

Bay Area Air Quality Management District

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**Permit Evaluation
and
Statement of Basis
for
Minor Revision of**

MAJOR FACILITY REVIEW PERMIT

**for
New United Motor Manufacturing Inc.
Facility # A1438**

Facility Address:
45500 Fremont Boulevard
Fremont, CA 94538

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July 2007

Application Engineer: Sanjeev Kamboj
Site Engineer: Sanjeev Kamboj

Application: 12215

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Title V Statement of Basis

A. Background

This facility is subject to the Operating Permit requirements of Title V of the federal Clean Air Act, Part 70 of Title 40 of the Code of Federal Regulations (CFR), and BAAQMD Regulation 2, Rule 6, Major Facility Review because it is a major facility as defined by BAAQMD Regulation 2-6-212. It is a major facility because it has the “potential to emit,” as defined by BAAQMD Regulation 2-6-218, of more than 100 tons per year of a regulated air pollutant.

Major Facility Operating permits (Title V permits) must meet specifications contained in 40 CFR Part 70 as contained in BAAQMD Regulation 2, Rule 6. The permits must contain all applicable requirements (as defined in BAAQMD Regulation 2-6-202), monitoring requirements, recordkeeping requirements, and reporting requirements. The permit holders must submit reports of all monitoring at least every six months and compliance certifications at least every year.

In the Bay Area, state and District requirements are also applicable requirements and are included in the permit. These requirements can be federally enforceable or non-federally enforceable. All applicable requirements are contained in Sections I through VI of the permit.

Each facility in the Bay Area is assigned a facility identifier that consists of a letter and a 4-digit number. This identifier is also considered to be the identifier for the permit. The identifier for this facility is A1438.

This facility received its initial Title V permit on December 18, 2002. A significant revision was issued on December 13, 2004. Section X of the permit, Revision History, has a list of these revisions in chronological order.

This application is for a minor revision to the permit. This statement of basis will include all proposed changes to the permit in strikeout/underline format. This statement of basis addresses only the proposed changes to the permit. The statements of basis for the permits issued on December 18, 2002, and December 13, 2004 contain the basis for most of the rest of the permit. This revision incorporates changes in conditions that were approved in pursuant BAAQMD Application 12176, which is attached in Appendix B.

New United Motor Manufacturing Inc. (NUMMI) submitted Application 12176 for the following permit condition changes:

- Modify Permit Condition Numbers 9158, Part 2; 9163, Part 10; and 9164, Part 2, to allow the following alternative to the destruction efficiency limits at abatement (control) devices A1007, A1008, A1009, A1015, A10022, and A10142: Total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizers shall be 10 ppm or less by volume.

These permit conditions are specific to the destruction efficiency performances of the Truck Paint thermal oxidizers. The proposed changes would specify that the thermal oxidizers used to abate emissions from NUMMI's truck line operations would be in compliance if they meet destruction efficiency requirements contained in permit conditions listed above or outlet emissions requirement of less than or equal to 10 ppm by volume of non-methane hydrocarbons. This would make the aforementioned permit conditions consistent with the permit conditions applicable to other thermal oxidizers at NUMMI. This is also a standard condition for VOC abatement devices as mentioned in the District's Model Permit Conditions Manual 4.

Outlet concentrations of 10 ppmv or less are practical limits when the inlet concentration is low. An outlet concentration limit also makes source testing easier because the concentrations can be measured after control, as opposed to before and after control when testing compliance with a destruction efficiency limit.

The proposed changes do not result in any criteria pollutants emissions increases because annual emissions for this plant would not increase due to this change in conditions.

This revision is a minor revision of the Major Facility Review permit for the following reasons:

- The change is not considered a major modification under 40 CFR Parts 51 (NSR) or 52 (PSD).
- The change is not considered a modification under 40 CFR Parts 60 (NSPS), 61 (NESHAPS), or Section 112 of the Clean Air Act (HAP).
- There is no significant change or relaxation of monitoring.
- No term is established to allow the facility to avoid an applicable requirement.
- No case-by-case determination has been made.
- No facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources has been made.
- The limits are not the incorporation of a requirement promulgated by EPA under the authority of the Clean Air Act.

B. Facility Description

NUMMI manufactures automobiles and light-duty trucks. Its major sources of air emissions are its coating operations (VOC) and natural gas combustion (NOx) for VOC control and air heating.

C. Permit Content

The legal and factual basis for the permit revision follows. The permit sections are described in the order presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities.

Changes to permit

There are no changes to Section I in this action.

II. Equipment

This section of the permit lists all permitted or significant sources. Each source is identified by an S and a number (e.g., S24).

Permitted sources are those sources that require a BAAQMD operating permit pursuant to BAAQMD Rule 2-1-302.

Significant sources are those sources that have a potential to emit of more than 2 tons of a “regulated air pollutant,” as defined in BAAQMD Rule 2-6-222, per year or 400 pounds of a “hazardous air pollutant,” as defined in BAAQMD Rule 2-6-210, per year.

All abatement (control) devices that control permitted or significant sources are listed. Each abatement device whose primary function is to reduce emissions is identified by an A and a number (e.g., A24).

The equipment section is considered to be part of the facility description. It contains information that is necessary for applicability determinations, such as fuel types, contents or sizes of tanks, etc. This information is part of the factual basis of the permit.

Each of the permitted sources has previously been issued a permit to operate pursuant to the requirements of BAAQMD Regulation 2, Permits. These permits are issued in accordance with state law and the District’s regulations. The capacities in the permitted sources table are the maximum allowable capacities for each source, pursuant to Standard Condition I.J and Regulation 2-1-403.

Changes to permit:

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1007	Truck Sealer Oven Thermal Oxidizer	S1007	BAAQMD Condition # 9158 Part 2 b & c	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); or <u>Total Non-methane Organic Hydrocarbon Outlet Concentration</u> \leq 10 ppmv

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1008	Truck Prime Booth Thermal Oxidizer	S1008	BAAQMD Condition # 9163 Part 11 b & c	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or</u> <u>Total Non-methane Organic Hydrocarbon Outlet Concentration</u> \leq 10 ppmv

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1009	Truck Prime Oven Thermal Oxidizer	S1009	BAAQMD Condition # 9158 Part 2 b & c	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); or <u>Total Non-methane Organic Hydrocarbon Outlet Concentration</u> \leq 10 ppmv

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
1015	Truck Topcoat Oven Thermal Oxidizer	S1015	BAAQMD Condition # 9158 Part 2 b & c	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or</u> <u>Total Non-</u> <u>methane</u> <u>Organic</u> <u>Hydrocarbon</u> <u>Outlet</u> <u>Concentration</u> <u>\leq 10 ppmv</u>

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
10022	Truck ED-Oven Thermal Oxidizer	S1002	BAAQMD Condition # 9158 Part 2	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or</u> <u>Total Non-</u> <u>methane</u> <u>Organic</u> <u>Hydrocarbon</u> <u>Outlet</u> <u>Concentration</u> <u>\leq 10 ppmv</u>

Table II B – Abatement Devices

A#	Description	Source(s) Controlled	Applicable Requirement	Operating Parameters	Limit or Efficiency
10142	Truck Topcoat (Clearcoat) Booth Thermal Oxidizer	S1014	BAAQMD Condition # 9164 Part 2 b & c	temperature shall be \geq 1400 °F	Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); or <u>Total Non-methane Organic Hydrocarbon Outlet Concentration</u> \leq 10 ppmv

III. Generally Applicable Requirements

This section of the permit lists requirements that generally apply to all sources at a facility including insignificant sources and portable equipment that may not require a District permit. If a generally applicable requirement applies specifically to a source that is permitted or significant, the standard will also appear in Section IV and the monitoring for that requirement will appear in Sections IV and VII of the permit. Parts of this section apply to all facilities (e.g., particulate, architectural coating, odorous substance, and sandblasting standards). In addition, standards that apply to insignificant or unpermitted sources at a facility (e.g., refrigeration units that use more than 50 pounds of an ozone-depleting compound) are placed in this section.

Unpermitted sources are exempt from normal District permits pursuant to an exemption in BAAQMD Regulation 2, Rule 1. They may, however, be specifically described in a Title V permit if they are considered significant sources pursuant to the definition in BAAQMD Rule 2-6-239.

Changes to permit

No changes to this section are proposed in this action.

IV. Source-Specific Applicable Requirements

This section of the permit lists the applicable requirements that apply to permitted or significant sources. These applicable requirements are contained in tables that pertain to one or more sources that have the same requirements. The order of the requirements is:

- District Rules
- SIP Rules (if any) are listed following the corresponding District rules. SIP rules are District rules that have been approved by EPA for inclusion in the California State Implementation Plan. SIP rules are “federally enforceable” and a “Y” (yes) indication will appear in the “Federally Enforceable” column. If the SIP rule is the current District rule, separate citation of the SIP rule is not necessary and the “Federally Enforceable” column will have a “Y” for “yes”. If the SIP rule is not the current District rule, the SIP rule or the necessary portion of the SIP rule is cited separately after the District rule. The SIP portion will be federally enforceable; the non-SIP version will not be federally enforceable, unless EPA has approved it through another program.
- Other District requirements, such as the Manual of Procedures, as appropriate.
- Federal requirements (other than SIP provisions)
- BAAQMD permit conditions. The text of BAAQMD permit conditions is found in Section VI of the permit.
- Federal permit conditions. The text of Federal permit conditions, if any, is found in Section VI of the permit.

Section IV of the permit contains citations to all of the applicable requirements. The text of the requirements is found in the regulations, which are readily available on the District’s or EPA’s websites, or in the permit conditions, which are found in Section VI of the permit. All monitoring requirements are cited in Section IV. Section VII is a cross-reference between the limits and monitoring requirements. A discussion of monitoring is included in Section C.VII of this permit evaluation/statement of basis.

Changes to permit:

Tables IV-AB, IV-AF, IV-AG, IV-AH, IV-AK and IV-AL

BAAQMD permit condition numbers 9158, Part 2; 9163, Part 10; and 9164, Part 2, were modified to allow the following alternative requirement to the destruction efficiency at abatement (control) devices for truck line sources S1002, S1007, S1008, S1009, S1014 and S1015: Total non-methane organic hydrocarbon concentration requirement.

Table IV - AB
Source-specific Applicable Requirements
S1002 – TRUCK ED OVEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9158			
Part 1	Abatement Requirement (basis: BACT)	Y	
Part 2	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement (basis: BACT)</u>	Y	
Part 3	Continuous Temperature Monitor (basis: BACT)	Y	
Part 4	Annual Source Test Requirement (basis: BACT)	Y	
Part 5	Records (basis: BACT)	Y	
Part 6	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 7	NOx Limit (basis: Cumulative Increase)	Y	
Part 8	VOC Emission Limit (basis: Cumulative Increase)	Y	
Part 9	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 10	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 11	Revision of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 12	Abatement Equipment Operation Requirement (basis: Cumulative Increase)	Y	
1-523.1	Parametric monitor periods of inoperation	Y	

Table IV – AF
Source-specific Applicable Requirements
S1007 – TRUCK SEALER OVEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9158			
Part 1	Abatement Requirement (basis: BACT)	Y	
Part 2	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement (basis: BACT)</u>	Y	
Part 3	Continuous Temperature Monitor (basis: BACT)	Y	
Part 4	Annual Source Test Requirement (basis: BACT)	Y	
Part 5	Records (basis: BACT)	Y	
Part 6	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 7	NOx Limit (basis: Cumulative Increase)	Y	
Part 8	VOC Emission Limit (basis: Cumulative Increase)	Y	

Table IV – AF
Source-specific Applicable Requirements
S1007 – TRUCK SEALER OVEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 9	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 10	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 11	Revision of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 12	Abatement Equipment Operation Requirement (basis: Cumulative Increase)	Y	

Table IV - AG
Source-specific Applicable Requirements
S1008 – TRUCK PRIME BOOTH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9163			
Part 1	VOC Content Limitation (basis: BACT, Cumulative Increase)	Y	
Part 2	Usage Limit (basis: Cumulative Increase)	Y	
Part 3	Monthly Records (basis: Cumulative Increase)	Y	
Part 4	Spray Equipment Limitations (basis: BACT)	Y	
Part 5	VOC Emission Limit (basis: Cumulative Increase)	Y	
Part 6	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 7	NOx Limit (basis: Cumulative Increase)	Y	
Part 8	Particulate Abatement Requirement (basis: Cumulative Increase)	Y	
Part 9	Abatement Requirement (basis: BACT)	Y	
Part 10	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement (basis: BACT)</u>	Y	
Part 11	Continuous Temperature Monitoring (basis: BACT, Regulation 1-523)	Y	
Part 12	Activated Carbon System Requirements (basis: BACT)	Y	
Part 13	Annual Source Testing Requirement (basis: BACT)	Y	
Part 14	Maintenance of Abatement Equipment (basis: Cumulative Increase)	Y	
Part 15	Records (basis: Cumulative Increase)	Y	
Part 16	Minimization of Solvents (basis: BACT)	Y	
Part 17	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 18	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	

Table IV - AG
Source-specific Applicable Requirements
S1008 – TRUCK PRIME BOOTH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 19	Revision of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 22	Abatement Operating Requirements (basis: BACT)	Y	

Table IV - AH
Source-specific Applicable Requirements
S1009 – TRUCK PRIMER OVEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9158			
Part 1	Abatement Requirement (basis: BACT)	Y	
Part 2	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement</u> (basis: BACT)	Y	
Part 3	Continuous Temperature Monitor (basis: BACT)	Y	
Part 4	Annual Source Test Requirement (basis: BACT)	Y	
Part 5	Records (basis: BACT)	Y	
Part 6	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 7	NOx Limit (basis: Cumulative Increase)	Y	
Part 8	VOC Emission Limit (basis: Cumulative Increase)	Y	
Part 9	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 10	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 11	Revision of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 12	Abatement Equipment Operation Requirement (basis: Cumulative Increase)	Y	

Table IV - AK
Source-specific Applicable Requirements
S1014 – TRUCK TOPCOAT BOOTH

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9164			
Part 1	Abatement Requirement (basis: BACT)	Y	
Part 2	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement (basis: BACT)</u>	Y	
Part 3	Continuous Temperature Monitor (basis: BACT)	Y	
Part 4	VOC Reduction Efficiency Requirement (basis: BACT)	Y	
Part 5	Annual Source Test Requirement (basis: BACT)	Y	
Part 6	Proper Maintenance (basis: Cumulative Increase)	Y	
Part 7	Records (basis: BACT)	Y	
Part 8	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 9	NOx Emissions Limit (basis: Cumulative Increase)	Y	
Part 10	Minimization of Clean-up Solvent (basis: BACT)	Y	
Part 11	Minimization of Purge Solvent (basis: BACT)	Y	
Part 12	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 13	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 14	Abatement During Production and Cleanup (basis: BACT)	Y	
Part 15	VOC Content Limitation (basis: BACT, Cumulative Increase)	Y	
Part 16	Usage Limit (basis: Cumulative Increase)	Y	
Part 17	Monthly Records (basis: Cumulative Increase)	Y	
Part 18	Spray Equipment Limitations (basis: BACT)	Y	
Part 19	VOC Emission Limit (basis: Cumulative Increase)	Y	
Part 20	Particulate Abatement Requirement (basis: Cumulative Increase)	Y	

Table IV - AL
Source-specific Applicable Requirements
S1015 – TRUCK TOPCOAT OVEN

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
BAAQMD Condition # 9158			
Part 1	Abatement Requirement (basis: BACT)	Y	
Part 2	<u>Destruction Efficiency or Total Non-methane Organic Hydrocarbon Concentration Requirement (basis: BACT)</u>	Y	

**Table IV - AL
 Source-specific Applicable Requirements
 S1015 – TRUCK TOPCOAT OVEN**

Applicable Requirement	Regulation Title or Description of Requirement	Federally Enforceable (Y/N)	Future Effective Date
Part 3	Continuous Temperature Monitor (basis: BACT)	Y	
Part 4	Annual Source Test Requirement (basis: BACT)	Y	
Part 5	Records (basis: BACT)	Y	
Part 6	Fuel Limitations (basis: Cumulative Increase)	Y	
Part 7	NOx Limit (basis: Cumulative Increase)	Y	
Part 8	VOC Emission Limit (basis: Cumulative Increase)	Y	
Part 9	Allowable Temperature Excursion (basis: Cumulative Increase)	Y	
Part 10	Recording of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 11	Revision of Allowable Temperature Excursions (basis: Cumulative Increase)	Y	
Part 12	Abatement Equipment Operation Requirement (basis: Cumulative Increase)	Y	

V. Schedule of Compliance

A schedule of compliance is required in all Title V permits pursuant to BAAQMD Regulation 2-6-409.10 which provides that a major facility review permit shall contain the following information and provisions:

“409.10 A schedule of compliance containing the following elements:

- 10.1 A statement that the facility shall continue to comply with all applicable requirements with which it is currently in compliance;
- 10.2 A statement that the facility shall meet all applicable requirements on a timely basis as requirements become effective during the permit term; and
- 10.3 If the facility is out of compliance with an applicable requirement at the time of issuance, revision, or reopening, the schedule of compliance shall contain a plan by which the facility will achieve compliance. The plan shall contain deadlines for each item in the plan. The schedule of compliance shall also contain a requirement for submission of progress reports by the facility at least every six months. The progress reports shall contain the dates by which each item in the plan was achieved and an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.”

Since the District has not determined that the facility is out of compliance with an applicable requirement, the schedule of compliance for this permit contains only sections 2-6-409.10.1 and 2-6-409.10.2.

Changes to permit:

There are no changes to Section V in this action.

VI. Permit Conditions

The Major Facility Review permit contains conditions that are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). Permit conditions may also be imposed or revised as part of the annual review of the facility by the District pursuant to

California Health and Safety Code (H&SC) § 42301(e), through a variance pursuant to H&SC § 42350 et seq., an order of abatement pursuant to H&SC § 42450 et seq., or as an administrative revision initiated by District staff. After issuance of the Title V permit, permit conditions will be revised using the procedures in Regulation 2, Rule 6, Major Facility Review.

When necessary to meet Title V requirements, additional monitoring, recordkeeping, or reporting has been added to the permit.

Each permit condition is identified with a unique numerical identifier, up to five digits.

All changes to existing permit conditions that are proposed in this action are clearly shown in “strike-out/underline” format in the proposed permit. When the permit is issued, all ‘strike-out’ language will be deleted and all “underline” language will be retained, subject to consideration of comments received.

Changes to permit:

Condition # 9158

For S1002, TRUCK ED OVEN
S1007, TRUCK SEALER OVEN,
S1009, TRUCK PRIME OVEN, AND
S1015, TRUCK TOPCOAT OVEN:

1. VOC emissions from the oven and cooling tunnel shall be abated by thermal oxidation (A10022, A1007, A1009, A1015).
 - a. The net mass emissions of POC shall be determined for the sources listed above with their respective coating sources combined. To determine the net mass emissions, the following shall be calculated and/or measured:
 - b. POC emissions on a pounds per unit basis [A] shall be determined by multiplying the annual coating usage with the POC content and dividing by the annual production rate.
 - c. Measured POC emissions to each Thermal Oxidizer (averaged, using the data obtained from the 3 most recent source tests) shall be determined using District approved source testing methods [B].
 - d. Measured POC emissions from each oven Thermal Oxidizer (averaged, using the data obtained from the 3 most recent source tests) shall be determined using District approved source testing methods[C].
 - e. [B] and [C] shall each be divided by the production rate measured during the source test to yield a pounds per unit basis. [B] and [C] shall be each multiplied by the annualized units per hour and divided by the source test measured units per hour rate.

- f. The net mass emissions shall be calculated by subtracting the measured POC emissions from the inlet from the calculated POC emissions and adding the measured POC emissions from the outlet [A-B+C].
 - g. The determined value [A-B+C] shall be multiplied by the actual annual reduction rate.
 - h. Within 60 days of the source test, a report shall be provided to the District. This 60-day period may be extended to 90 days, if NUMMI can demonstrate to the satisfaction of the APCO that the additional time is required. If the source test indicates any violation of the permit conditions (total mass emission greater than emission limits for coating line (booth(s) and oven(s) combined), NUMMI shall report such violation to the Director of Enforcement within 10 days of determining that a violation has occurred. (basis: BACT; Manual of Procedures, Volume II, Part 3, Section 4.7)
2. The thermal oxidizers (A10022, A1007, A1009, A1015) shall achieve the following:
 - a. The minimum oxidizer operating temperature shall be 1400 degree F, regardless of inlet concentration.
 - b. At oxidizer inlet, VOC concentrations greater 1200 ppm as C1, the minimum oxidizer destruction efficiency shall be 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.
 - c. At oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.
(basis: BACT)
3. The thermal oxidizer firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523.
4. The thermal oxidizers (A10022, A1007, A1009, A1015) shall be source tested once per calendar year to verify compliance with Parts 1 and 2 of Condition 9158 and maintained according to manufacturer's specifications. Records of the source test results shall be kept for a period of five years following the date of entry. (basis: Cumulative Increase)
 - a. Each of the Truck Line Oven thermal oxidizers (A10022, A1007, A1009, A1015) shall be source tested for NOx and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold

dictated in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the District within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use an 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate method. (basis: Cumulative Increase)

5. All records required in Parts 3 and 4 of Condition 9158 shall be kept and made available for District Inspection for a period of five years following the date of entry. (basis: Cumulative Increase)
6. Only natural gas, propane, LPG, or butane shall be used as a fuel for these sources. (basis: Cumulative Increase)
7. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperature is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)

8. The VOC emissions from these sources shall not exceed any of the:

Source		tons/month	tons/year
S1002	Truck ED Oven	0.33	3.21
S1007	Truck Sealer Oven	1.31	12.56
S1009	Truck Prime Oven	0.53	5.09
S1015	Topcoat Oven	0.69	6.59

(basis: Cumulative Increase)

9. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:
 - a. A temperature excursion no more than 20 degrees F below the requirement; or
 - b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or
 - c. A temperature excursion longer than 15 minutes but shorter than 3 hours in duration, provided that all of the following are satisfied:
 - i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;

- ii. There are no more than 2 excursions per abatement device per month; and
 - iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)
10. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met, including the following:
- a. Starting date and time and the duration of each Allowable Temperature Excursion;
 - b. Minimum temperature during each Allowable Temperature Excursion;
 - c. Number of Allowable Temperature Excursions (>15 minutes) per abatement device per month;
 - d. Total number of Allowable Temperature Excursions (>15 minutes) for the entire facility per month.

A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions. (basis: Cumulative Increase)

11. The District may revise or revoke Parts 9 and 10 of Condition 9158 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)
12. Abatement equipment must be operating during periods of truck line production and during clean-up operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

Condition # 9163

For S1008, TRUCK PRIME BOOTH:

1. The VOC content of each coating shall not exceed the following:

Coating	lbs VOC/gal
Primer	4.08
Int. Color	4.46
Others-Repair	4.63
Soft-Chip	7.09

(basis: BACT, Cumulative Increase)

2. The coating usage rate for this booth shall not exceed any of the following limits:

Coating	gal/yr	gal/mo
Primer	62,129	6,461
Int. Color	26,973	2,805
Others-Repair	233	24
Soft-Chip	9,908	1,030

One or more of these usages may increase above the specified limits if there is a corresponding usage decrease for one or more of the coatings, based on controlled emissions, so that total emissions for this source do not exceed the limit specified in Part 5 of Condition # 9163. (basis: Cumulative Increase)

3. Monthly usage records for each of the coatings shall be kept. Monthly records shall be totaled for each consecutive 12-month period. The records shall be kept and made available for District inspection for a period of five years from the date of entry. (basis: Cumulative Increase)
4. Only High-Volume-Low Pressure (HVLP), electrostatic, and/or APCO approved application equipment with equivalent or higher transfer efficiency shall be used to apply coatings. Air-atomized spray equipment may be used to apply Repair, Blackout, and Soft-Chip coatings. (basis: BACT)
5. The VOC emissions from this source shall not exceed either of the following:

11.01	tons/month
105.9	tons/year

(basis: Cumulative Increase)
- *6. Only natural gas, propane, LPG, or butane shall be used as a fuel for this source. (basis: Regulation 2-1-103)
7. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperatures is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)
8. Particulate emissions from this source shall be abated by 98%. (basis: BACT)
9. All VOC emissions from the soft-chip, automatic, flash off and setting zones in the booth shall be controlled by the activated carbon system (A10082) and the thermal oxidizer (A1008) required for the booth (S1008). This includes VOC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)
10. The thermal oxidizer shall achieve the following level of control:
 - a. The minimum oxidizer operating temperature shall be 1400 degrees F, regardless of inlet concentration.
 - b. When oxidizer inlet VOC concentrations are greater than 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall be 98.5% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.

- c. When oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98.5% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume. (basis: BACT)
11. The thermal oxidizer (A1008) firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523. (basis: BACT, Regulation 1-523)
 12. The VOC reduction efficiency of the activated carbon system (A10082) shall be at least 90% by weight. (basis: BACT)
 13. The activated carbon system (A10082) and the thermal oxidizer (A1008) shall be source tested once per calendar year to verify compliance with Parts 10 and 12 of Condition 9163. Each of the Truck Line thermal oxidizers shall be source tested for NO_x and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the APCO within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate method. (basis: BACT)
 14. The activated carbon system (A10082) and the thermal oxidizer (A1008) shall be maintained according to the manufacturer's specifications. (basis: Cumulative Increase)
 15. All records required in Parts 11 and 13 of Condition 9161 shall be kept and made available for District Inspection for a period of five years following the date of entry. (basis: Cumulative Increase)
 16. To minimize the amount of clean-up solvent used in the booth, NUMMI shall:
 - a. Provide a paper, plastic lining, or protective removable coating for the walls and fixtures of the booth, except over doors and windows.
 - b. Cover all robots, where practical.

- c. Replace the paper/plastic lining, or protective removable coating on an as needed basis. (basis: BACT)
17. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:
 - a. A temperature excursion not exceeding 20 degrees F below the requirement; or
 - b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or
 - c. A temperature excursion greater than 15 minutes but less than 3 hours in duration, provided that all of the following are satisfied:
 - i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;
 - ii. There are no more than 2 excursions per abatement device per month; and
 - iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

18. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met including but not limited to the following:
 - a. Starting date and time and the duration of each Allowable Temperature Excursion;
 - b. Minimum temperature during each Allowable Temperature Excursion;
 - c. Number of Allowable Temperature Excursions (>15 minutes) per abatement device per month;
 - d. Total number of Allowable Temperature Excursions (> 15 minutes) for the entire facility per month.

A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions. (basis: Cumulative Increase)

19. The District may revise or revoke Parts 17 and 18 of Condition 9161 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)
20. Abatement equipment must be operated during periods of truck line production and during cleanup operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

Condition # 9164

For S1014, TRUCK TOPCOAT BOOTH I:

1. All VOC emissions from the automatic, flash off and setting zones of the booth shall be controlled by the activated carbon system (A10144) and the thermal oxidizer (A10142) required for the Truck Topcoat Booth (S1014). This includes VOC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)
2. The thermal oxidizer shall achieve the following level of control:
 - a. The minimum thermal oxidizer operating temperature shall be 1400 degrees F, regardless of inlet concentration.
 - b. At thermal oxidizer inlet VOC concentrations greater 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall be 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.
 - c. At thermal oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume. (basis: BACT)
3. The thermal oxidizer firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications.
 - a. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523. (basis: BACT, Regulation 1-523)
4. The VOC reduction efficiency of the rotary drum carbon beds shall be at least 90% by weight. (basis: BACT, Cumulative Increase)
5. The activated carbon system (A10144) and the thermal oxidizer (A10142) shall be source tested once per calendar year to verify compliance with Parts 1, 2 and 4 of Condition 9164. Records of the source test results and maintenance schedule shall be kept for a period of five years following the date of entry.
 - a. Each of the Truck Line thermal oxidizers shall be source tested for NO_x and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold dictated in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in

Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the APCO within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use an 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate representation. (basis: BACT)

6. The activated carbon system (A10144) and the thermal oxidizer (A10142) shall be maintained in accordance with manufacturer's specifications. (basis: Cumulative Increase)
7. All records required in Parts 3 and 5 of Condition 9164 shall be kept and made available for District Inspection for a period of five years following the date of entry. (basis: BACT)
8. Only natural gas, propane or butane shall be used as a fuel for this source. (basis: Cumulative Increase)
9. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperature is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)
10. To minimize the amount of clean-up solvent used in the booth, NUMMI shall:
 - a. Provide a paper, plastic lining, or a protective removable coating for the walls and fixtures of the booth, except over doors and windows.
 - b. Cover all robots, where practical.
 - c. replace the paper/plastic lining, or protective removable coating on an as needed basis. (basis: BACT)
11. To minimize the amount of purge solvent used in S1014 Topcoat Booths I, NUMMI shall coat at least 2 vehicles between purge cycles for the two most popular colors. (basis: BACT)
12. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:
 - a. A temperature excursion not exceeding 20 degrees F below the requirement; or
 - b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or
 - c. A temperature excursion greater than 15 minutes but less than 3 hours in duration, provided that all of the following are satisfied:
 - i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;

- ii. There are no more than 2 excursions per abatement device per calendar month; and
 - iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

13. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met including but not limited to the following:
 - a. Starting date and time, and the duration of each Allowable Temperature Excursion;
 - b. Minimum temperature during each Allowable Temperature Excursion;
 - c. Number of Allowable Temperature Excursions (>15 minutes) per abatement device per month;
 - d. Total number of Allowable Temperature Excursions (>15 minutes) for the entire facility per month. A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions.
(basis: Cumulative Increase)

14. Abatement equipment must be operating during periods of truck line production and during clean-up operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

15. The VOC content of each coating shall not exceed the following:

Coating	lbs VOC/gal
Solids	3.54
Base Coat	4.79
Clear Coat	4.12
Other-Repair	4.63

(basis: Cumulative Increase)

16. The coating usage rate for this booth shall not exceed any of the following ~~limits~~:

Coating	gal/yr	gal/mon
Solids	26,927	2,800
Base Coat	53,211	5,534
Clear Coat	70,094	7,290
Others-Repair	349	36

One or more of these coating usages may increase above the specified usage limit provided there is a corresponding decrease for one or more of the coatings, based on controlled emissions so that total emissions for this source are not exceeded.
(basis: Cumulative Increase)

17. Monthly usage records for each of the coatings shall be kept. The records shall be kept and made available for District inspection for a period of five years from the date of entry. (basis: Cumulative Increase)

18. Only High-Volume-Low Pressure (HVLP), electrostatic, and/or APCO approved application equipment with equivalent or higher transfer efficiency shall be used to apply coatings. Air-atomized spray equipment may be used to apply Repair, Blackout, and Soft-Chip coatings. (basis: Cumulative Increase)

19. The VOC emissions from this source shall not exceed either of the following:

13.60 tons/month
 130.76 tons/year

(basis: Cumulative Increase)

20. Particulate emissions from this source shall be abated by 98%. (basis: BACT)

VII. Applicable Limits and Compliance Monitoring Requirements

This section of the permit is a summary of numerical limits and related monitoring requirements for each source. The summary includes a citation for each monitoring requirement, frequency of monitoring, and type of monitoring. The applicable requirements for monitoring are completely contained in Sections IV, Source-Specific Applicable Requirements, and VI, Permit Conditions, of the permit.

Changes to permit:

The option of compliance with either destruction efficiency requirements or outlet emissions of less than or equal to 10 ppm by volume of non-methane hydrocarbons has been added to the Section VII tables for truck line operations thermal oxidizers.

**Table VII - AC
 Applicable Limits and Compliance Monitoring Requirements
 S1002 – TRUCK ED OVEN**

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
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Table VII - AC
Applicable Limits and Compliance Monitoring Requirements
S1002 – TRUCK ED OVEN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9158 Part 2 b and c	Y		Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency $>$ 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or Total Non-methane Organic Hydrocarbon Outlet Concentration $<$ 10 ppmv</u>	BAAQMD Condition # 9158 Part 4	P/A	Source Test

Table VII - AG
Applicable Limits and Compliance Monitoring Requirements
S1007 – TRUCK SEALER OVEN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9158 Part 2 b & c	Y		Destruction Efficiency \geq 98%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency $>$ 95-98%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or Total Non-methane Organic Hydrocarbon Outlet Concentration $<$ 10 ppmv</u>	BAAQMD Condition # 9158 Part 4	P/A	Source Test

Table VII - AH
Applicable Limits and Compliance Monitoring Requirements
S1008 – TRUCK PRIME BOOTH

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9163 Part 10 b & c	Y		Destruction Efficiency of Thermal Oxidizers \geq 98.5%, if VOC concentration \geq 1200 ppm as C1; or Destruction Efficiency $>$ 95-98.5%, if VOC concentration \geq 500 ppm and \leq 1200 ppm (linearly); <u>or Total Non-methane Organic Hydrocarbon Outlet Concentration $<$ 10 ppmv</u>	BAAQMD Condition # 9163 Part 14	P/A	Source Test

Table VII – AI
Applicable Limits and Compliance Monitoring Requirements
S1009 – TRUCK PRIME OVEN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9158 Part 2 b and c	Y		Destruction Efficiency \geq 98% wt, if inlet VOC \geq 1200 ppm as C1; or Destruction Efficiency \geq 95-98% wt, if inlet VOC \geq 500-1200 ppm as C1; <u>or Total Non-methane Organic Hydrocarbon Outlet Concentration $<$ 10 ppmv</u>	BAAQMD Condition # 9158 Part 4	P/A	Source Test

Table VII - AL
Applicable Limits and Compliance Monitoring Requirements
S1014 – TRUCK TOPCOAT BOOTH

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9164 Part 2 b & c	Y		Destruction Efficiency \geq 98% wt, if inlet VOC \geq 1200 ppm as C1; or Destruction Efficiency \geq 95-98% wt, if inlet VOC \geq 500-1200 ppm as C1; <u>or</u> <u>Total Non-methane Organic Hydrocarbon Outlet Concentration < 10 ppmv</u>	BAAQMD Condition # 9164 Part 5	P/A	Source Test

Table VII – AM
Applicable Limits and Compliance Monitoring Requirements
S1015 – TRUCK TOPCOAT OVEN

Type of Limit	Citation of Limit	FE Y/N	Future Effective Date	Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type
	BAAQMD Condition # 9158 Part 2 b and c	Y		Destruction Efficiency \geq 98% wt, if inlet VOC \geq 1200 ppm as C1; or Destruction Efficiency \geq 95-98% wt, if inlet VOC \geq 500-1200 ppm as C1; <u>or</u> <u>Total Non-methane Organic Hydrocarbon Outlet Concentration < 10 ppmv</u>	BAAQMD Condition # 9158 Part 4	P/A	Source Test

VIII. Test Methods

This section of the permit lists test methods that are associated with standards in District or other rules. It is included only for reference. In most cases, the test methods in the rules are source test methods that can be used to determine compliance but are not required on an ongoing basis. They are not applicable requirements.

If a rule or permit condition requires ongoing testing, the requirement will also appear in Section IV of the permit.

Changes to permit

No changes are proposed to this section in this action.

IX. Permit Shield:

Changes to permit:

This action proposes no changes to permit shields.

X. Revision History

The revision history will be updated when the revision is issued.

XI. Glossary

Changes to permit:

This action proposes no changes to the glossary.

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

APPENDIX A
GLOSSARY

ARB

Air Resources Board

BAAQMD

Bay Area Air Quality Management District

BACT

Best Available Control Technology

Basis

The underlying authority that allows the District to impose requirements.

CAA

The federal Clean Air Act

CAAQS

California Ambient Air Quality Standards

CEM

Continuous Emission Monitor

CEQA

California Environmental Quality Act

CFR

The Code of Federal Regulations. 40 CFR contains the implementing regulations for federal environmental statutes such as the Clean Air Act. Parts 50-99 of 40 CFR contain the requirements for air pollution programs.

CO

Carbon Monoxide

Cumulative Increase

The sum of permitted emissions from each new or modified source since a specified date pursuant to BAAQMD Rule 2-1-403, Permit Conditions (as amended by the District Board on 7/17/91) and SIP Rule 2-1-403, Permit Conditions (as approved by EPA on 6/23/95). Cumulative increase is used to determine whether threshold-based requirements are triggered.

District

The Bay Area Air Quality Management District

dscf

Dry Standard Cubic Feet

EPA

The federal Environmental Protection Agency.

Federally Enforceable, FE

All limitations and conditions which are enforceable by the Administrator of the EPA including those requirements developed pursuant to 40 CFR Part 51, subpart I (NSR), Part 52.21 (PSD), Part 60 (NSPS), Part 61 (NESHAPs), Part 63 (MACT), and Part 72 (Permits Regulation, Acid Rain), including limitations and conditions contained in operating permits issued under an EPA approved program that has been incorporated into the SIP.

FP

Filterable Particulate as measured by BAAQMD Method ST-15, Particulate.

MOP

The District's Manual of Procedures.

NAAQS

National Ambient Air Quality Standards

NESHAPS

National Emission Standards for Hazardous Air Pollutants. See in 40 CFR Parts 61 and 63.

NH3

Ammonia

NOx

Oxides of nitrogen.

NSPS

Standards of Performance for New Stationary Sources. Federal standards for emissions from new stationary sources. Mandated by Title I, Section 111 of the Federal Clean Air Act, and implemented by 40 CFR Part 60 and District Regulation 10.

NSR

New Source Review. A federal program for pre-construction review and permitting of new and modified sources of pollutants for which criteria have been established in accordance with Section 108 of the Federal Clean Air Act. Mandated by Title I of the Federal Clean Air Act and implemented by 40 CFR Parts 51 and 52 and District Regulation 2, Rule 2. (Note: There are additional NSR requirements mandated by the California Clean Air Act.)

Offset Requirement

A New Source Review requirement to provide federally enforceable emission offsets for the emissions from a new or modified source. Applies to emissions of POC, NOx, PM10, and SO2.

POC

Precursor Organic Compounds

PM

Particulate Matter

PM10

Particulate matter with aerodynamic equivalent diameter of less than or equal to 10 microns

PSD

Prevention of Significant Deterioration. A federal program for permitting new and modified sources of those air pollutants for which the District is classified "attainment" of the National Air Ambient Quality Standards. Mandated by Title I of the Act and implemented by both 40 CFR Part 52 and District Regulation 2, Rule 2.

SCR

Selective Catalytic Reduction

SIP

State Implementation Plan. State and District programs and regulations approved by EPA and developed in order to attain the National Air Ambient Quality Standards. Mandated by Title I of the Act.

SO2

Sulfur dioxide

Title V

Title V of the federal Clean Air Act. Requires a federally enforceable operating permit program for major and certain other facilities.

TRMP

Toxic Risk Management Plan

VOC

Volatile Organic Compounds

Units of Measure:

bhp	=	brake-horsepower
btu	=	British Thermal Unit
cfm	=	cubic feet per minute
g	=	grams

Permit Evaluation and Statement of Basis: Site A1438, NUMMI, 45500 Fremont Boulevard, Fremont, CA, 94538
Application 12215

gal	=	gallon
gpm	=	gallons per minute
hp	=	horsepower
hr	=	hour
lb	=	pound
in	=	inches
max	=	maximum
m ²	=	square meter
min	=	minute
mm	=	million
MMbtu	=	million btu
MMcf	=	million cubic feet
ppmv	=	parts per million, by volume
ppmw	=	parts per million, by weight
psia	=	pounds per square inch, absolute
psig	=	pounds per square inch, gauge
scfm	=	standard cubic feet per minute
yr	=	year

Permit Evaluation and Statement of Basis: Site A1438, NUMMI, 45500 Fremont Boulevard, Fremont, CA, 94538
Application 12215

APPENDIX B
BAAQMD ENGINEERING EVALUATION REPORT

ENGINEERING EVALUATION

New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 12176

1.0 BACKGROUND

New United Motor Manufacturing Inc. (NUMMI) submitted this application to request the following permit condition changes:

- **Modify Permit Condition Numbers 9158 Part 2, 9163 Part 10 and 9164 Part 2 to include the following: Total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizers shall be 10 ppm or less by volume.**

Condition Number 9158 applies to S1002 (Truck Ed Oven), S1007 (Truck Sealer Oven), S1009 (Truck Prime Oven) and S1015 (Truck Topcoat Oven). Condition Number 9163 applies to S1008 (Truck Prime Booth). Condition Number 9164 applies to S1014 (Truck Topcoat Booth).

These permit conditions are specific to the destruction efficiency performances of the Truck Paint thermal oxidizers. The oxidizers affected by this change are A10022, which is abating S1002; A1007, which is abating S1007; A1008, which is abating S1008; A1009, which is abating S1009; A10142, which is abating S1014; and A1015, which is abating S1015.

The proposed changes would specify that the thermal oxidizers used to abate emissions from NUMMI's truck line operations would be in compliance in the event the outlet emissions from the thermal oxidizers are less than or equal to 10 ppm by volume of non-methane hydrocarbons. This would make the aforementioned permit conditions consistent with the permit conditions applicable to other thermal oxidizers at NUMMI (i.e., for example Condition Number 10578, Part 8, and Condition Number 10320, Part 20, have similar conditions for different thermal oxidizers). This is also a standard condition for VOC abatement devices as mentioned in the District's Model Permit Conditions Manual 4.

2.0 EMISSIONS SUMMARY

There is no increase in emissions because all the affected sources mentioned in the Background Section, will continue to be subject to the same annual emissions and throughput limits contained in the existing permit conditions. The NMOC destruction efficiencies in NUMMI's existing conditions are based on BACT. Adding the 10 ppmv limit to the conditions will not increase emissions because 10 ppmv NMOC is considered a background level of NMOC.

2.1 Plant Cumulative Increase

The cumulative emission increase is zero for all the criteria pollutants because annual emissions for this plant are not increasing due to this application.

2.2 Best Available Control Technology

In accordance with Regulation 2, Rule 2, Section 301, a source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NO_x, CO, SO₂ or PM₁₀ must use BACT. For

this application, BACT is not triggered because proposed changes will not result in an increase in any emissions.

2.3 Offsets

Offsets must be provided for any new or modified source at a facility that emits more than 10 tons/yr of POC or NOx. The District may provide offsets from the Small Facility Banking Account for a facility with emissions between 10 and 35 tons/yr of POC or NOx, provided that the facility has no available offsets. Since there is no increase in emissions at this plant as mentioned in Section 2 above, offsets are not required for this application.

3.0 STATEMENTS OF COMPLIANCE

Sources mentioned in this application will continue to comply with all the applicable regulations.

The project is considered to be ministerial under the District's CEQA regulation 2-1-311 and therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard permit conditions and standard emission factors as outlined in the District Permit Handbook Chapter 5.8.

This facility is over 1,000 feet from the nearest school and therefore is not subject to the public notification requirements of Regulation 2-1-412.

A Toxic Risk Screening Analysis is not required because there are no emission increases for this application.

NUMMI's existing Title V permit and Statement of Basis will be revised to include this change. These changes will be handled in Title V Minor Revision Application Number 12215 that is currently being processed by the District.

PSD, NSPS, and NESHAPS do not apply.

4.0 PERMIT CONDITIONS

(i) *Modifications to Condition Number 9158*

COND# 9158 -----

For S1002, TRUCK ED OVEN
S1007, TRUCK SEALER OVEN,
S1009, TRUCK PRIME OVEN, AND
S1015, TRUCK TOPCOAT OVEN:

1. VOC emissions from the oven and cooling tunnel shall be abated by thermal oxidation (A10022, A1007, A1009, A1015).

- a. The net mass emissions of POC shall be determined for the sources listed above with their respective coating sources combined. To determine the net mass emissions, the following shall be calculated and/or measured:
- b. POC emissions on a pounds per unit basis [A] shall be determined by multiplying the annual coating usage with the POC content and dividing by the annual production rate.
- c. Measured POC emissions to each Thermal Oxidizer (averaged, using the data obtained from the 3 most recent source tests) shall be determined using District approved source testing methods [B].
- d. Measured POC emissions from each oven Thermal Oxidizer (averaged, using the data obtained from the 3 most recent source tests) shall be determined using District approved source testing methods [C].
- e. [B] and [C] shall each be divided by the production rate measured during the source test to yield a pounds per unit basis. [B] and [C] shall be each multiplied by the annualized units per hour and divided by the source test measured units per hour rate.
- f. The net mass emissions shall be calculated by subtracting the measured POC emissions from the inlet from the calculated POC emissions and adding the measured POC emissions from the outlet [A-B+C].
- g. The determined value [A-B+C] shall be multiplied by the actual annual reduction rate.
- h. Within 60 days of the source test, a report shall be provided to the District. This 60-day period may be extended to 90 days, if NUMMI can demonstrate to the satisfaction of the APCO that the additional time is required. If the source test indicates any violation of the permit conditions (total mass emission greater than emission limits for coating line (booth(s) and oven(s) combined), NUMMI shall report such violation to the Director of Enforcement within 10 days of determining that a violation has occurred. (basis: BACT; Manual of Procedures, Volume II, Part 3, Section 4.7)

2. The thermal oxidizers (A10022, A1007, A1009, A1015) shall achieve the following:

- a. The minimum oxidizer operating temperature shall be 1400 degree F, regardless of inlet concentration.
- b. At oxidizer inlet, VOC concentrations greater 1200

ppm as C1, the minimum oxidizer destruction efficiency shall be 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.

c. At oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.

(basis: BACT)

3. The thermal oxidizer firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523.

4. The thermal oxidizers (A10022, A1007, A1009, A1015) shall be source tested once per calendar year to verify compliance with Parts 1 and 2 of Condition 9158 and maintained according to manufacturer's specifications. Records of the source test results shall be kept for a period of five years following the date of entry. (basis: Cumulative Increase)

a. Each of the Truck Line Oven thermal oxidizers (A10022, A1007, A1009, A1015) shall be source tested for NOx and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold dictated in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the District within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use an 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate method. (basis: Cumulative Increase)

5. All records required in Parts 3 and 4 of Condition 9158 shall be kept and made available for District Inspection for a period of five years

following the date of entry. (basis: Cumulative Increase)

6. Only natural gas, propane, LPG, or butane shall be used as a fuel for these sources. (basis: Cumulative Increase)

7. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperature is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)

8. The VOC emissions from these sources shall not exceed any of the:

Source		tons/month	tons/year
S1002	Truck ED Oven	0.33	3.21
S1007	Truck Sealer Oven	1.31	12.56
S1009	Truck Prime Oven	0.53	5.09
S1015	Topcoat Oven	0.69	6.59

(basis: Cumulative Increase)

9. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:

a. A temperature excursion no more than 20 degrees F below the requirement; or

b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or

c. A temperature excursion longer than 15 minutes but shorter than 3 hours in duration, provided that all of the following are satisfied:

i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;

ii. There are no more than 2 excursions per abatement device per month; and

iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

10. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met, including the following:

a. Starting date and time and the duration of each

- Allowable Temperature Excursion;
- b. Minimum temperature during each Allowable Temperature Excursion;
- c. Number of Allowable Temperature Excursions (>15 minutes) per abatement device per month;
- d. Total number of Allowable Temperature Excursions (>15 minutes) for the entire facility per month.

A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions.
(basis: Cumulative Increase)

11. The District may revise or revoke Parts 9 and 10 of Condition 9158 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

12. Abatement equipment must be operating during periods of truck line production and during clean-up operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

(ii) *Modifications to Condition Number 9163*

COND# 9163 -----

For S1008, TRUCK PRIME BOOTH:

1. The VOC content of each coating shall not exceed the following:

Coating	lbs VOC/gal
Primer	4.08
Int. Color	4.46
Others-Repair	4.63
Soft-Chip	7.09

(basis: BACT, Cumulative Increase)

2. The coating usage rate for this booth shall not exceed any of the following limits:

Coating	gal/yr	gal/mo
Primer	62,129	6,461
Int. Color	26,973	2,805
Others-Repair	233	24
Soft-Chip	9,908	1,030

One or more of these usages may increase above the specified limits if there is a corresponding usage

decrease for one or more of the coatings, based on controlled emissions, so that total emissions for this source do not exceed the limit specified in Part 5 of Condition # 9163. (basis: Cumulative Increase)

3. Monthly usage records for each of the coatings shall be kept. Monthly records shall be totaled for each consecutive 12-month period. The records shall be kept and made available for District inspection for a period of five years from the date of entry. (basis: Cumulative Increase)

4. Only High-Volume-Low Pressure (HVLP), electrostatic, and/or APCO approved application equipment with equivalent or higher transfer efficiency shall be used to apply coatings. Air-atomized spray equipment may be used to apply Repair, Blackout, and Soft-Chip coatings. (basis: BACT)

5. The VOC emissions from this source shall not exceed either of the following:

11.01 tons/month
105.9 tons/year

(basis: Cumulative Increase)

*6. Only natural gas, propane, LPG, or butane shall be used as a fuel for this source. (basis: Regulation 2-1-103)

7. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperatures is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)

8. Particulate emissions from this source shall be abated by 98%. (basis: BACT)

9. All VOC emissions from the soft-chip, automatic, flash off and setting zones in the booth shall be controlled by the activated carbon system (A10082) and the thermal oxidizer (A1008) required for the booth (S1008). This includes VOC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)

10. The thermal oxidizer shall achieve the following level of control:

a. The minimum oxidizer operating temperature shall be 1400 degrees F, regardless of inlet concentration.

b. When oxidizer inlet VOC concentrations are

greater than 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall be 98.5% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.

c. When oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98.5% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.
(basis: BACT)

11. The thermal oxidizer (A1008) firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523. (basis: BACT, Regulation 1-523)

12. The VOC reduction efficiency of the activated carbon system (A10082) shall be at least 90% by weight. (basis: BACT)

13. The activated carbon system (A10082) and the thermal oxidizer (A1008) shall be source tested once per calendar year to verify compliance with Parts 10 and 12 of Condition 9163. Each of the Truck Line thermal oxidizers shall be source tested for NO_x and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the APCO within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate method. (basis: BACT)

14. The activated carbon system (A10082) and the thermal oxidizer (A1008) shall be maintained according to the manufacturer's specifications.
(basis: Cumulative Increase)

15. All records required in Parts 11 and 13 of Condition 9161 shall be kept and made available for District Inspection for a period of five years following the date of entry. (basis: Cumulative Increase)

16. To minimize the amount of clean-up solvent used in the booth, NUMMI shall:

- a. Provide a paper, plastic lining, or protective removable coating for the walls and fixtures of the booth, except over doors and windows.
- b. Cover all robots, where practical.
- c. Replace the paper/plastic lining, or protective removable coating on an as needed basis. (basis: BACT)

17. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:

- a. A temperature excursion not exceeding 20 degrees F below the requirement; or
- b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or
- c. A temperature excursion greater than 15 minutes but less than 3 hours in duration, provided that all of the following are satisfied:
 - i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;
 - ii. There are no more than 2 excursions per abatement device per month; and
 - iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

18. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met including but not limited to the following:

- a. Starting date and time and the duration of each Allowable Temperature Excursion;
- b. Minimum temperature during each Allowable Temperature Excursion;
- c. Number of Allowable Temperature Excursions (>15

- minutes) per abatement device per month;
d. Total number of Allowable Temperature Excursions (> 15 minutes) for the entire facility per month.

A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions. (basis: Cumulative Increase)

19. The District may revise or revoke Parts 17 and 18 of Condition 9161 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

20. Abatement equipment must be operated during periods of truck line production and during cleanup operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

(iii) *Modifications to Condition Number 9164*

COND# 9164 -----

For S1014, TRUCK TOPCOAT BOOTH I:

1. All VOC emissions from the automatic, flash off and setting zones of the booth shall be controlled by the activated carbon system (A10144) and the thermal oxidizer (A10142) required for the Truck Topcoat Booth (S1014). This includes VOC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)
2. The thermal oxidizer shall achieve the following level of control:
 - a. The minimum thermal oxidizer operating temperature shall be 1400 degrees F, regardless of inlet concentration.
 - b. At thermal oxidizer inlet VOC concentrations greater 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall be 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.
 - c. At thermal oxidizer inlet VOC concentrations from 500 ppm to 1200 ppm as C1, the minimum allowable oxidizer destruction efficiency shall vary linearly with VOC concentration from 95 to 98% by weight or total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizer shall be 10 ppm or less by volume.

(basis: BACT)

3. The thermal oxidizer firebox shall be equipped with APCO approved continuous temperature measuring and recording instrument. The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacturer's specifications.

a. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523.
(basis: BACT, Regulation 1-523)

4. The VOC reduction efficiency of the rotary drum carbon beds shall be at least 90% by weight. (basis: BACT, Cumulative Increase)

5. The activated carbon system (A10144) and the thermal oxidizer (A10142) shall be source tested once per calendar year to verify compliance with Parts 1, 2 and 4 of Condition 9164. Records of the source test results and maintenance schedule shall be kept for a period of five years following the date of entry.

a. Each of the Truck Line thermal oxidizers shall be source tested for NO_x and CO emissions once per calendar year, after notification to the APCO. If the total carbon monoxide (CO) emissions from all the thermal oxidizers of the Truck Line exceed the PSD Modeling threshold dictated in Regulation 2-2-305 (dated June 7, 1994), NUMMI shall submit a PSD Modeling Protocol to the APCO for review before implementation of the PSD Air Quality Analysis, as specified in Regulation 2-2-414 (dated June 7, 1995). The PSD Modeling Protocol shall be submitted to the APCO within 90 days of the source test report date. To calculate CO emissions, NUMMI shall use the most recent source test derived emission factors for thermal oxidizer burner warm-up and normal operations. NUMMI shall use an 1,200 hours per year for the thermal oxidizer burner warm-up and 5,400 hours per year for normal burner operations to estimate combustion emissions, unless NUMMI can demonstrate a more accurate representation. (basis: BACT)

6. The activated carbon system (A10144) and the thermal oxidizer (A10142) shall be maintained in accordance with manufacturer's specifications.
(basis: Cumulative Increase)

7. All records required in Parts 3 and 5 of Condition 9164 shall be kept and made available for

District Inspection for a period of five years following the date of entry. (basis: BACT)

8. Only natural gas, propane or butane shall be used as a fuel for this source. (basis: Cumulative Increase)

9. Except during periods of thermal oxidizer start-up and burner warm-up operations (when oxidizer temperature is at or below 1200 degrees F), emissions of oxides of nitrogen, measured as NO₂, from this source shall not exceed 0.1 lb NO_x per million BTU. (basis: Cumulative Increase)

10. To minimize the amount of clean-up solvent used in the booth, NUMMI shall:

- a. Provide a paper, plastic lining, or a protective removable coating for the walls and fixtures of the booth, except over doors and windows.
- b. Cover all robots, where practical.
- c. replace the paper/plastic lining, or protective removable coating on an as needed basis. (basis: BACT)

11. To minimize the amount of purge solvent used in S1014 Topcoat Booths I, NUMMI shall coat at least 2 vehicles between purge cycles for the two most popular colors. (basis: BACT)

12. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion" below the minimum temperature requirement, provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:

- a. A temperature excursion not exceeding 20 degrees F below the requirement; or
- b. A temperature excursion period(s) aggregating 15 minutes or less in any hour; or
- c. A temperature excursion greater than 15 minutes but less than 3 hours in duration, provided that all of the following are satisfied:
 - i. There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;
 - ii. There are no more than 2 excursions per abatement device per calendar month; and
 - iii. There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

13. NUMMI shall keep records to demonstrate that all qualifying criteria for Allowable Temperature Excursions are met including but not limited to the

following:

- a. Starting date and time, and the duration of each Allowable Temperature Excursion;
- b. Minimum temperature during each Allowable Temperature Excursion;
- c. Number of Allowable Temperature Excursions (>15 minutes) per abatement device per month;
- d. Total number of Allowable Temperature Excursions (>15 minutes) for the entire facility per month. A summary of these records shall be included in NUMMI's monthly report to the APCO. To satisfy the NSPS requirement of 40 CFR 60, Subpart MM, a negative declaration is also required in NUMMI's monthly report if there are no temperature excursions.
(basis: Cumulative Increase)

14. Abatement equipment must be operating during periods of truck line production and during clean-up operations following production. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

15. The VOC content of each coating shall not exceed the following:

Coating	lbs VOC/gal
Solids	3.54
Base Coat	4.79
Clear Coat	4.12
Other-Repair	4.63

(basis: Cumulative Increase)

16. The coating usage rate for this booth shall not exceed any of the following limits:

Coating	gal/yr	gal/mon
Solids	26,927	2,800
Base Coat	53,211	5,534
Clear Coat	70,094	7,290
Others-Repair	349	36

One or more of these coating usages may increase above the specified usage limit provided there is a corresponding decrease for one or more of the coatings, based on controlled emissions so that total emissions for this source are not exceeded. (basis: Cumulative Increase)

17. Monthly usage records for each of the coatings shall be kept. The records shall be kept and made available for District inspection for a period of five years from the date of entry. (basis: Cumulative Increase)

18. Only High-Volume-Low Pressure (HVLP), electrostatic, and/or APCO approved application

equipment with equivalent or higher transfer efficiency shall be used to apply coatings. Air-atomized spray equipment may be used to apply Repair, Blackout, and Soft-Chip coatings. (basis: Cumulative Increase)

19. The VOC emissions from this source shall not exceed either of the following:

13.60 tons/month
130.76 tons/year
(basis: Cumulative Increase)

20. Particulate emissions from this source shall be abated by 98%. (basis: BACT)

5.0 RECOMMENDATION

Approve changes to Condition Numbers 9158 Part 2, 9163 Part 10 and 9164 Part 2 to include the following: Total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizers shall be 10 ppm or less by volume. Issue modified Permit to Operate to NUMMI for:

S1002 Truck Ed Oven

S1007 Truck Sealer Oven

S1008 Truck Prime Booth

S1009 Truck Prime Oven

S1014 Truck Topcoat Booth

S1015 Truck Topcoat Oven

By:

Sanjeev Kamboj
Air Quality Engineer II