04
		SO_2 (5)	<0.01	0.01
AERO-HAA01	Hood Army Airfield 01 Aerosol Can Spray	VOC (4)	1.37	0.20
		Exempt Solvent (4)	1.12	0.26
		PM (4)	0.08	0.01
		PM_{10} (4)	0.03	<0.01
		$PM_{2.5}$ (4)	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
AERO-HAA02	Hood Army Airfield 02 Aerosol Can Spray	VOC (4)	1.80	0.27
		Exempt Solvent (4)	1.40	0.34
		PM (4)	0.11	0.02
		PM_{10} (4)	0.03	0.01
		$PM_{2.5}$ (4)	0.01	<0.01
AERO-CTE03	East Cantonment 01 Aerosol Can Spray	VOC (4)	14.61	2.46
		Exempt Solvent (4)	14.89	3.55
		PM (4)	1.01	0.18
		PM_{10} (4)	0.32	0.06
		$PM_{2.5}$ (4)	0.05	0.01
		Ammonia (4)	0.01	0.04
AERO-CTE04	East Cantonment 02 Aerosol Can Spray	VOC (4)	18.07	3.02
		Exempt Solvent (4)	18.33	4.37
		PM (4)	1.09	0.22
		PM_{10} (4)	0.34	0.07
		$PM_{2.5}$ (4)	0.06	0.01
		Ammonia (4)	0.02	0.09
AERO-CTE05	East Cantonment 03 Aerosol Can Spray	VOC (4)	28.29	4.75
		Exempt Solvent (4)	28.76	6.86
		PM (4)	1.70	0.35
		PM_{10} (4)	0.56	0.11
		$PM_{2.5}$ (4)	0.09	0.02
		Ammonia (4)	0.04	0.18

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
AERO-CTW06	West Cantonment 01 Aerosol Can Spray	VOC (4)	4.74	0.80
		Exempt Solvent (4)	4.84	1.15
		PM (4)	0.29	0.06
		PM_{10} (4)	0.09	0.02
		$PM_{2.5}$ (4)	0.02	<0.01
		Ammonia (4)	0.01	0.04
AERO-CTW07	West Cantonment 02 Aerosol Can Spray	VOC (4)	24.25	4.08
		Exempt Solvent (4)	24.69	5.89
		PM (4)	1.46	0.30
		PM_{10} (4)	0.46	0.09
		$PM_{2.5}$ (4)	0.08	0.02
		Ammonia (4)	0.03	0.13
AERO-CTW08	West Cantonment 03 Aerosol Can Spray	VOC (4)	56.83	9.55
		Exempt Solvent (4)	57.97	13.80
		PM (4)	6.56	1.11
		PM_{10} (4)	2.07	0.35
		$PM_{2.5}$ (4)	0.35	0.06
		Ammonia (4)	0.07	0.31
AERO-DOL09	DOL Aerosol Can Spray	VOC (4)	0.41	0.40
		Exempt Solvent (4)	0.02	0.01
		PM (4)	0.26	0.25
		PM_{10} (4)	0.08	0.08
		$PM_{2.5}$ (4)	0.01	0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
AERO-FHW11	Fort Hood West 02 Aerosol Can Spray	VOC (4)	2.43	3.64
		Exempt Solvent (4)	1.89	0.46
		PM (4)	0.14	0.02
		PM_{10} (4)	0.04	0.01
		$PM_{2.5}$ (4)	0.01	<0.01
AERO-DS212	DS2 Hood Army Airfield Aerosol Can Spray	VOC (4)	0.68	0.65
		Exempt Solvent (4)	0.19	0.18
		PM (4)	0.01	0.01
		PM_{10} (4)	<0.01	<0.01
		$PM_{2.5}$ (4)	<0.01	<0.01
AERO-DS213	DS2 Fort Hood West Aerosol Can Spray	VOC (4)	0.22	0.22
		Exempt Solvent (4)	0.06	0.06
		PM (4)	<0.01	<0.01
		PM_{10} (4)	<0.01	<0.01
		$PM_{2.5}$ (4)	<0.01	<0.01
AERO-DPW14	DPW East Cantonment Aerosol Can Spray	VOC (4)	0.11	0.14
		Exempt Solvent (4)	<0.01	<0.01
		PM (4)	<0.01	<0.01
		PM_{10} (4)	<0.01	<0.01
		$PM_{2.5}$ (4)	<0.01	<0.01

Emission Sources - Maximum Allowable Emission Rates

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates (7)	
			lbs/hour	TPY (6)
AERO-DPW15	DPW West Cantonment Aerosol Can Spray	VOC (4)	0.11	0.14
		Exempt Solvent (4)	<0.01	<0.01
		PM (4)	<0.01	<0.01
		PM_{10} (4)	<0.01	<0.01
		$PM_{2.5}$ (4)	<0.01	<0.01
All Emission Points at the Site	All Sources at the Site	Single HAP	---	<10.00
		All HAP	---	<25.00

(1) Emission point identification - either specific equipment designation or emission point number from plot plan.
(2) Specific point source name. For fugitive sources, use area name or fugitive source name.
(3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
ES - Exempt Solvent , those carbon compounds or mixtures of carbon compounds used as solvents which have been excluded from the definition of volatile organic compound.
PM - total particulate matter, suspended in the atmosphere, including PM_{10} and $PM_{2.5}$
PM_{10} - total particulate matter equal to or less than 10 microns in diameter, including $PM_{2.5}$
$PM_{2.5}$ - particulate matter equal to or less than 2.5 microns in diameter
NO_x - total oxides of nitrogen
CO - carbon monoxide
SO_2 - sulfur dioxide
HAP - hazardous air pollutant as listed in § 112(b) of the Federal Clean Air Act or Title 40 Code of Federal Regulations Part 63, Subpart C
(4) Fugitive emissions
(5) Emissions from natural gas combustion
(6) Compliance with annual emission limits (tons per year) is based on a 12-month rolling period.
(7) Rates include planned maintenance, startup, and shutdown emissions.

Date: February 28, 2019