Bay Area Air Quality Management District

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Permit Evaluation
and
Statement of Basis
for
RENEWAL 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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February 2009

Application Engineer: Sanjeev Kamboj
Site Engineer: Sanjeev Kamboj

Application: 16248

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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 and a minor revision were issued on December 13, 2004 and October 24, 2007 respectively. Section X of the permit, Revision History, has a list of these revisions in chronological order.

This application is for the second renewal of the Title V permit. The standard sections of the permit have been upgraded to include new standard language used in all Title V permits. Also, various other corrections have been made to the permit. This statement of basis will include all proposed changes to the permit in ~~strikeout~~/underline format.

The facility has submitted following applications since the Major Facility Review permit was issued on December 18, 2002:

Application #	Description	Date of Receipt
19382	Loss of Exemption Emergency Standby Engine	01/05/09
17750	Title V for NSR Application 17748	04/08/08
17748	Modify Permit Condition	04/08/08
16439	Title V for NSR Application 16439	07/17/07
16438	Modify Permit Condition	07/17/07
16248	Title V Permit Renewal	06/01/07
13654	Modify Permit Condition	10/24/05
13653	Title V for NSR Application 13654	10/24/05

Application #	Description.....	Date of Receipt
12215	Title V for NSR Application	03/21/05
12176	Modify Permit Condition	03/21/05
10438	New Sources	07/15/04
10005	Modify Permit Condition	06/16/04
8493	Permit Condition Change	11/03/03
8419	Modification	10/21/03
8370	New Sources	10/01/03
7151	Permit Condition Change	03/10/03
7119	New Sources	02/27/03
7048	Permit Condition Change	02/13/03
6914	New Sources	01/19/03

Application 17748 was submitted to modify permit conditions 207 (for S71, Passenger Cavity Wax Booth), 14205 (for North Paint Shop Sources) and 22541 (for S3022, NPS Passenger ELPO Dip Tank). A new permit condition 24057 was also created for S71. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis. Title V Application 17750 was related to NSR Application 17748 that was submitted to make changes approved in the NSR application to the facility's Title V permit.

Application 16438 was submitted to modify permit conditions 207 (for sources S62, Passenger Gas Tank Paint Booth, S63, Passenger Gas Tank Oven, S801, Stamping Plant Fugitive Solvent Emissions, and S802, Stamping Plant Fugitive Machining) and 10578 (for S1050, Truck Fuel Tank Coating Booth). The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis. Title V Application 16439 was related to NSR Application 16438 that was submitted to make changes approved in the NSR application to the facility's Title V permit.

Application 16248 is for renewal of the Title V permit, which is the subject of this action.

Application 13654 was submitted to modify permit condition 10320 (for S59, Bumper Prime Booth and archive sources S960, Plastic Plant Booth and General Cleaning and S961, Bumper Release Cleaning and Polish. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis. Title V Application 13653 was related to NSR Application 13654 that was submitted to make changes approved in the NSR application to the facility's Title V permit.

Applications 12215 and 12176 were included in the minor revision that was issued on October 24, 2007.

Application 10438 was submitted for the purpose of obtaining permits to operate for the following new sources: S3022, NPS Passenger ELPO Dip Tank, S3024, NPS PVC Undercoat Booth, S3025, NPS Passenger Bead Sealer Operations, S592, NPS Passenger ELPO Resin Storage Tank, and S593, NPS Passenger ELPO Pigment Storage Tank. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Application 10005 was submitted to create new permit condition 22219 for S803, Passenger Sealer Deck Line (Bead Sealer) and to modify permit condition 207 by deleting all parts that apply to S803. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Applications 8493, 8419, 8370, 7151, 7119, 7048, and 6914 were included in the significant revision that was issued on December 13, 2004.

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.

These applications have resulted in no change in criteria pollutants emissions because any emission increases have been completely offset by the contemporaneous emission reduction credits.

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 follows. The permit sections are described in the order that they are presented in the permit.

I. Standard Conditions

This section contains administrative requirements and conditions that apply to all facilities. If the Title IV (Acid Rain) requirements for certain fossil-fuel fired electrical generating facilities or the accidental release (40 CFR § 68) programs apply, the section will contain a standard condition pertaining to these programs. Many of these conditions derive from 40 CFR § 70.6, Permit Content,

which dictates certain standard conditions that must be placed in the permit. The language that the District has developed for many of these requirements has been adopted into the BAAQMD Manual of Procedures, Volume II, Part 3, Section 4, and therefore must appear in the permit.

The standard conditions also contain references to BAAQMD Regulation 1 and Regulation 2. These are the District's General Provisions and Permitting rules.

Changes to permit

- The adoption dates of the rules in Standard Condition I.A have been updated.
- The following language was added as Standard Condition I.B.12: "The permit holder is responsible for compliance, and certification of compliance, with all conditions of the permit, regardless whether it acts through employees, agents, contractors, or subcontractors. (Regulation 2-6-307)." The purpose is to reiterate that the Permit Holder is responsible for ensuring that all activities at the facility comply with all applicable requirements.
- Reference to Regulation 3 as basis was deleted from Standard Conditions I.E and I.F as this regulation applies to Fees only and has no concern with Records and Monitoring Reports requirements.
- The due dates for semi-annual monitoring reports have been changed from June 1st to July 1st and from December 31st to January 1st. This would streamline reporting requirements by having the semi-annual monitoring reports due dates correspond with the semi-annual reporting requirements of 40 CFR Parts 63, 264 and 265, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks; commonly referred to as the Automotive MACT standard.
- The annual compliance certification reports period has been changed to January 1st to December 31st. This would align the annual certification requirement with the Title V semiannual reporting requirement and the semiannual MACT reporting requirement.
- Deleted Standard Condition I.K, as NUMMI is not subject to 40 CFR Part 68, Chemical Accident Prevention Provisions. NUMMI does not store or maintain chemicals in any quantity exceeding the regulatory threshold limits.

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). If a source is also an abatement device, such as when an engine controls VOC emissions, it will also be listed in the abatement device table but will have an "S" number. An abatement device may also be a source (such as a thermal oxidizer that burns fuel) of secondary emissions. If

the primary function of a device is to control emissions, it is considered an abatement (or "A") device. If the primary function of a device is a non-control function, the device is considered to be a source (or "S").

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 A – Permitted Sources

- Numerous deletions and additions were made to Table II A. The deletions were the result of the sources that have been permanently removed from service. Some new sources were added as part of the expansion of the North Paint Shop that was handled in District Application 10438. The changes made to Table II A are summarized as follows:

Source	Description	Permit Action	Application #	Comments
2	Passenger Body Elpo Dip Tank	Deleted	10438	Deleted due to source removal, 12/13/06
3	Passenger Body Elpo Oven	Deleted	10438	Deleted due to source removal, 12/13/06
41	Passenger Body Phosphate Washer	Deleted	10438	Deleted due to source removal, 01/29/07
60	Passenger Undercoating Booth	Deleted	10438	Deleted due to source removal, 01/297/07
72	Passenger PVC Exterior, Underbody & Engine Wax Booth	Deleted	16438	Deleted due to source removal, 01/29/07
73	Passenger Exterior Wax Hot Air Dryer	Deleted	16438	Deleted due to source removal, 01/29/07
420	ELPO Waste Paint Above Ground Storage Tank	Deleted	10438	Deleted due to source removal, 01/29/07
421	ELPO Paint Pigment Storage	Deleted	10438	Deleted due to source removal, 12/13/06
422	ELPO Paint Resin Above Ground Storage Tank	Deleted	10438	Deleted as requested by NUMMI, 12/13/06
592	NPS Passenger ELPO Resin Storage Tank	Added	10438	Added as requested by NUMMI, 12/13/06
593	NPS Passenger ELPO Pigment Storage Tank	Added	10438	Added as requested by NUMMI, 12/13/06

Source	Description	Permit Action	Application #	Comments
802	Stamping Plant Fugitive Machining Emissions	Deleted	16438	Deleted due to source removal, 12/27/07
803	Passenger Sealer Deck Line (Fugitive)	Deleted	10438	Deleted due to source removal, 12/13/06
807	Passenger Anti-Chip Wheelhouse Booth	Deleted	10438	Deleted due to source removal, 12/13/06
808	Passenger Sealer-Antichip Oven	Deleted	10438	Deleted due to source removal, 12/13/06
813	Passenger Fugitive Trial Application Area - Bead Sealer	Deleted	10438	Deleted due to source removal, 12/13/06
900	Lime Slurry Tank	Deleted	N/A	Deleted due to source removal, 02/09/08
960	Plastic Plant Booth and General Cleaning	Deleted	13654	Deleted due to source removal, 09/27/06
961	Plastic Plant Booth and General Cleaning	Deleted	13654	Deleted due to source removal, 09/27/06
1021	Truck Underbody, Engine & Exterior Wax Booth	Deleted	16438	Deleted due to source removal, 01/29/07
1050	Truck Fuel Tank Coating Booth	Deleted	16438	Deleted due to source removal, 12/27/07
1051	Truck Fuel Tank - Heater Box	Deleted	16438	Deleted due to source removal, 01/29/07
1060	Plastic Paint Shop Emergency Standby Diesel Engine	Added	19382	Added as the engine lost its exemption status, 03/26/09
1061	Truck Axle Coating Booth	Deleted	16438	Deleted due to source removal, 01/29/07
1062	Truck Axle Oven	Deleted	16438	Deleted due to source removal, 01/29/07
1063	General Truck Axle Booth and Area Cleaning	Deleted	16438	Deleted due to source removal, 01/29/07
1510	Cold Cleaner	Deleted	N/A	Deletes due to source removal, 11/16/06
1600	Sub 5 Emergency Standby Diesel Engine	Added	16480	Added as requested by NUMMI, 03/01/03
1601	Truck Paint Emergency Standby Diesel Engine	Added	16480	Added as requested by NUMMI, 03/01/03
1602	Security Emergency Standby Diesel Engine	Added	16480	Added as requested by NUMMI, 03/01/03
1603	Hazardous Materials Building Emergency Standby Diesel Engine	Added	16480	Added as requested by NUMMI, 03/01/03
1900	Plastic Parts Adhesion	Deleted	N/A	Deleted due to source

Source	Description	Permit Action	Application #	Comments
	Operation			removal, 08/09/07
1901	Offline Export Final Repair Area/Booth	Added	N/A	Added as this source is still active and was mistakenly left out in the previous revision of Title V permit
2007	Cold Cleaner	Deleted	N/A	Deleted due to source removal, 10/06/05
3007	NPS ELPO Oven	Renamed	N/A	Per NUMMI's request, renamed from "NPS Dry Off Oven" to "NPS ELPO Oven" to correctly reflect its actual operational use
3022	NPS Passenger ELPO Dip Tank	Added	10438	Added as requested by NUMMI, 12/13/06
3024	NPS PVC Undercoat Booth	Added	10438	Added as requested by NUMMI, 12/13/06
3025	NPS Passenger Bead Sealer Operations	Added	10438	Added as requested by NUMMI, 12/13/06
3500	Cold Cleaner	Deleted	N/A	Deleted due to source removal, 07/10/08
3501	Cold Cleaner	Deleted	N/A	Deleted due to source removal, 07/10/08
3502	Cold Cleaner	Deleted	N/A	Deleted due to source removal, 12/23/05

The natural gas throughputs for various booths were deleted, as booths do not use natural gas. It is only ovens that use natural gas at the facility.

Table II B – Abatement Devices

- Abatement devices A4, A809, A900, and A10612 have been deleted, as sources S4, S808, S1051, S900, and S1061 that they were abating are no longer in service.
- Per Application 10438, added A3010, NPS ELPO Oven Thermal Oxidizer to abate emissions from S3007, NPS ELPO Oven.
- Added A10141, Truck Topcoat Thermal Oxidizer and A10143, Topcoat Booth Carbon Concentrator as these were mistakenly left out in the prior revision of Title V permit. A 10141 and A10143 abate emissions from S1014, Truck Topcoat Booth.
- Added A593, A10081, A10145, A10703, A30141, A30143, A30161 and A30163, Dry Filters, as these were mistakenly left out in the prior revision of Title V permit.
- Added capacities and/or firing rates for various thermal oxidizers.
- "Limit or Efficiency" sections for A102, A571, A3008, A3014, and A3016 have been modified to allow the following alternative to the destruction efficiency limits: Total non-methane organic hydrocarbon emissions from the outlet of the thermal oxidizers shall be 10 ppm or less by volume. 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.

- Minor typos were corrected for A1008 and A10082.
- Regulation 6, Particulate Matter and Visible Emissions, was renumbered as Regulation 6, Rule 1, and renamed as Particulate Matter, General Requirements on December 5, 2007. The equivalent rule in the State Implementation Plan (SIP) is Regulation 6, Particulate Matter and Visible Emissions, which was approved in a Federal Register notice of September 4, 1998. This change is reflected in this table for A10704.

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

- EPA's website address containing SIP standards has been included in Section III.
- The adoption dates of the rules have been updated.
- Regulation 6, Particulate Matter and Visible Emissions, was renumbered as Regulation 6, Rule 1, and renamed as Particulate Matter, General Requirements on December 5, 2007. The equivalent rule in the State Implementation Plan (SIP) is Regulation 6, Particulate Matter and Visible Emissions, which was approved in a Federal Register notice of September 4, 1998. The BAAQMD rule is technically not federally enforceable, although the requirements are identical. This change is also reflected in the Section IV and VII tables.
- Added EPA Regulation 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks.

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.

Applicability of 40 CFR Part 60, Subpart MM

Some of the sources at the facility are subject to 40 CFR 60, Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations, because they are a prime coat operation, guide coat operation or topcoat operation in an automobile or light-duty truck assembly plant, and because they were built or modified after December 24, 1980. Section IV of the permit, Source-Specific Applicable Requirements, shows which particular sources are subject.

Exempted from the provisions of this subpart are operations used to coat plastic body components or all-plastic automobile or light-duty truck bodies on separate coating lines. The attachment of plastic body parts to a metal body before the body is coated does not cause the metal body coating operation to be exempted.

Applicability of 40 CFR Part 60, Subpart A

40 CFR Part 60, Subpart A are the general provisions for 40 CFR Part 60, and specifies the regulations apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of issuance of any part of any standard.

Applicability of 40 CFR Part 63, Subpart IIII

40 CFR Part 63, Subpart IIII, National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Automobile and Light Duty Trucks promulgates national emission standards for automotive and light-duty truck surface coating operations located at major sources of hazardous air pollutants (HAPS). The rule implements section 112(d) of the Clean Air Act requiring automotive and light duty truck coating operations to meet HAP emissions standards reflecting the application of the maximum achievable control technology (MACT).

The following Title V sources are subject to 40 CFR Part 63, Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks, per 40 CFR Part 63 § 63.3082 which specifies:

(a) This subpart applies to each new, reconstructed, and existing affected source.

(b) The affected source is the collection of *all* items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1)All coating operations as defined in § 63.3176

(2) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored and mixed.

(3) All manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) In addition, you may choose to include in your affected source, and thereby make subject to the requirements of this subpart, any coating operations, as defined in §63.3176, which would otherwise be subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products (subpart MMMM of this part) or the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products (subpart PPPP of this part), which apply coatings to new other motor vehicle bodies or body parts for new other motor vehicles, parts intended for use in new automobiles, new light-duty trucks, or new other motor vehicles, or aftermarket repair or replacement parts for automobiles, light-duty trucks, or other motor vehicles.

§63.3176 define coating operations as following "*Coating operation* means equipment used to apply coating to a substrate (coating application) and to dry or cure the coating after application. A single coating operation always includes at least the point at which a coating is applied and all subsequent points in the affected source where organic HAP emissions from that coating occur. There may be multiple coating operations in an affected source."

Given the above criteria, and the fact NUMMI submitted declarations to the District that it had elected to include 40 CFR Part 63 Subparts MMMM and PPPP in their affected sources, the following sources listed in NUMMI's Permit to Operate are <u>not</u> subject to the MACT standard:

Source No.	Source Description	Source No.	Source Description
75	Quality Control Lab Oven	77	Quality Control Lab Spray Booth
403	Anti-Freeze Storage Tank	404	Power Steering Fluid Storage Tank
405	Waste Water Storage Tank	406	Windshield Washer Fluid Above Ground Storage Tank
407	Engine Oil Storage Tank	409	Auto Transmission Fluid

Source No.	Source Description	Source No.	Source Description
			Storage Tank
410	Manual Transmission Oil Storage Tank	411	Diesel Fuel Oil Storage Tank
412	Waste Water Storage Tank	413	Waste Water Storage Tank
414	Waste Water Storage Tank	419	Wastewater Treatment System
435	Propane Storage Tank	436	CPI Separator Storage Tank (Oil)
437	CPI Separator Storage Tank (Water)	806	GDF # 6340
826	Passenger BAYCO Parts Cleaning Oven	1056	Truck ASH Boiler # 1
1057	Truck ASH Boiler # 2		
1060	Plastic Paint Shop Emergency Standby Generator	1600	Sub 5Emergency Standby Generator
1601	Truck Paint Emergency Standby Generator	1602	Security Emergency Standby Generator
1603	Hazardous Materials Building Emergency Standby Generator	1604	Waste Water Treatment Plant Emergency Standby Generator
2826	Plastic Plant Bayco Cleaning Oven	32001	Miscellaneous Air Supply Houses
32002	Miscellaneous Door Air Heaters	32003	Miscellaneous Boilers

All Title V sources not listed in the above referenced table are subject to the Auto MACT standard, 40 CFR Part 63.

The facility is required to determine the overall control efficiency for their capture and control systems based upon emission capture and reduction (destruction) efficiency using established EPA protocols.

The facility is required to determine the transfer efficiency for primer-surfacer and topcoat materials and for all coatings except for deadener and for adhesive and sealer that are not components of glass bonding systems.

Facility HAPS emissions cannot exceed 0.60 lbs HAP per gallon of applied coated solids. Actual emissions must be calculated utilizing coating volume, organic HAP content, and volume of solids content for each coating applied, as well as transfer efficiency for the coatings and spray equipment used, and the overall control efficiency for controlled booths, ovens and other controlled emission sources.

The facility is required to develop and implement work practice standards and plans to minimize organic HAP emissions from the storage, mixing and conveying of coatings, thinners, and cleaning materials used in and waste materials generated by all coating operations for which emission limits are established.

The facility is required to develop and implement a startup-shutdown-malfunction plan for all emission capture and control systems. All start-ups, shutdowns and malfunctions applicable to the control equipment must be documented and those records maintained and readily available for review, for a minimum of 5 years.

Applicability of 40 CFR 64, Compliance Assurance Monitoring

Per 40 CFR 64.2(a), emission units (as defined in 40 CFR parts 64.1 and 70) will be subject to 40 CFR 64, Compliance Assurance Monitoring, if the units are subject to a federally enforceable requirement for a pollutant, the pollutant is controlled by an abatement device, and the emissions of the pollutant before abatement are more than 100% of the major source thresholds.

The definition of emission unit is as follows:

> Emissions unit means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term "unit" for purposes of title IV of the Act.

It is not exactly equivalent to the BAAQMD's definition of source in BAAQMD Regulation 2-1-221, which states:

> Source: Any article, machine, equipment, operation, contrivance or related groupings of such which may produce and/or emit air pollutants.

In this case, the emission unit is similar to the "related groupings." Various sources are controlled by one abatement device. Some of the emission limits apply to a group of sources that are abated by one abatement device. This "grouping" will be considered to be an emission unit for the purposes of 40 CFR 64.

Coating sources at NUMMI are subject to CAM because they have federally enforceable VOC limits, are abated by thermal oxidizers, and because the VOC emissions before abatement are greater than 100 tons/yr.

Following is a discussion of the federally enforceable emission limitations.

BAAQMD Regulation 8, Rule 13, Light and Medium Duty Motor Vehicle Assembly Plants, imposes federally enforceable limits on these sources. The limits are in terms of g VOC/l of coating as applied or control by an abatement device to an equivalent level. NUMMI uses abatement devices to meet more stringent BAAQMD BACT limits, but does not use them to meet the g/l limits. Instead, NUMMI adheres to the g/l limits by limiting the concentration of VOC in the coating. 40 CFR 64.2(a)(2) only requires CAM if "[T]he unit uses a control device to achieve compliance with any such emission limitation or standard…" Since NUMMI does not use the control device to achieve compliance with the standard, CAM does not apply to the limits in BAAQMD Regulation 8, Rule 13.

40 CFR 60, Subpart MM, Standards of Performance for Automobile and Light Duty Truck Surface Coating Operations, also imposes federally enforceable limits on these sources. The limits are in terms of kg VOC/l of coating as applied or control by an abatement device to an equivalent level. NUMMI uses abatement devices to meet more stringent BAAQMD BACT limits, but does not use

them to meet the kg/l limits. Instead, NUMMI adheres to the VOC limits by limiting the concentration of VOC in the coating. 40 CFR 64.2(a)(2) only requires CAM if "[T]he unit uses a control device to achieve compliance with any such emission limitation or standard…" Since NUMMI does not use the control device to achieve compliance with the standard, CAM does not apply to the limits in 40 CFR 60, Subpart MM.

Pursuant to 40 CFR 64.2(b)(1), CAM does not apply to limits in the NSPS or NESHAPS that were promulgated after November 15, 1990. Therefore, CAM does not apply to the federally enforceable limits in 40 CFR 63, Subpart IIII—National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. These standards are presumed to contain adequate monitoring.

The remaining federally enforceable limits are contained in BAAQMD permit conditions, which impose limits on the total amount of VOC that is emitted, on destruction efficiency, and on temperature.

In 40 CFR 64.3, Monitoring Design Criteria, the requirements for sources that emit more than 100 tons/yr after abatement are more stringent than the requirements for sources that emit less than 100 tons/yr after abatement. It is possible that the abated sources at the facility could be split into two groups based on the emissions after abatement, and that CAM plans could be designed for each group. However, NUMMI has decided to implement the same, more stringent, CAM plan for all abated sources for the sake of simplicity.

In accordance with 40 CFR 64.3(a), continuous temperature monitoring will be used as CAM monitoring. Temperature is a well-accepted parameter for destruction efficiency for VOC in thermal oxidizers. NUMMI has tested these thermal oxidizers for many years and has determined that the temperature limits in the permit conditions correspond to more than the destruction efficiency required by the permit conditions. The temperature limits and corresponding destruction efficiencies are:

Abatement device	Sources Controlled	Temperature limit	Destruction efficiency	Applicable Permit Condition	Temperature Excursion Permit Condition
A102	S102	800 ^{o}F	60%	207 Part 3(a)(1)	207 Part 4
A571	S58, S59, S65, S1070, S1071	1400	95% or more	10320 Parts 19 and 20	10320 Part 26
A1007	S1007	1400 ^{o}F	95% or more	9158 Parts 2(a) and 2(c)	9158 Part 9
A1008	S1008	1400 ^{o}F	95% or more	9163 Part 10	9163 Part 17
A1009	S1009	1400 ^{o}F	95% or more	9158 Parts 2(a) and	9158 Part 9

Abatement device	Sources Controlled	Temperature limit	Destruction efficiency	Applicable Permit Condition	Temperature Excursion Permit Condition
				2(c)	
A1015	S1015	1400 ^{o}F	95% or more	9158 Parts 2(a) and 2(c)	9158 Part 9
A3008	S3008, S3009	1400 ^{o}F	95% or more	14206 Parts 10 and 11	14205 Parts 2 and 3
A3010	S3007	1200 ^{o}F	90% or more	14205 Part 17	14205 Parts 2 and 3
A3014	S3014, S3015	1400 ^{o}F	95% or more	14207 Parts 10 and 11	14205 Parts 2 and 3
A3016	S3016, S3017	1400 ^{o}F	95% or more	14207 Parts 10 and 11	14205 Parts 2 and 3
A10022	S1002	1400 ^{o}F	95% or more	9158 Parts 2(a) and 2(c)	9158 Part 9
A10141	S1014	1400 ^{o}F	95% or more	9164 Part 2	9164 Part 12
A10142	S1014	1400 ^{o}F	95% or more	9164 Part 2	9164 Part 12

The capture efficiency has been determined in previous source tests.

Permit conditions require that the temperature measuring and recording instruments be installed, calibrated and maintained according to the manufacturer's specifications, so the requirements for representative data in 40 CFR 60.3(b)(1), verification procedures in 40 CFR 64.3(b)(2), and quality assurance and control practices in 40 CFR 60.3(b)(3) are met.

Temperature data is recorded continuously, so the criteria of data collection at least 4 times per hour in 40 CFR 60.3(b)(4)(ii) is met.

If the temperatures are above the limits in the permit conditions and annual source testing shows that the temperatures correspond to the destruction efficiency in the permit conditions, NUMMI will be able to use their record keeping to determine the mass VOC emissions going to the thermal oxidizer and calculate the emissions from the thermal oxidizer with confidence. NUMMI will then add these emissions to the emissions from their unabated coating booths on a monthly basis and determine if they are in compliance with their annual limits, which are calculated on a rolling consecutive 12-month basis.

Section 64.6(c)(2) requires that the permit contain the method by which the owner/operator will define an exceedances or excursion. The permit conditions state that an exceedance occurs when the

temperature drops below the limit set in applicable parts of the various permit conditions. Standard District permit conditions regarding temperature exceedances are allowed without penalty.

Section 64.6(c)(1)(ii) states that the permit must contain the devices used to measure the indicators. The permit conditions do contain the devices.

Section 64.6(c)(1)(iii) states that the permit must contain the performance requirements. Parts of different applicable permit conditions contain the requirement to develop performance requirements for the temperature monitor.

Section 64.6(c)(3) states that the owner/operator must conduct the monitoring. This obligation is contained in the permit conditions.

Section 64.6(c)(4) states that data availability may be specified, if appropriate. The temperature monitoring at NUMMI is well established and there have not been problems with data availability, so additional requirements are not appropriate at this time. However, the temperature monitor is subject to the provisions of BAAQMD and SIP Regulation 1-523, which address periods of non-operation for parametric monitors. These provisions will assure data availability. If long periods of non-operation are reported by the facility, the District may impose additional data availability requirements.

Section 64.6(d) requires a schedule for monitoring that requires installation, testing, or final verification. The temperature monitoring at NUMMI is well established. These requirements have already been fulfilled.

Section 64.7 contains requirements for operation of monitoring and does not need any additional permit terms beyond inclusion of the citation in the permit.

Section 64.8 contains optional requirements for a Quality Improvement Plan. This plan would be required if there were problems with the existing monitoring strategy. Problems are not anticipated at the time of writing.

Sections 64.9, Reporting and record keeping requirements, and 64.10, Savings Provisions, do not need any additional permit terms beyond inclusion of the citation in the permit.

Changes to permit:

- EPA's website address containing SIP standards has been included in Section IV.
- Deleted tables for sources S2, S3, S41, S72, S73, S802, S808, S900, S960, S1021, S1050, S1051, S1061, S1062, S1063, S1510, S1900, S3500, S3501 and S3502, as these are no longer in service. Renumbered the tables after deleting these sources.
- Added tables for new sources S592, S593, S1060, S1600-S1604, S3022, S3024 and S3025.
- Added table IV- BE to introduce Compliance Assurance Monitoring (CAM) requirements per 40 CFR 64 for following abatement devices: A102, A571, A1007, A1008, A1009, A1015, A3008, A3010, A3014, A3016, A10022, A10141, and A10142.
- Regulation 6, Particulate Matter and Visible Emissions, was renumbered as Regulation 6, Rule 1, and renamed as Particulate Matter, General Requirements on December 5, 2007. The equivalent rule in the State Implementation Plan (SIP) is Regulation 6, Particulate Matter and

Visible Emissions, which was approved in a Federal Register notice of September 4, 1998. The BAAQMD rule is technically not federally enforceable, although the requirements are identical. This change is reflected in all tables, where applicable, in Section IV.

- Introduced, where applicable, requirements per EPA Regulation 40 CFR Part 63, Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks.
- The adoption dates of the rules have been updated in all tables, where applicable, in Section IV.
- Added Regulation 9, Rule 1 requirements where applicable to various Ovens.

Table IV-Facility

- Added EPA Regulation 40 CFR Part 63, Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks.

Table IV-A

- Part 18 of BAAQMD permit condition #10320 was deleted as it does not exist and was erroneously included in the past.
- Parts 47, 48, 49 and 50 of BAAQMD permit condition 10320 were added per Application 13654. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-B

- Deleted sources S60, S803, S807 and S813 per Applications 10438 and 16438 as these have been dismantled and removed from service. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- Parts 2.a, 2.b, and 2.c of BAAQMD permit condition 207 were deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-C

- Parts 2.a, 2.b, and 2.c of BAAQMD permit condition 207 were deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-D

- Deleted sources S72 and S73 per Application 16438 as these have been dismantled and removed from service. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Deleted permit condition 207 as it does not apply to S71 anymore.
- Per Application 17748, added new permit condition 24057 that applies to S71.

Table IV-E

- Parts 2.a, 2.b, and 2.c of BAAQMD permit condition 207 were deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Minor typos were corrected for S101 and S102.

Table IV-G

- Included low vapor pressure exemption per BAAQMD Regulation 8-5-117 as sources S405 and S414 store organic liquids with true vapor pressures of less than or equal to 0.5 psia.
- Removed S408 from this table, as this tank is subject to pressure relief valve requirements per Regulation 8, Rule 5 where as sources S405 and S414 have low vapor exemption as mentioned above. Created new table IV-G1 for S408.

Table IV-H

- Included new requirements that apply to fixed roof tanks per BAAQMD Regulation 8, Rule 5 and SIP Regulation 8, Rule 5.

Table IV-I

- Deleted all references to sources S420, S421, and S422 as these sources have been dismantled and are no longer in service.
- Included SIP Regulation 8, Rule 5, Section 117 in the table.

Tables IV-L and IV-N

- Parts 2.a, 2.b, and 2.c of BAAQMD permit condition 207 were deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-P

- Deleted reference to S2007 as it has been dismantled and removed from service per request from NUMMI.

Table IV-S

- Included new requirements that apply to fixed roof tanks per BAAQMD Regulation 8, Rule 5 and SIP Regulation 8, Rule 5.
- Parts 35 and 36 of BAAQMD permit condition #10320 were deleted as they don't exist and were erroneously included in the past.

Tables IV-T, IV-U, IV-V, IV-X, IV-Y, IV-Z, IV-AA, IV-AB, IV-AC, IV-AD, IV-AE, IV-AF, IV-AG, IV-AH, IV-AI,

- Minor typo related to Part 2 of BAAQMD permit condition 9156 was corrected.

Table IV-W

- Minor typo related to Part 2 of BAAQMD permit condition 9156 was corrected.
- Deleted Parts 6 and 7 of BAAQMD permit condition 9159 as these were deleted on 12/13/04 in the District databank.

Table IV-AE
Included BAAQMD Regulation 9, Rule 1 requirements.

Table IV-AJ

- Included new BAAQMD Regulation 9, Rule 7 requirements that were adopted on 7/30/08. New requirements include Interim and Final emission limits for NOx and CO, Future effective dates, Insulation requirements, Stack gas temperature limits, and Tune-up requirements.
- Included SIP Regulation 9, Rule 7 requirements.

Table IV-AK
Sources S1060 and S1600-S1604 are emergency generators. These sources were exempt from District until May 17, 2000, when BAAQMD Regulation 2, Rule 1, General Requirements, was amended to require permits for all stationary engines over 50 hp. The requirement for permits is not federally enforceable because SIP Regulation 2, Rule 1 still has an exemption for standby engines.

BAAQMD Regulation 9, Rule 8, as adopted on January 20, 1993, did not apply to engines under 250-hp, liquid-fueled engines, or emergency standby engines. On August 1, 2001, the rule was amended to include hours of operation limits for emergency standby engines. On July 25, 2007, the rule was amended to include limits for non-emergency liquid fueled engines and engines under 250-hp. These new limits will be effective on January 1, 2012. Since the engines at this plant are emergency standby engines, they will only be subject to the following sections of the rule: 9-8-330, 9-8-502.1, and 9-8-530, which essentially restrict the hours of operation for standby engines. These provisions are not federally enforceable because the SIP rule is the 1993 rule.

On November 8, 2004, the California Air Resources Board (CARB or ARB) adopted an Air Toxics Control Measure (ATCM) for stationary diesel engines, which was effective on January 1, 2005. The measure restricted the hours of operation for older standby engines and required controls and/or lower emission rates for prime and new standby engines. Since the ATCM is a state standard, it is not federally enforceable.

The engines will be incorporated into the Title V permit during this renewal. The requirements of Regulation 6, and Regulation 9, Rules 1 and 8 will now be incorporated into the following new tables: IV-AK and VII-AK. The engines are subject to BAAQMD Standard Condition #22820.

Following is a discussion of the requirements of the ATCM.
Section 93115.5 requires the use of CARB diesel or several alternatives. The owner/operator will comply by burning CARB diesel.

The operating requirements and emissions standards are contained in Section 93115.6.

The engines are not subject to Section 93115.6(a) because they are not new as defined by the ATCM.

The engines are not subject to Section 93115.6(b)(1) of the ATCM because the BAAQMD permit does not allow operation in anticipation of a rotating outage.

The engines are not subject to Section 93115.6(b)(2) of the ATCM because the engines are not located within 1000 feet of a school.

Section 93115.6(b)(3)(A) allows the owner/operator to choose 20 hours of operation for maintenance and testing, to show that the engine has particulate emissions below 0.15 g/bhp, or to control the particulate emissions of the engine by 85%. The owner/operator has chosen to operate the engines for less than 20 hours/yr for maintenance and testing. An unlimited number of hours are allowed during emergencies.

Section 93115.6(b)(3)(A)(2), which allows more hours for maintenance and testing in certain cases is not cited because the owner/operator will comply by not operating the engines for more than 20 hr/yr for maintenance and testing.

The engines are not subject to Section 93115.6(b)(3)(B) because the owner/operator is not using an emission control strategy that is not verified through CARB's Verification Procedure.

The engines are not subject to Section 93115.6(b)(3)(C) because the District has not established more stringent standards for these engines.

The engines are not subject to Section 93115.6(c) because the engines are not being used in a demand response program.

The requirements of 93115.7 are not cited because these requirements are for prime engines.

The requirements of 93115.8 are not cited because these requirements are for agricultural engines.

The requirements of 93115.9 are not cited because these requirements are for new engines under 50-hp.

The notification requirements of Section 93115.10(a) are not cited because the requirements have already been met.

The requirements of Section 93115.10(b) have not been cited because they apply only to sellers of engines.

The requirements of Section 93115.10(c)(1) have not been cited because they apply only to new engines as defined by the ATCM.

The requirements of Section 93115.10(c)(2) have not been cited because the reporting requirements have already been met.

The notification requirements of Section 93115.10(d) are not cited because the engines are not exempt from requirements pursuant to Sections 93115.3 or 93115.8(a)(2).

The engines are subject to the requirement in Section 93115.10(e)(1) to have a non-resettable hour meter.

Section 93115.10(e)(2) is not cited because the engines do not have diesel particulate filters.

Section 93115.10(e)(3) is not cited because the District has not required additional monitoring.

Section 93115.10(f) is not cited because the engines are exempted by the ATCM.

The requirement for monthly recordkeeping in Section 93115.10(g) applies to the engines.

The requirement in Section 93115.10(h) applies only to the San Diego Gas and Electric Company.

The requirement in Section 93115.10(i) applies only to engines that are used to fulfill the requirements of an Interruptible Service Contract as defined by the ATCM.

Section 93115.11 is not cited because the owner/operator has 4 or more engines.

Section 93115.12 is cited because the owner/operator has 4 or more engines. The compliance schedule in 93115.12(a) applies to the engines because the owner/operator has chosen to comply by reducing the hours of operation to 20 hr/yr.

Section 93115.12(b) is not cited because the owner/operator has chosen to comply with Section 93115.12(a).

Section 93115.13 is not cited because the owner/operator will comply by reducing the hours of operation, not by testing or installing diesel particulate filters.

Section 93115.14 is not cited because the owner/operator is not required to test the engines.

Section 93115.15, Severability, is cited because invalidation of one part of the ATCM does not invalidate the remaining parts.

Table IV-AL

- Included BAAQMD Regulation 9, Rule 1 requirements.

- Changed Part 10 of BAAQMD permit condition 10320 from “Coatings Usage Limit” to “VOC Content Limits” per Application 13654. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Deleted Part 18 of BAAQMD permit condition 10320 related to “Net Mass Emissions Requirements” as the part does not exist and was erroneously included in the past. Included “Net Mass Emissions Requirements” in Part 17 of permit condition 10320 correctly.
- Changed Part 42 of BAAQMD permit condition 10320 from “Coatings Usage Limit” to “VOC Content Limits” per Application 13654. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-AM

- Changed description of S1072 to clarify that this source is part of the Plastic Plant.
- Minor typo related to Part 32 of permit condition 10320 was corrected.

Table IV-AN

- Minor typo related to Part 32 of permit condition 10320 was corrected.

Table IV-AP and IV-AQ

- Included SIP Regulation 8, Rule 5 requirements in both the tables.

Table IV-AV

- Changed description of S3007 to correctly reflect its actual operational use.
- Included BAAQMD Regulation 9, Rule 1 requirements.
- Corrected "basis" of Part 8 of permit condition 14205.
- Parts 14, 15, 16, 17, 18 and 19 of BAAQMD permit condition 14205 were added per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table IV-AW

- Corrected "basis" of Part 8 of permit condition 14205.
- Changed Part 2 of BAAQMD permit condition 14206 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Minor typo related to Part 16 of permit condition 14206 was corrected.

Table IV-AX

- Included BAAQMD Regulation 9, Rule 1 requirements.
- Corrected "basis" of Part 8 of permit condition 14205.
- Changed Part 2 of BAAQMD permit condition 14206 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Corrected Part 17 by renumbering it as Part 15 of permit condition 14206 that deals with Source Test Requirement for Heater Boxes.

Table IV-AY

- Included BAAQMD Regulation 9, Rule 1 requirements.
- Corrected "basis" of Part 8 of permit condition 14205.
- Changed Part 2 of BAAQMD permit condition 14207 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Corrected Part 17 by renumbering it as Part 15 of permit condition 14207 that deals with Source Test Requirement for Heater Boxes.

Table IV-BC

Included new requirements that apply to fixed roof tanks per BAAQMD Regulation 8, Rule 5 and SIP Regulation 8, Rule 5.

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

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

All changes to existing permit conditions are clearly shown in "strike-out/underline" format in the proposed permit. When the permit is issued, all 'strike-out" language will be deleted; all "underline" language will be retained, subject to consideration of comments received.

The existing permit conditions are derived from previously issued District Authorities to Construct (A/C) or Permits to Operate (P/O). It is also possible for permit conditions to 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.

The regulatory basis is listed following each condition. The regulatory basis may be a rule or regulation. The District is also using the following terms for regulatory basis:

- BACT: This term is used for a condition imposed by the Air Pollution Control Officer (APCO) to ensure compliance with the Best Available Control Technology in Regulation 2-2-301.
- Cumulative Increase: This term is used for a condition imposed by the APCO that limits a source's operation to the operation described in the permit application pursuant to BAAQMD Regulation 2-1-403.

- Offsets: This term is used for a condition imposed by the APCO to ensure compliance with the use of offsets for the permitting of a source or with the banking of emissions from a source pursuant to Regulation 2, Rules 2 and 4.
- PSD: This term is used for a condition imposed by the APCO to ensure compliance with a Prevention of Significant Deterioration permit pursuant to Regulation 2, Rule 2.
- TRMP: This term is used for a condition imposed by the APCO to ensure compliance with limits that arise from the District's Toxic Risk Management Policy.

Changes to permit:

- Numerous permit condition deletions and additions were made to Section VI. The deletions were the result of the sources that have been permanently removed from service. Some new sources were added as part of the expansion of the North Paint Shop that was handled in District Application 10438. The changes made to Table VI are summarized as follows:

Permit Condition	Source(s)	Permit Action	Application #	Comments
4159	900	Deleted	N/A	Deleted due to source removal, 02/09/08
4281	3	Deleted	10438	Deleted due to source removal, 12/13/06
7364	1021	Deleted	16438	Deleted due to source removal, 01/29/07
10481	1061, 1062, 1063, 1510	Deleted	N/A	Deleted due to source removal, 11/16/06
10484	1061, 1062	Deleted	16438	Deleted due to source removal, 01/29/07
10578	1050, 1051	Deleted	16438	Deleted due to source removal, 01/29/07
17797	41	Deleted	10438	Deleted due to source removal, 01/29/07
18533	1900	Deleted	N/A	Deleted due to source removal, 08/09/07
22541	3022	Added	10438	Added as requested by NUMMI, 12/13/06
22542	3024	Added	10438	Added as requested by NUMMI, 12/13/06
22543	3025	Added	10438	Added as requested by NUMMI, 12/13/06
22544	592	Added	10438	Added as requested by NUMMI, 12/13/06
22545	593	Added	10438	Added as requested by NUMMI, 12/13/06
22820	S1060, S1600-	Added	16480, 19382	Added as requested by NUMMI, 03/01/03

Permit Condition	Source(s)	Permit Action	Application #	Comments
	S1604			

Condition # 207
As a result of Application #'s 10005, 10438, 17748 and 16438, Condition # 207 was amended to delete numerous sources (e.g., S2, S3, S60, S803, S807, S808, S813, S1050 etc.). Emission limits were adjusted accordingly to account for deleted sources. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.

Condition # 9156
As a result of Application # 16438, Condition # 9156 was amended to delete S1021. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 9164
- Parts 1, 2, 4, 5, and 6 were amended to include abatement devices, A10141 and A10143, as these were erroneously left out in the prior revision of the Title V permit. A 10141 and A10143 abate emissions from S1014, Truck Topcoat Booth.
- Minor typos were corrected in Parts 3, 5, 6, and 11.

Condition # 10320
As a result of Application # 13654, Condition # 10320 was amended to delete sources S960 and S961 that have been dismantled and are no longer in service. The material usage limits for sources S57, S58, S59, and S65 were replaced with VOC content limits of coatings in Part 10 of the condition. Similarly, material usage limits for S1070 and S1071 were replaced with VOC content limits of coatings in Part 42. References to S960 and S961 were removed from all parts of the Condition # 10320. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 14205
- Part 5 of the condition was amended per Application # 17748 to lower overall POC emissions from North Paint Shop Sources from 834.73 tpy to 828.53 tpy. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

- As a result of Application # 10438, S3007 description was changed to correctly reflect its actual operational use. Added parts 14 thru 19 to the Condition # 14205. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 14206
Part 1 of the condition was amended per Application # 10438 to reflect new emissions limits from sources S3008 and S3009. The material usage limits for sources S3008 and S3009 were replaced with VOC content limits of coatings in Part 2 of the condition. Minor typos were corrected in parts 8, 14, and 16 of the condition. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 14207
Part 2 of the condition was amended per Application # 10438 to replace material usage limits with VOC content limits of topcoat materials. This change provided operational flexibility to NUMMI. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 14210
Condition was amended to delete sources S3500, S3501 and S3502 as these have been dismantled and are no longer in service. Part 1 of the condition was amended to remove references to the deleted sources. The sources were dismantled and removed to minimize material storage. The usage did not change, just the method for handling and transporting the material to the needed locations. For example, instead of storing the cleaning solvent in cold cleaners, it is placed in a bucket or closed container, and transported to the needed area. Hence, POC emissions limit in part 1 of the condition 14210 was not adjusted to account for deleted sources.

Condition # 16780
Condition was amended to delete source S2007 as it has been dismantled and is no longer in service. Parts 1 and 2 were amended to remove references to S2007. The material usage and POC emission limits have not been adjusted, as the amount of material used didn't change as a result of the removal of S2007. The handling of the material is now accomplished using one cold cleaner instead of two.

Condition # 22541
As a result of Application # 10438, Condition # 22541 was created for new source S3022, NPS Passenger ELPO Dip Tank. Part 1.a of this condition was further amended per Application # 17748 to lower POC emissions limit from 66.40 tpy to 60.20 tpy. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.

Condition # 22542
As a result of Application # 10438, Condition # 22542 was created for new source S3024, NPS PVC Undercoat Booth. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 22543
As a result of Application # 10438, Condition # 22543 was created for new source S3025, NPS Passenger Bead Sealer Operations. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 22544
As a result of Application # 10438, Condition # 22544 was created for new source S592, NPS Passenger ELPO Resin Storage Tank. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 22545
As a result of Application # 10438, Condition # 22545 was created for new source S593, NPS Passenger ELPO Pigment Storage Tank. The engineering evaluation of Application # 10438 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 24057
As a result of Application # 17748, a new condition, Condition # 24057, was created for S71, Passenger Cavity Wax Booth. Condition # 24057 was created to reflect new emissions and VOC content limits as requested by NUMMI. The engineering evaluation of Application # 17748 is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Condition # 22820
As a result of adoption of an Air Toxics Control Measure (ATCM) for stationary diesel engines by the California Air Resources Board (CARB or ARB) on November 8, 2004, Condition # 22820 was created for sources S1060 and S1600-S1604, Emergency Standby Diesel Engines. The ATCM restricted the hours of operation for older standby engines and required controls and/or lower emission rates for prime and new standby engines.

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.

The District has reviewed all monitoring and has determined the existing monitoring is adequate to provide a reasonable assurance of compliance.

Monitoring decisions are typically the result of a balancing of several different factors including: 1) the likelihood of a violation given the characteristics of normal operation, 2) degree of variability in the operation and in the control device, if there is one, 3) the potential severity of impact of an undetected violation, 4) the technical feasibility and probative value of indicator monitoring, 5) the economic feasibility of indicator monitoring, and 6) whether there is some other factor, such as a different regulatory restriction applicable to the same operation, that also provides some assurance of compliance with the limit in question.

These factors are the same as those historically applied by the District in developing monitoring for applicable requirements**.** It follows that, although Title V calls for a re-examination of all monitoring**,** there is a presumption that these factors have been appropriately balanced and incorporated in the District's prior rule development and/or permit issuance. It is possible that, where a rule or permit requirement has historically had no monitoring associated with it, no monitoring may still be appropriate in the Title V permit if, for instance, there is little likelihood of a violation**.** Compliance behavior and associated costs of compliance are determined in part by the frequency and nature of associated monitoring requirements. As a result, the District will generally revise the nature or frequency of monitoring only when it can support a conclusion that existing monitoring is inadequate**.**

Changes to permit:

- A note has been added at the beginning of the section to clarify that this section is a summary of the limits and monitoring, and that in case of a conflict between Sections I-VI and Section VII, the preceding sections take precedence.
- Deleted tables for sources S2, S3, S41, S72, S73, S802, S803, S808, S900, S960, S1021, S1050, S1051, S1061, S1062, S1063, S1510, S1900, S3500, S3501 and S3502, as these are no longer in service. Renumbered the tables after deleting these sources.
- Added tables for new sources S592, S593, S1060, S1600-S1604, S3022, S3024 and S3025.
- Regulation 6, Particulate Matter and Visible Emissions, was renumbered as Regulation 6, Rule 1, and renamed as Particulate Matter, General Requirements on December 5, 2007. The equivalent rule in the State Implementation Plan (SIP) is Regulation 6, Particulate Matter and Visible Emissions, which was approved in a Federal Register notice of September 4, 1998. This change is reflected in all tables, where applicable, in Section VII.
- Introduced, where applicable, monitoring requirements per EPA Regulation 40 CFR Part 63, Subpart IIII, National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light Duty Trucks.

Table VII-A

- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- Changed Part 10 of BAAQMD permit condition 10320 from “Coatings Usage Limit” to “VOC Content Limits” per Application 13654. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Part 20 of BAAQMD permit condition 10320 was amended to include “total non-methane organic carbon emissions from the outlet of the thermal oxidizer shall be 10 ppm by volume or less” per Application # 12176. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- The frequency of monitoring for the limit in BAAQMD permit condition 10320, parts 4, 5, and 24 has been changed from monthly to quarterly to reflect the actual language in part 7.

Table VII-B

- The emissions limit in Condition 207, part 1(a), was lowered from 459.2 tpy to 110.10 tpy per Application #’s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- Deleted part 2(a) of permit condition # 207 per Application # 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-C

- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- The emission limit in Condition 207, part 1(a), was lowered from 459.2 tpy to 110.10 tpy per Application #’s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- The protective fuel tank emission limit in Condition 207, part 1(d), was lowered from 19.10 tpy to 4 tpy per Application #’s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.

- The protective Fuel Tank VOC content limit was lowered from 0.95 lb/gal to 0.28 lb/gal per Application # 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Deleted part 2(a) of Condition # 207 per Application # 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-D
Deleted all requirements per permit condition # 207, as it does not apply to S71 anymore.

Table VII-E
- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- The emission limit in Condition, part 1(a), was lowered from 459.2 tpy to 110.10 tpy per Application #'s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- Deleted part 2(a) of permit condition # 207 per Application # 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Spare Parts ELPO emissions in Condition 207, part 1(d), were lowered from 17.20 tpy to 6.90 tpy per Application #'s 10438and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.

Table VII-G
- Included new recordkeeping requirements (i.e., 8-5-501.1 and 8-5-501.3) as a result of changes to BAAQMD Regulation 8, Rule 5.

Table VII-H
- Included new recordkeeping requirements (i.e., 8-5-501.1 and 8-5-501.3) as a result of changes to BAAQMD Regulation 8, Rule 5.

Table VII-L
- The emissions in Condition 207, Part 1(d), were lowered from 69 tpy to 63.60 tpy per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-M
- The emission limit in Condition 207, part 1(a), was lowered from 459.2 tpy to 110.10 tpy per Application #'s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- The emissions in Condition 207, Part 1(d), were lowered from 69 tpy to 63.60 tpy per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

- Part 2(a) of BAAQMD permit condition 207 was deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-N

- The emission limit in Condition 207, Part 1(a), was lowered from 459.2 tpy to 110.10 tpy per Application #'s 10438 and 16438. The engineering evaluations of these applications are contained in Appendix B and form part of this permit evaluation/statement of basis.
- The emissions in Condition 207, Part 1(d), emissions were lowered from 69 tpy to 63.60 tpy per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Part 2(a) of BAAQMD permit condition 207 was deleted per Application 16438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Minor typos related to permit condition 207 were corrected.

Table VII-P

Deleted reference to S2007 as it has been dismantled and removed from service per request from NUMMI.

Table VII-R

Minor typo related to permit condition 10320, part 31, was corrected.

Table VII-S

- Included new recordkeeping requirements (i.e., 8-5-501.1 and 8-5-501.3) as a result of changes to BAAQMD Regulation 8, Rule 5.

Table VII-U

Included SO2 limits per BAAQMD Regulation 9, Rule 1.

Table VII-W

Deleted Condition # 9159, Part 7, as it was removed on 12/13/04 in the District databank.

Table VII-X

Deleted part 6 of Condition # 9161 as it does not exist and was erroneously included in the prior revision of Title V.

Table VII-Y

Included SO2 limits per BAAQMD Regulation 9, Rule 1.

Table VII-AA

Included SO2 limits per BAAQMD Regulation 9, Rule 1.

Table VII-AB

Minor typo related to Condition # 10011, part 5, was corrected.

Table VII-AD
Minor typos related to Condition # 9164 were corrected.

Table VII-AE
Included SO2 limits per BAAQMD Regulation 9, Rule 1.

Table VII-AF
Minor typos related to Condition # 9170 were corrected as the numbers were transposed.

Table VII-AG
Minor typos related to Condition # 9171 were corrected as the numbers were transposed.

Table VII-AH
Minor typo related to Condition # 9172 was corrected as the numbers were transposed.

Table VII-AJ
Included NOx and CO monitoring requirements per SIP Regulations 9-7-301.1 and 9-7-301.2.

Table VII-AK
Monitoring for opacity for diesel standby reciprocating engines is not required in accordance with Section I.O.1 in CAPCOA/ARB/EPA Region IX Periodic Monitoring committee recommendations in the June 24, 1999 document entitled: "Periodic Monitoring Recommendations For Generally Applicable Requirements in SIP." The reason is that sources in California burn low-sulfur, low-aromatic fuels. When the recommendations were written, California diesel contained 0.05% sulfur. Now the fuels contain 0.0015% sulfur, so particulate should be even lower.

In addition, in the Bay Area, the standard for opacity for emergency standby engines is Ringelmann 2, which is roughly equivalent to 40% opacity. It is unlikely that even an old engine would exceed a 40% opacity.

Moreover, these engines operate infrequently.

For the three reasons above, no monitoring for opacity is required for these engines.

Monitoring for filterable particulate (FP) for diesel standby reciprocating engines is not required in accordance with Section II.A.1 in CAPCOA/ARB/EPA Region IX Periodic Monitoring committee recommendations in the June 24, 1999 document entitled: "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources." This determination applies to engines that are operated for maintenance and testing for less than 200 hours/yr. These engines are operated for maintenance and testing for less than 20 hours/yr, so no monitoring for FP is justified.

The generally applicable FP limit in the Bay Area is 0.15 grains/dscf. It is highly unlikely that any engine could exceed this standard, especially taking the fuel's low sulfur and aromatic content into account

No monitoring is required for the 0.5% standard for S by weight in BAAQMD Regulation 9, Rule 1, because the only diesel fuel available in California has a sulfur content of 0.0015% by weight.

The CARB ATCM and BAAQMD permit condition have a limit of 20 hours/yr for maintenance and testing. The engines must have non-resettable meters for the hours of operation and the owner/operator must is required to keep monthly records. This is appropriate monitoring for the operational limit.

Table VII-AL

- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- Part 41 of BAAQMD Condition # 10320 was amended to lower POC emissions limit from 21.61 tpy to 21.49 tpy, as it was not captured correctly in the prior revision of Title V.
- Changed Part 42 of BAAQMD permit condition 10320 from "Coatings Usage Limit" to "VOC Content Limits" per Application 13654. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-AP

Included new recordkeeping requirements (i.e., 8-5-501.1 and 8-5-501.3) as a result of changes to BAAQMD Regulation 8, Rule 5.

Table VII-AQ

Included new recordkeeping requirements (i.e., 8-5-501.1 and 8-5-501.3) as a result of changes to BAAQMD Regulation 8, Rule 5.

Table VII-AV

- Changed description of S3007 to correctly reflect its actual operational use.
- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-AW

- Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Part 1 of BAAQMD Condition # 14206 was amended to include new Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Changed Part 2 of BAAQMD permit condition 14206 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-AX

- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Changed Part 2 of BAAQMD permit condition 14206 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Minor typo related to Condition # 14206, Part 16, was corrected.

Table VII-AY

- Included SO2 limits per BAAQMD Regulation 9, Rule 1.
- Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Changed Part 2 of BAAQMD permit condition 14207 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Table VII-AY1

- Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Changed Part 2 of BAAQMD permit condition 14207 from "Coatings Usage Limit" to "VOC Content Limits" per Application 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.
- Minor typo related to Condition # 14207, Part 15, was corrected.

Table VII-BD

Part 5 of BAAQMD Condition # 14205 was amended to include new North Passenger Paint Shop Emissions limit per Application # 10438. The engineering evaluation of this application is contained in Appendix B and forms part of this permit evaluation/statement of basis.

Following is a summary of the limits and monitoring, organized by pollutant.

NOX Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S58, S65, S1071,	BAAQMD Condition #10320, Part 4	S58 + S65 + S1071 Emissions < 26.16 TPY	Annual Source Test and records
S1002, Truck Ed Oven	BAAQMD Condition # 9158, Part 7	Emissions < 0.1 lb/MMBTU	Annual Source Test
S1007, Truck Sealer Oven	BAAQMD Condition #9158, Part 7	Emissions < 0.1 lb/MMBTU	Annual Source Test
S1009, Truck Prime Oven	BAAQMD Condition #9158, Part 7	Emissions < 0.1 lb/MMBTU	Annual Source Test
S1014, Truck Topcoat Booth	BAAQMD Condition #9164, Part 9	Emissions < 0.1 lb/MMBTU	Annual Source Test
S1015, Truck Topcoat Oven	BAAQMD Condition #9158, Part 7	Emissions < 0.1 lb/MMBTU	Annual Source Test
S1056, S1057, Boilers	BAAQMD 9-7-301.1 (until 1/1/2012)	30 ppmv @ 3%O2, dry, 3-hr average	Annual Source Test
	BAAQMD 9-7-307.5 (after 1/1/2012)	9 ppmv @ 3%O2, dry, 3-hr average	Annual Source Test
	BAAQMD Condition # 9174, Part 2	30 ppmv @ 3%O2, dry, 1-hr average	Annual Source Test
S3007, S3009, S3015, S3017	BAAQMD Condition #14205, Part 9	S3007 + S3009 + S3015 + S3017 Emissions < 40.54 TPY	Source Test every 5 years
A571, Plastic Plant Thermal Oxidizer	BAAQMD Condition #10320, Part 21	NOx from A571 < 1.72 tons/month	Annual Source Test

NOx Discussion:

Natural gas usage is limited at the facility by permitting conditions and/or maximum firing rate. The facility is required to keep records of the quantity of natural gas that is burned. NOx emissions are dependent on the amount of natural gas burned.

From prior source test results at NUMMI, the maximum NOx emission factor for the combustion of natural gas in a booth, oven, and thermal oxidizer is approximately 0.1 per million British Thermal Units (lb/MMBTU) of natural gas. The following calculations of potential to emit are based on the emission factor and the maximum allowed natural gas usage (in million therms (MMTherms) per year (yr).

Sources S58, S65, and S1071 (including A571): 15.8 tons NOx/year [3.16 MMTherms/yr (Part 2 of Condition 10320) and 0.1 lb/MMBTU], which is below the limit of 26.16 TPY (Part 4 of Condition # 10320)

The following calculations of potential to emit are based on specific emission factors and the maximum allowed natural gas usage (in million therms (MMTherms) per year (yr) for the following sources: S3007, S3009, S3015, S3017: 40.54 tons NOx/year using the NOx emission factors of 0.1, 0.15, 0.1, and 0.023 pound per million British Thermal Units (lb/MMBTU) for the Thermal Oxidizers, Oven Heater Boxes, and Boilers, respectively (from application # 25397 evaluation report) and maximum firing rate of 9.63 MMTherms/yr (Part 6 of Condition 14205), which is how the limit of 40.54 TPY (Part 9 of Condition 14205) was developed. Source testing has verified compliance with these conditions.

CO Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S58 + S65 + S1071	BAAQMD Condition #10320, Part 5	S58 + S65 + S1071 Emissions < 46.48 TPY	Annual Source Test and records
S1056, S1057, Boilers	BAAQMD 9-7-301.4	400 ppmv @3%O2, dry, 3-hr average	Annual Source Test
S3007, S3009, S3015, S3017	BAAQMD Condition #14205, Part 10	S3007 + S3009 + S3015 + S3017 Emissions < 50.46 TPY	Source Test every 5 years

CO Discussion:

Natural gas usage is limited at the facility by permit conditions and/or maximum firing rate. The facility is required to keep records of the quantity of natural gas that is burned. CO emissions are dependent on the amount of natural gas burned. No other fuels are burned at the facility.

From prior source test results at NUMMI, the maximum CO emission factor for the combustion of natural gas in a booth, oven, and thermal oxidizer is approximately 0.25 per million British Thermal Units (lb/MMBTU) of natural gas. The following calculations of potential to emit are based on the emission factor and the maximum allowed natural gas usage (in million therms (MMTherms) per year (yr).

Sources S58, S65, and S1071 (including A571): 39.5 tons CO/year [3.16 MMTherms/yr (Part 2 of Condition 10320) and 0.25 lb/MMBTU], which is below the limit of 46.48 TPY (Part 5 of Condition # 10320)

The following calculations of potential to emit are based on specific emission factors and the maximum allowed natural gas usage (in million therms (MMTherms) per year (yr) for the following sources: S3007, S3009, S3015, S3017: 50.46 tons CO/year using the CO emission factors of 0.274, 0.12, 0.1, and 0.034 pound per million British Thermal Units (lb/MMBTU) for the Thermal

Oxidizers, Heater Boxes, and Boilers, respectively (from application # 25397 evaluation report) and maximum firing rate of 9.63 MMTherms/yr (Part 6 of Condition 14205), which is how the limit of 50.46 TPY (Part 10 of Condition 14205) was developed. Source testing has verified compliance with these conditions**.**

SO_2 Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
All combustion sources	BAAQMD 9-1-301	Ground level concentrations of SO2 shall not exceed: 0.5 ppm for 3 consecutive minutes AND 0.25 ppm averaged over 60 consecutive minutes AND 0.05 ppm averaged over 24 hours	None
	BAAQMD 9-1-302	300 ppm (dry)	None

SO_2 Discussion:

Sulfur Dioxide (SO2) is generated when sulfur in fuel is burned. A small amount of sulfur dioxide is generated by burning natural gas. All of the combustion sources except Emergency Standby Diesel Engines at the facility burn utility natural gas, since no other gas is available at the site.

The general emission limit for SO2 pursuant to Regulation 9-1-302 is 300 ppm, dry. The specification for utility-grade natural gas is 5 grains per standard cubic foot of natural gas, which is equivalent to about 170-ppm sulfur as hydrogen sulfide (H2S) in the gas. One molecule of SO2 is generated for each molecule of H2S.

About 8.7 cubic feet of combustion gases are generated for each cubic foot of natural gas burned, but the amount of sulfur in the gas remains constant. Therefore, if the concentration of sulfur in the natural gas is 170-ppm, the concentration in the combustion gases will be 20 ppm or less. Since the concentration in the combustion gases will be less than 10% of the limit, there is no need to perform monitoring for SO2 at this facility.

All facility combustion sources are subject to the SO2 emission limitations in District Regulation 9, Rule 1 (ground-level concentration and emission point concentration). In EPA's June 24, 1999 agreement with the CAPCOA and ARB, "Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", EPA has agreed that natural-gas-fired combustion sources do not need additional monitoring to verify compliance with Regulation 9, Rule 1, since violations of the regulation are unlikely. Therefore, no monitoring is proposed for this requirement.

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S58, S63, S65, S102, S1002, S1007, S1009, S1015, S1056, S1057, S1071, S3009, S3015, S3017 (combustion sources)	SIP Regulation 6-301	Ringelmann 1.0	None
S57-S59, S61, S62, S65, S71, S101, S1005, S1006, S1008, S1010, S1012, S1014, S1017, S1018, S1070, S1071, S3008, S3014, S3016	SIP Regulation 6-301	Ringelmann 1.0	None
S804, S805, S1003, S1004, S1011, S1019	SIP Regulation 6-301	Ringelmann 1.0	None
S802, S1020, S1809, S2826	SIP Regulation 6-301	Ringelmann 1.0	Monthly visible emissions check
S57-S59, S61, S62, S65, S71, S101, S1005, S1006, S1008, S1010, S1012, S1014, S1017, S1018, S1019, S1020, S1070, S1071, S3008, S3014, S3016	SIP Regulation 6-310	0.15 gr/dscf	None
S804, S805, S1003, S1004, S1011, S1019,	SIP Regulation 6-310	0.15 gr/dscf	None
S802, S1020, S1809, S2826	SIP Regulation 6-310	0.15 gr/dscf	Monthly visible emissions check
S58, S63, S65, S73, S102, S1002, S1007, S1009, S1015, S1056, S1057, S1062, S1071, S2826, S3009, S3015, S3017 (combustion sources)	SIP Regulation 6-310.3	0.15 gr/dscf at 6% O2	None
S57-S59, S61, S62, S65, S71, S72, S101, S1005, S1006, S1008, S1010, S1012, S1014, S1017, S1018, S1019, S1020, S1070, S1071, S3008, S3014, S3016	SIP Regulation 6-311	$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	None

PM Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S804, S805, S1003, S1004, S1011, S1019	SIP Regulation 6-311	$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	None
S802, S1020, S1809, S2826	SIP Regulation 6-311	$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	Monthly visible emissions check
S58, S63, S65, S102, S1002, S1007, S1009, S1015, S1056, S1057, S1071, S2826, S3009, S3015, S3017 (combustion sources)	SIP Regulation 6-311	$4.10P^{0.67}$ lb/hr, where P is process weight, ton/hr	None

PM Discussion:

BAAQMD Regulation 6, Rule 1 “Particulate Matter, General Requirements”

Visible Emissions

BAAQMD Regulation 6-1-301 limits visible emissions to no darker than 1.0 on the Ringelmann Chart (except for periods or aggregate periods less than 3 minutes in any hour). Visible emissions are normally not associated with combustion of gaseous fuels, such as natural gas. All of the combustion sources at this facility burn natural gas exclusively, therefore, per the EPA's June 24, 1999 agreement with CAPCOA and ARB titled "Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP"; the EPA does not require the monitoring of PM for the combustion emissions from these sources.

Particulate Weight Limitation

BAAQMD Regulation 6-1-310 limits filterable particulate (FP) emissions from any source to 0.15 grains per dry standard cubic foot (gr/dscf) of exhaust volume. Section 310.3 limits filterable particulate emissions from “heat transfer operations” to 0.15 gr/dscf @ 6% O_2. These are the “grain loading” standards.

Exceedances of the grain loading standards are normally not associated with combustion of gaseous fuels, such as natural gas. All of the combustion sources at this facility burn natural gas exclusively, therefore, per the EPA's July 2001 agreement with CAPCOA and ARB entitled "CAPCOA/CARB/EPA Region IX Recommended Periodic Monitoring for Generally Applicable Grain Loading Standards in the SIP: Combustion Sources: Summary of Periodic Monitoring Recommendations for Generally Applicable Requirements in SIP", the EPA does not require the monitoring of PM for the combustion emissions from these sources.

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S101, S102, S1001, S1002, S3007, S3022	BAAQMD 8-13-306	Electrophoretic Primer VOC ≤ 145 g/l (1.2 lb/gal)	Records
S61, S62, S63, S101, S102, S804, S805	BAAQMD Condition # 207 Part 1(a)	Total* Emissions ≤ 110.10 TPY	Records
S57, S58, S59, S65	BAAQMD 8-13-307.1	Flexible Parts Primer VOC ≤ 490 g/l (4.1 lb/gal)	Records
S57, S58, S59, S65	BAAQMD 8-13-307.2	Color Topcoat VOC ≤ 450 g/l (3.8 lb/gal)	Records
S57, S58, S59, S65	BAAQMD 8-13-307.3	Basecoat/Clearcoat VOC ≤ 540 g/l (4.5 lb/gal)	Records
S57, S58, S59, S65	BAAQMD Condition # 10320 Part 9	Emissions ≤ 173 TPY	Records
S57, S58, S59, S65	BAAQMD Condition # 10320 Part 10	VOC content limits as follows: Primer (Solvent-borne) ≤4.10 lbs/gal, Primer (Water-borne) <1.27 lbs/gal (includes water), Non-Metallic High Solids <4.70 lbs/gal, Basecoat <4.70 lbs/gal, Clearcoat <4.20 lbs/gal	Records
S57, S58, S59, S65	BAAQMD Condition # 10320 Part 19	A571 Temperature ≥ 1400 oF	Temperature
S57, S58, S59, S65	BAAQMD Condition # 10320 Part 20	A571 Destruction Efficiency ≥ 98.5%, if inlet concentration of VOC ≥ 500 ppmv, as methane; or A571 Destruction Efficiency ≥ 95%, if inlet concentration of VOC < 500 ppmv, as methane or total non-methane organic carbon emissions from the outlet of the thermal oxidizer shall be 10 ppm by volume or less.	Source Test

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S61, S71, S804, S805, S1005, S1006, S1007, S1010, S1017, S1018, S1019, S3014, S3015, S3016, S3017	BAAQMD 8-13-302.1	Spray Primer VOC ≤ 1.80 kg/l (15.0 lb VOC/gal of applied solids)	Records
S61, S71, S804, S805, S1005, S1006, S1007, S1010, S1017, S1018, S1019, S3014, S3015, S3016, S3017	BAAQMD 8-13-302.2	Primer Surfacer VOC < 1.80 kg/l (15.0 lb VOC/gal of applied solids)	Records
S61, S71, S804, S805, S1005, S1006, S1007, S1010, S1017, S1018, S1019, S3014, S3015, S3016, S3017	BAAQMD 8-13-302.3	Topcoat VOC < 1.80 kg/l (15.0 lb VOC/gal of applied solids)	Records
S61	BAAQMD Condition # 207 Part 1(d)	Blackout Chassis Emissions ≤ 18.1 TPY	Records
S61	BAAQMD Condition # 207 Part 1(d)	Blackout Chassis VOC < 3.02 lb/gal	Records
S62, S63, S1070, S1071	BAAQMD 8-13-308	Off-Line VOC ≤ 340 g/l (2.8 lb/gal)	Records
S62, S63	BAAQMD Condition # 207 Part 1(d)	Protective Fuel Tank < 4.0 TPY	Records
S62, S63	BAAQMD Condition # 207 Part 1(d)	Protective Fuel Tank VOC ≤ 0.28 lb/gal	Records
S71	BAAQMD Condition # 24057 Part 1(a)	Cavity Wax Emissions ≤ 8.70 TPY	Records
S71	BAAQMD Condition # 24057 Part 1(b)	Cavity Wax VOC ≤ 3.40 lb/gal	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S101, S102	BAAQMD Condition # 207 Part 1(d)	Spare Parts ELPO Emissions < 6.90 TPY	Records
S101, S102	BAAQMD Condition # 207 Part 1(d)	Spare Parts Elpo VOC ≤ 1.21 lb/gal	Records
S101, S102	BAAQMD Condition # 207 Part 3(A)(1)	Spare Parts Elpo Oven Destruction Efficiency ≥ 60 wt or total non-methane organic carbon emissions from the outlet of the thermal oxidizer shall be 10 ppm by volume or less. %	Source Test
S101, S102	BAAMQD Condition # 207 Part 3(A)(1)	Temperature ≥ 800 oF	Temperature
S405, S406, S408, S414, S965, S992, S1511, S1512, S3503, S3505	None	None	Records
S406	BAAQMD Condition # 10709 Part 1	Throughput < 530,170 gals/yr	Records
S801, S1809	BAAQMD Regulation 8-2-301	Emissions < 15 lb/day or < 300 ppmv	None
S801, S804, S805	BAAQMD Condition # 207 Part 1(d)	Fugitive Emissions from Body & Assembly (S801 + S804 + S805) ≤ 63.60 TPY	Records
S801, S804, S805	BAAQMD Condition # 207 Part 1(d)	Underbody Black VOC ≤ 3.02 lb/gal	Records
S805	BAAQMD Condition # 207 Part 1(d)	Final Repair Emissions ≤ 2.0 TPY	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S805	BAAQMD Condition # 207 Part 1(d)	Repair Primer Emissions ≤ 5.1 TPY	Records
S805	BAAQMD Condition # 207 Part 1(d)	Final Repair VOC ≤ 6.41 lb/gal	Records
S805	BAAQMD Condition # 207 Part 1(d)	Repair Primer VOC ≤ 5.83 lb/gal	Records
S806	BAAQMD Condition # 7799	Throughput < 1.1 E6 gals/yr	Records
S1504	BAAQMD Condition # 16780 Part 1 & Part 2	Emissions < 5,068 lbs/yr, or Usage < 160 gal/yr Safety Kleen 105, and < 60 gal/yr SystemOne Ashland Solvent, and < 500 gal/yr NUMMI Solvent IV	Records
S964, S1072, S1509	BAAQMD Condition # 10320 Part 31	Emissions < 134.51 TPY	Records
S964, S1072, S1509	BAAQMD Condition # 10320 Part 32	Cleanup Solvent Collected/Recovered > 77%, or compliance with Condition # 10320 Part 31	Records
S1001, S1002, S1005-S1008, S1010, S1012, S1014, S1015, S1017-S1020, S1053, S1803, S3007, S3008, S3009, S3014-S3017	40 CFR 60 Subpart MM Section 60.392 (a)(1)	Prime Coat Operation VOC < 0.17 kg/l of applied coating solids, when Solids Turnover Ratio (RT) > 0.16	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1001, S1002, S1005-S1010, S1012, S1014, S1015, S1017-S1020, S1053, S1803, S3007, S3008, S3009, S3014-S3017	40 CFR 60 Subpart MM Section 60.392 (a)(2)	Prime Coat Operation VOC < 0.17 x 350 (0.16-RT) kg/l of applied coating solids, when Solids Turnover Ratio (RT) > 0.04 and < 0.16	Records
S1001, S1002, S1005-S1010, S1012, S1014, S1015, S1017-S1020, S1053, S1803, S3007, S3008, S3009, S3014-S3017	40 CFR 60 Subpart MM Section 60.392 (a)(3)	Prime Coat Operation VOC < 0.17 kg/l of applied coating solids, when Solids Turnover Ratio (RT) < 0.04	Records
S1001, S1002, S1003-S1012, S1014, S1015, S1017-S1020, S1053, S1803, S1809	BAAQMD Condition # 9156 Part 5	Truck Vehicle Line* Emissions from non-combustion operations < 779.17 TPY	Records
S1001	BAAQMD Condition # 9257 Part 1	Elpo Primer VOC < 0.59 lb/gal	Records
S1001	BAAQMD Condition # 9257 Part 2	Elpo Primer Usage < 107,371 gal/yr; < 11,167 gal/month; < 515 gals/day; or compliance with Condition # 9257 Part 5	Records
S1001	BAAQMD Condition # 9257 Part 5	Emissions < 0.99 ton/month; < 9.5 ton/yr	Records
S1002, S1007, S1009, S1015	BAAQMD Condition # 9158 Part 2a	Temperature > 1400 oF, or compliance with Condition # 9158 Parts 9 & 10	Temperature

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1002, S1007, S1009, S1015	BAAQMD Condition # 9158 Part 2b and c	Destruction Efficiency > 98%, if VOC concentration > 1200 ppm as C1; or Destruction Efficiency > 95-98%, if VOC concentration > 500 ppm and < 1200 ppm (linearly); or Total Non-methane Organic Hydrocarbon Outlet Concentration ≤ 10 ppmv	Source Test
S1002	BAAQMD Condition # 9158 Part 8	Emissions ≤ 0.33 ton/month; ≤ 3.21 ton/yr	Records
S1005-S1010, S1012, S1014, S1015, S1017-S1020, S1053, S1803, S3014-S3017	40 CFR 60 Subpart MM Section 60.392 (b)	Guide Coat VOC ≤ 1.40 kg/l of applied coating solids	Records
S1005-S1010, S1012, S1014, S1015, S1017-S1020, S1053, S1803, S3014-S3017	40 CFR 60 Subpart MM Section 60.392 (c)	Topcoat Operation VOC ≤ 1.47 kg/l of applied coating solids	Records
S1005	BAAQMD Condition # 9159 Part 1	PVC Undercoat VOC ≤ 0.6 lb/gal	Records
S1005	BAAQMD Condition # 9159 Part 2	PVC Undercoat Usage < 291,757 gal/yr; < 30,343 gal/month; or compliance with Condition # 9159 Part 5	Records
S1005	BAAQMD Condition # 9159 Part 5	Emissions ≤ 2.73 ton/month; ≤ 26.3 ton/yr	Records
S1006	BAAQMD Condition # 9161 Part 1	Anti-Chip I VOC ≤ 4.06 lb/gal; Anti-Chip II ≤ 1.42 lb/gal; Repair Primer VOC ≤ 4.63 lb/gal	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1006	BAAQMD Condition # 9161 Part 2	Anti-Chip I Usage < 11,628 gal/yr, 1,209 gal/month Anti-Chip II Usage < 29,413 gal/yr, 3,059 gal/month Repair Primer Usage < 233 gal/yr, 24 gal/month; or compliance with Condition # 9161 Part 5	Records
S1006	BAAQMD Condition # 9161 Part 5	Emissions ≤ 3.20 ton/month or ≤ 30.76 TPY	Records
S1007	BAAQMD Condition # 9158 Part 8	Emissions ≤ 1.31 ton/month; ≤ 12.56 TPY	Records
S1008	BAAQMD Condition # 9163 Part 1	Primer VOC < 4.08 lb/gal Int. Color VOC < 4.46 lb/gal Others-Repair < 4.63 lb/gal Soft-Chip < 7.09 lb/gal	Records
S1008	BAAQMD Condition # 9163 Part 2	Primer Usage < 62,129 gal/month, 6,461 gal/month Int. Color Usage < 26,973 gal/yr, 2,805 gal/month Others-Repair Usage < 233 gal/yr, 24 gal/month Soft-Chip Usage < 9,908 gal/yr, 1,030 gal/month; or compliance with Condition # 9163 Part 5	Records
S1008	BAAQMD Condition # 9163 Part 5	Emissions ≤ 11.01 ton/month; ≤ 105.9 TPY	Records
S1008	BAAQMD Condition # 9163 Part 10a	Temperature ≥ 1400 oF, or compliance with Condition 9163 Part 17 and 18	Temperature

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1008	BAAQMD Condition # 9163 Part 10 b & c	Destruction Efficiency of Thermal Oxidizers ≥ 98.5%, if VOC concentration ≥1200 ppm as C1; or Destruction Efficiency ≥ 95-98.5%, if VOC concentration ≥ 500 ppm and ≤ 1200 ppm (linearly); or Total Non-methane Organic Hydrocarbon Outlet Concentration ≤ 10 ppmv	Source Test
S1008	BAAQMD Condition # 9163 Part 12	VOC Reduction Efficiency of Activated Carbon System (A10082) ≥ 90% wt	Source Test
S1009	BAAQMD Condition # 9158 Part 8	Emissions ≤ 0.53 ton/month; ≤ 5.09 TPY	Records
S1010, S1017	BAAQMD Condition # 10011 Part 1	Repair Primer VOC ≤ 4.63 lb/gal Solids (repair) VOC ≤ 3.54 lb/gal Base Coat (repair) VOC ≤ 4.79 lb/gal Clear Coat (repair) VOC ≤ 4.12 lb/gal Solids (lacquer Repair) VOC ≤ 6.32 lb/gal Base Coat (lacquer repair) VOC ≤ 6.41 lb/gal Clear Coat (lacquer Repair) VOC ≤ 6.30 lb/gal Adhesion Promoter VOC ≤ 6.61 lb/gal Anti-Chip I VOC≤ 4.06 lb/gal Anti-Chip II VOC ≤ 1.42 lb/gal	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1010, S1017	BAAQMD Condition # 10011 Part 2	Repair Primer Usage < 837 gal/yr, 87 gal/month Solids (repair) Usage < 606 gal/yr, 63 gal/month Base Coat (repair) Usage < 857 gal/yr, 89 gal/month Clear Coat (repair) Usage < 1,665 gal/yr, 173 gal/month Solids (lacquer Repair) Usage < 691 gal/yr, 72 gal/month Base Coat (lacquer repair) Usage < 963 gal/yr, 100 gal/month Clear Coat (lacquer Repair) Usage < 1,576 gal/yr, 164 gal/month Adhesion Promoter Usage < 1,238 gal/yr, 128 gal/month Anti-Chip I Usage< 38 gal/yr, 4 gal/month Anti-Chip II Usage < 10 gal/yr, 1 gal/month; or compliance with Condition # 10011 Part 5	Records
S1010, S1017	BAAQMD Condition # 10011 Part 5	Emissions $\leq$ 2.38 ton/month; $\leq$ 22.91 TPY	Records
S1014	BAAQMD Condition # 9164 Part 2a	Temperature $\geq$ 1400 oF; Or compliance with Condition # 9164 Parts 12 & 13	Temperature
S1014	BAAQMD Condition # 9164 Part 2 b & c	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; **;** or Total Non-methane Organic Hydrocarbon Outlet Concentration $\leq$ 10 ppmv	Source Test

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1014	BAAQMD Condition # 9164 Part 4	VOC Reduction Efficiency of Activated Carbon System ≥ 90% wt	Source Test
S1014	BAAQMD Condition # 9164 Part 15	Solids VOC ≤ 3.54 lb/gal Base Coat VOC ≤ 4.79 lb/gal Clear Coat VOC ≤ 4.12 lb/gal Other-Repair VOC ≤ 4.63 lb/gal	Records
S1014	BAAQMD Condition # 9164 Part 16	Solids Usage ≤ 26,927 gal/yr, 2,800 gal/month; Base Coat Usage ≤ 53,211 gal/yr, 5,534 gal/month Clear Coat Usage ≤ 70,094 gal/yr, 7,290 gal/month Other-Repair Usage ≤ 349 gal/yr, 36 gal/month	Records
S1014	BAAQMD Condition # 9164 Part 19	Emissions ≤ 13.6 ton/month; ≤ 130.76 TPY	Records
S1015	BAAQMD Condition # 9158 Part 8	Emissions ≤ 0.69 ton/month; ≤ 6.59 TPY	Records
S1018	BAAQMD Condition # 9170 Part 1	ASCA Chassis Blk VOC ≤ 2.95 lb/gal	Records
S1018	BAAQMD Condition # 9170 Part 2	ASCA Chassis Blk Usage ≤ 12,317 gal/yr; 1,281 gal/month	Records
S1018	BAAQMD Condition # 9170 Part 4	Emissions ≤ 1.89 ton/month; ≤ 18.17 TPY	Records
S1019	BAAQMD Condition # 9171 Part 2	Cavity Wax Usage ≤ 15,406 gal/yr; 1,602 gal/month	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1019	BAAQMD Condition # 9171 Part 5	Emissions ≤ 0.58 ton/month; ≤ 5.62 TPY	Records
S1020	BAAQMD Condition # 9172 Part 1	Solids VOC ≤ 3.54 lb/gal Base Coat VOC ≤ 4.79 lb/gal Clear Coat VOC ≤ 4.12 lb/gal Lacquer VOC ≤ 6.61 lb/gal	Records
S1020	BAAQMD Condition # 9172 Part 2	Solids Usage ≤ 629 gal/yr, 65 gal/month Base Coat Usage ≤ 893 gal/yr, 93 gal/month Clear Coat Usage ≤ 1,734 gal/yr, 180 gal/month Lacquer Usage ≤ 279 gal/yr, 29 gal/month	Records
S1020	BAAQMD Condition # 9172 Part 4	Emissions ≤ 0.81 ton/month; ≤ 7.75 TPY	Records
S1053	BAAQMD Condition # 9167 Part 1	EMISSIONS ≤ 1.64 ton/month; ≤ 15.79 TPY	Records
S1060, S1600-S1604	BAAQMD Condition # 22820 Part 1	Operating limit ≤ 20 hours/yr for maintenance and testing	Records, Totalizing Counter
S1070, S1071	BAAQMD Condition # 10320 Part 42	Top Coat (Solventborne) VOC ≤ 6.70 lb/gal, Top Coat (Waterborne) ≤ 2.93 lb/gal (less water)	Records
S1070, S1071	BAAQMD Condition # 10320 Part 19	Temperature < 1400 oF, or compliance with Condition # 10320 Part 26 & 27	Temperature

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1070, S1071	BAAQMD Condition # 10320 Part 20	Destruction Efficiency ≥ 98.5% wt, if inlet VOC ≥ 500 ppm as C1; or Destruction Efficiency ≥ 95% wt, if inlet VOC ≤ 500 ppm as C1; or VOC Outlet Concentration ≤ 10 ppmv	Source Test
S1511	BAAQMD Condition # 13984 Part 1	Throughput ≤ 283,000 gal/yr	Records
S1512	BAAQMD Condition # 13985 Part 1	Throughput ≤ 27,900 gal/yr	Records
S1803	BAAQMD Condition # 9175 Part 1	Bead Sealer VOC ≤ 0.25 lb/gal	Records
S1803	BAAQMD Condition # 9175 Part 2	Bead Sealer Usage ≤ 110,236 gal/yr, 11,465 gal/month, or compliance with Condition # 9175 Part 5	Records
S1803	BAAQMD Condition # 9175 Part 5	Emissions ≤ 0.29 ton/month; ≤ 2.76 TPY	Records
S1809	BAAQMD Condition # 7343 Part 1	Sealant Usage ≤ 17,875 gal/yr, 1,859 gal/month; Adhesive Usage ≤ 8,500 gal/yr, 884 gal/month; Various Usage ≤ 117,166 gal/yr, 12,185 gal/month; or compliance with Condition # 7343 Part 3	Records
S1809	BAAQMD Condition # 7343 Part 3	Emissions ≤ 74.66 TPY	Records

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1810	BAAQMD Condition # 9877 Part 1	Wipe & Clean-up Usage < 17,616 gal/yr, 1,832 gal/month; Cleaning Solvent Usage < 164,050 gal/yr, 17,061 gal/month, or Compliance with Condition # 9877 Part 3	Records
S1810	BAAQMD Condition # 9877 Part 3	Emissions $\leq$ 28.3 ton/month; 272 TPY	Records
S1810	BAAQMD Condition # 9877 Part 4	Solvent Recovery $\geq$ 65%, or Compliance with Condition # 9877 Part 3	Records
S3007, S3008, S3009, S3014-S3017, S30960,	BAAQMD Condition # 14205 Part 5	New Passenger Paint Shop* Emissions $\leq$ 828.53 TPY	Records
S3007, S3008, S3009, S3014-S3017	BAAQMD Condition # 14205 Part 8	New Passenger Paint Shop* Manual touch-up or repair operations Usage $\leq$ 6,906 gal/yr or Emissions $\leq$ 19.91 TPY	Records
S3008, S3009, S3014, S3015, S3016, S3017	BAAQMD Condition # 14206 Part 1	Emissions $\leq$ 160.14 tons/yr; or 20 tons/month, unless facility notifies District	Records
S3008, S3009, S3014, S3015, S3016, S3017	BAAQMD Condition # 14206 Part 10	Minimum Temperature < 1400 oF, or compliance with Parts 2 and 3 of Condition # 14205	Temperature Monitor
S3008, S3009, S3014, S3015, S3016, S3017	BAAQMD Condition # 14206 Part 11	Destruction Efficiency $\geq$ 98.5% wt, if inlet VOC $\geq$ 500 ppm as C1; or Destruction Efficiency $\geq$ 95% wt, if inlet VOC $\leq$500 ppm as C1; or VOC Outlet Concentration $\leq$ 10 ppmv	Source Test

VOC Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S30960	BAAQMD Condition # 14210 Part 1	Emissions ≤ 321.03 TPY or 40.13 ton/month or compliance with Condition # 14205 Part 5	Records
S30960	BAAQMD Condition # 14210 Part 2	Collection/ Recovery Efficiency ≥ 65% of Cleanup Solvent or compliance with Condition # 14210 Part 1	Records
S3022	BAAQMD Condition # 22541 Part 1(a)	Total Emissions ≤ 60.20 TPY	Records
S3022	BAAQMD Condition # 22541 Part 1(b)	Passenger Body Elpo VOC ≤ 0.61 lb/gal	Records
S3024	BAAQMD Condition # 22542 Part 1(a)	Total Emissions ≤ 14.50 TPY	Records
S3024	BAAQMD Condition # 22542 Part 1(b)	Undercoat VOC ≤ 0.41 lb/gal	Records
S3025	BAAQMD Condition # 22543 Part 1(a)	Total Emissions ≤ 5.40 TPY	Records
S3025	BAAQMD Condition # 22543 Part 1(b)	Bead Sealer VOC ≤ 0.20 lb/gal	Records

VOC Discussion:

All sources that are listed in the equipment list in Section II of the permit are VOC sources. Even the combustion sources emit small amounts of VOC.

Adequate recordkeeping requirements are in place to ensure compliance with all throughput and VOC content limits for the coating and solvent cleaning sources at the facility, per Regulation 8-13-503 requirements, the Regulation 8-16-501 requirements, and per existing permit conditions.

To demonstrate compliance with the abatement efficiencies for the VOC abatement devices, additional monitoring requirements (such as source testing) were added to those permit conditions that had emission limits but no corresponding monitoring requirement.

There is no VOC limit for the combustion devices that are not abatement devices and so there is no VOC monitoring for these sources.

Toxics Sources

S# & Description	Emission Limit Citation	Federally Enforceable Emission Limit	Monitoring
S1001, S1002, S1003, S1004, S1005, S1006, S1007, S1008, S1009, S1010, S1011, S1012, S1014, S1015, S1017, S1018, S1019, S1020, S1056, S1057	BAAQMD Condition # 9156 Part 6	(for Truck Vehicle Line*) Benzene $\leq$ 157 lb/yr 1,4 Dioxane $\leq$ 141.0 lb/yr Formaldehyde $\leq$ 3342 lb/yr Methylene Chloride $\leq$ 684.8 lb/yr Perchloroethylene $\leq$ 1341.9 lb/yr Vinyl chloride $\leq$ 2.8 lb/yr	Records

Toxic Sources and Discussion:

Adequate recordkeeping requirements are in place to ensure compliance with all toxic limits for truck line sources at the facility, per existing permit conditions.

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

- Regulation 6, Particulate Matter and Visible Emissions, was renumbered as Regulation 6, Rule 1, and renamed as Particulate Matter, General Requirements on December 5, 2007. The equivalent rule in the State Implementation Plan (SIP) is Regulation 6, Particulate Matter and Visible Emissions, which was approved in a Federal Register notice of September 4, 1998. This change is reflected in Table VIII.
- Test methods have been added for the limits in BAAQMD Sections 6-1-301, 6-1-304, and 6-1-310.
- Correct test methods have been included for the limits in BAAQMD Section 8-4-302. Added SIP 8-4-302 test methods.
- Removed citation for BAAQMD Regulation 8-4-304 as it was deleted on 05/15/96 and no longer exists.
- Added various citations and corresponding test methods per BAAQMD Regulation 8, Rule 5 and SIP Regulation 8, Rule 5.
- Added Phase I and Phase II Vapor Recovery Requirements and corresponding test methods per BAAQMD Sections 8-7-301 and 302.
- Minor typo related to citation for "Compounds with Low Volatility" was corrected.
- Included new requirements for NOx and CO performance standards per BAAQMD Regulation 9, Rule 7.
- Removed citation for BAAQMD Section 9-7-302.2, as this was deleted on 07/30/08 and no longer exists. Instead Section 9-7-301.4 which applies to CO performance standard was included in the table.

IX. Permit Shield:

The District rules allow two types of permit shields. The permit shield types are defined as follows: (1) A provision in a major facility review permit that identifies and justifies specific federally enforceable regulations and standards which the APCO has confirmed are not applicable to a source or group of sources, or (2) A provision in a major facility review permit that identifies and justifies specific federally enforceable applicable requirements for monitoring, recordkeeping and/or reporting which are subsumed because other applicable requirements for monitoring, recordkeeping, and reporting in the permit will assure compliance with all emission limits.

The second type of permit shield is allowed by EPA's White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program. The District uses the second type of permit shield for all streamlining of monitoring, recordkeeping, and reporting requirements in Title V permits. The District's program does not allow other types of streamlining in Title V permits.

This facility has no permit shields.

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 the glossary:

APCO
Air Pollution Control Officer

Basis
The underlying authority, which allows the District to impose requirements.

Dscf
Dry Standard Cubic Feet

NMHC
Non-methane Hydrocarbons (Same as NMOC)

NMOC
Non-methane Organic Compounds (Same as NMHC)

NPOC
Non-precursor organic compounds

THC
Total Hydrocarbons (NMHC + Methane)

TOC
Total Organic Compounds (NMOC + Methane, Same as THC)

XII. Applicable State Implementation Plan

Changes to Permit:
This section has been deleted as the applicable regulations and rules from the State Implementation Plan are no longer attached to the permit.

D. Alternate Operating Scenarios:

No alternate operating scenario has been requested for this facility.

There is no change in this section for this Title V renewal.

E. Compliance Status:

A December 29, 2009 office memorandum from the Director of Compliance and Enforcement to the Director of Engineering presents a review of the compliance record of the facility, which is attached in Appendix A. The Compliance and Enforcement Division staff has reviewed NUMMI's Annual Compliance Certifications for December 30, 2003 to December 30, 2008 and additional District compliance records for December 18, 2002 to November 30, 2009. This review was initiated as part

of the District evaluation of the application for a Title V permit renewal. During the period subject to review, activities known to the District include:

- The District issued seven (7) Notices of Violation (NOVs) to NUMMI from December 18, 2002 to November 30, 2009. All of the violations (7) associated with the NOVs were in compliance at the time of this review. Furthermore, the District's analysis of the NOVs indicated that there are no ongoing violations or pattern of recurring violations that would currently require a compliance schedule.
- The District received two (2) air pollution complaints alleging NUMMI as the source. Both of these complaints were unconfirmed.
- The District received two (2) notifications for Reportable Compliance Activity (RCA): one (1) indicated a monitor excess and one (1) in-operative monitor report. Neither of the two (2) RCAs resulted in NOVs.
- The District processed four (4) dockets for variances and permit appeals before the District's Hearing Board.

The Compliance and Enforcement Division has made a determination that for the review period NUMMI was in intermittent compliance. There is no evidence of on-going non-compliance and no recurring pattern of violations that would warrant consideration of a Title V permit compliance schedule or additional permit terms. The Division does not have any recommendations for any additional permit conditions and limitations to improve compliance beyond what is already contained in the Title V Permit under consideration.

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APPENDIX A

GLOSSARY

ACT
Federal Clean Air Act

APCO
Air Pollution Control Officer

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 EPAapproved 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
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

APPENDIX B

BAAQMD ENGINEERING EVALUATION REPORTS

ENGINEERING EVALUATION
New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 17748

1.0 BACKGROUND

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

- **Create new permit condition (Condition No. 24057) for S71, Passenger Cavity Wax Booth. Change VOC limit for cavity wax used at S71 from current 0.94 lbs/gallon to 3.40 lbs/gallon.**

- **Change POC emissions limit for S71 from current 2.50 tons per year (tpy) to 8.70 tpy. The net result is an increase of 6.20 tpy of allowable POC emissions from this source.**

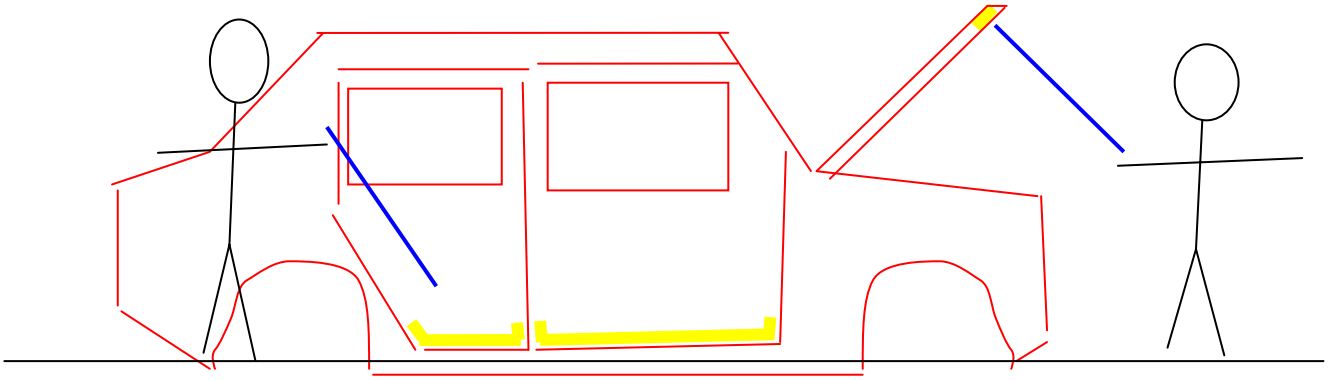
- **Remove all references to S71 from permit condition 207 (PC 207). Adjust the total emissions applicable to PC 207 to account for the effect of removing S71 from PC 207.**

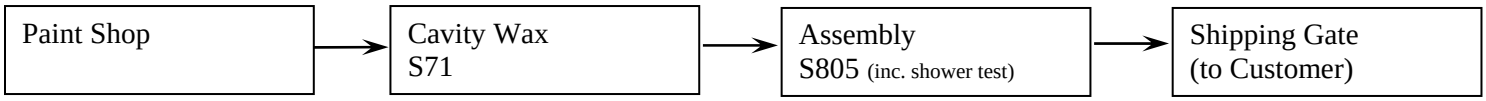
- **Modify permit condition 22541, part 1a, to lower POC emissions limit from S3022, North Paint Shop Passenger ELPO Dip Tank, from 66.40 tpy to 60.20 tpy. This will result in lowering total allowable POC emissions from S3022 by 6.20 tpy. The decrease in allowable POC emissions from S3022 will be used to offset the proposed increase in allowable emissions for S71.**

- **Modify permit condition 14205, part 5, to lower overall POC emissions from North Paint Shop sources from 834.73 tpy to 828.53 tpy. The decrease is attributed to the 6.20 tpy decrease from S3022 allowable POC emissions. The current 834.73 tpy includes emissions from S3022. With the decrease in allowable S3022 POC emissions, the total North Paint Shop POC emissions will be adjusted accordingly.**

The Cavity Wax Process (S71) is a manual spray application. The cavity wax product is heated in a circulation tank and pumped hot to the application nozzles. There are two application team members, one on either side of the car that applies the material. The application areas are inside of the four vehicle doors in the crevice formed by the inner and outer sheet metal door panels. The side doors are opened and the wand is inserted into the bottom of the door cavity through openings in the inner structural door panel. The team member pulls the trigger starting the material to flow and pulls the wand along the length of the seam.

Cavity wax is also applied inside the front edge of the hood, along the crevice formed by the inner and outer sheet metal panels. This is done with the hood propped open. The following drawing shows the locations of the cavity wax material in gray:





Cavity wax operation at NUMMI passenger line involves applying wax, Tectyl 630 G, to Toyota Corolla and Pontiac Vibe at S71. This material has been unable to consistently meet the required quality specifications for passenger vehicles built at NUMMI. The material leaks from hood and body crevices onto engine, headlights, and other parts of the vehicle creating potential consumer safety hazards.

NUMMI trialed and investigated several methods to make the existing cavity wax comply with applicable quality standards. Some of these methods are listed below:

- Installed heated circulation tank to maintain consistent pressure and temperature
- Trialed new applicators
- Trialed using mineral spirits to thin material to improve flow application
- Conducted refresher training for all cavity wax dispensing operators

Unfortunately none of these measures generated positive results for Tectyl 630 G.

Besides above measures, NUMMI has also investigated using a water-borne material with a VOC content of 0.50 lbs/gal. Unfortunately the material was not compatible with NUMMI's existing operations, including the application equipment. Coverage was worse (lower quality) than the existing material. Also, the time for the material to cure was longer than the process time to get the vehicle to the water leak test shower. NUMMI also discovered that under cured water-based material washes off in shower test. This can result in the vehicle not having any cavity wax upon delivery to the customer.

Toyota's Canadian plant produces Toyota Corolla and Matrix, using Tectyl 555 cavity wax. The Canadian cavity wax has a VOC content of 3.4 lbs/gal and has demonstrated superior quality performance. Hence, NUMMI is proposing to replace current wax, Tectyl 630 G with Tectyl 555 cavity wax at S71.

This 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 because BACT was taken from the District BACT/TBACT Workbook.
- No facility-specific determination for ambient impacts, visibility analysis, or increment analysis on portable sources has been made.
- No new federal requirement has been imposed.

2.0 EMISSIONS SUMMARY

(i) S71 (Passenger Cavity Wax Booth) emission calculations

Basis:

- Maximum vehicle production 300,000 per year
- Required cavity wax per vehicle = 0.08 lbs solids/vehicle
- Cavity wax Tectyl 555 MSDS data:
  - Density = 8.11 lbs/gal
  - VOC content = 3.40 lbs/gal
  - Water content = 0
  - Theoretical solids = Total density – VOC content
    = 8.11 lbs/gal – 3.40 lbs/gal
    = 4.70 lbs/gal

<u>S71 POC emissions:</u>

= (maximum production) (solids/vehicle) (gal/lbs solids) (lbs VOC/gal)

= (300,000 veh) (0.08 lbs solids/veh) (gal/4.71 lbs solids) (3.40 lbs VOC/gal)
= **17, 324.84 lbs/yr or 8.70 tons /yr and 69.30 lbs/day for 250 days/yr operation of S71**

POC emissions from S71 will increase from currently permitted 2.50 tpy to 8.70 tpy. As stated earlier in the Background section, lowering POC emissions by the same amount from S3022 will offset the 6.20 tpy POC emissions increase from S71. Hence, net facility-wide POC emission increase will be zero.

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, NOx, CO, SO_2 or PM_{10} must use BACT. S71 triggers BACT for POC emissions of 69.30 lbs/day as calculated above. S71 only emits POC. The District's BACT requirement for Spray Booth (Manual Zones)- Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.1 dated June 9, 1995. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is not determined for this source category. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

Four different abatement options are explored to determine the cost-effectiveness of abating S71. Option 1 is to abate POC emissions using a Regenerative Thermal Oxidizer (RTO) with a flow rate of 84,000 cfm. Option 2 is the use of Direct Fired Thermal Oxidizer with a flow rate of 84,000 cfm. Option 3 is to abate S71 using carbon adsorber(s) with Thermal Oxidizer. Option 4 is the use of Catalytic Thermal Oxidizer with a flow rate of 84,000 scfm. The EPA's Concost method is used to determine the cost-effectiveness of each option. Please see Attachment A for cost-effectiveness analysis and Con-Co$t spreadsheets.

The annual cost for abating one ton of POC emissions for Option 1 is $111,016.95, which is greater than the District and EPA BACT threshold of $17,500 per ton. Similarly, annual costs for abating one ton of POC emissions for Option 2 is $ 155,271.44, for Option 3 is $ 26,256.09 and for Option 4 is $ 92,746.78 which are also greater than the District and EPA BACT threshold of $17,500. Therefore, it is **not** cost-effective to abate the POC emissions from S71.

2.3 Toxics

An examination of the Material Safety Data Sheet for the proposed cavity wax, Tectyl 555, shows that there is no constituent with an assigned risk screening trigger level based on Table 2-5-1 of Rule 2-5. Therefore, a health risk screening analysis pursuant to Regulation 2, Rule 1, and Section 316 is not required.

2.4 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.

As mentioned above in Background and Emissions Summary sections, lowering POC emissions by the same amount from S3022, North Paint Shop Passenger ELPO Dip Tank, will offset 6.20 tpy POC emissions increase from S71. S3022 has been fully offset (Application 10438). Per Regulation 2-2-605.4, the baseline throughput and emission rates are based upon the levels allowed by the permit condition 22541. Application 10438 is the application that established the current emission cap in condition 22541 for this source. Based on the engineering evaluation report of Application 10438, the VOC content of the material permitted in the application was below the current VOC content limit of Rule 8-13. Also, S3022 has always been operated in compliance with coating VOC content limit that meets the current District Regulation 8-13. Therefore, no RACT adjustment is required.

Thus, contemporaneous emission reduction credits for S3022 are 6.20 tons per year.

3.0 STATEMENT OF COMPLIANCE

S3022 (North Paint Shop Passenger Elpo Dip Tank) will continue to comply with all applicable regulations including District Regulation 8, Rule 13, and Section 306. Regulation 8-13-306 identifies the VOC standards for electrophoretic primers. The ED6650 Lead-free Cationic bath in use by NUMMI is complying (VOC <1.2 lb/gal).

S71, Passenger Cavity Wax Booth, will continue to comply with all applicable regulations including District Regulation 8, Rule 13, and Section 302. Regulation 8-13-302 identifies the VOC standards for primer surfacers. The Tectyl 555 cavity wax proposed for use by NUMMI is complying (VOC <15 lbs/gal of applied coating solids).

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 5.1.

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.

This facility is subject to the following MACT standard: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, subpart IIII. This standard sets a facility-wide emission limit of 0.6 lbs of HAP emissions per gallon of applied coating solids. Based on NUMMI's June 17, 2008 Monthly Usage and VOC Emission Report to the District, their HAP emissions were 0.36 lbs per gallon of applied coating solids. Report has been included in this engineering evaluation as Attachment B. A review of the Material Safety Data Sheet

for the new cavity wax shows that it does not contain any HAPs, so the facility should remain in compliance with the standard.

Per Section I.F. of the Major Facility Review Permit ("Title V Permit") and Section 2-6-502 of the District's rules and regulations, NUMMI has to report to the District as a deviation any instance of cavity wax exceeding a VOC content value of 3.40 lbs/gallon.

PSD and NSPS do not apply.

4.0 PERMIT CONDITIONS

Modifications to Condition 207

COND# 207 ----------

~~Condition # 207~~
~~Amended for Application 16438~~
~~For~~ This condition was amended by Application 17748 in July, 2008

S61, PASSENGER BLACKOUT CHASSIS BOOTH
S62, PASSENGER FUEL TANK BOOTH
S63, PASSENGER PROTECTIVE GAS TANK OVEN
~~S71, PASSENGER CAVITY WAX BOOTH~~
S101, SPARE PARTS ELPO DIP TANK
S102, SPARE PARTS ELPO OVEN
S801, STAMPING PLANT FUGITIVE EMISSIONS
S804, PASSENGER FUGITIVE REPAIR PRIMING
S805, BODY SHOP ASSEMBLY AREAS

1. EMISSIONS LIMITATION

a. Total emissions for the sources listed for Condition 207, including reductions due to abatement measures, shall not exceed ~~112.6~~110.10 tons of VOC per year. (basis: Cumulative Increase)
b. Fugitive emissions for S801, S804, and S805, shall be calculated based upon materials used and the materials' VOC content. Total fugitive emissions from S801, S804, and S805, shall not exceed 63.60 tons during any consecutive 12-month period or 6.35 tons per month. (basis: Cumulative Increase)
c. Compliance with emission limitations shall be demonstrated by calculation, utilizing material usage rates and VOC content, unless other methods are specified or approved in writing by the APCO. (basis: Cumulative Increase)
d. Emissions for the listed materials shall not exceed those listed in the Emissions and VOC Limitation Table for these sources:

Table 1 Emission and VOC Content Limitation Table

Material	Total	VOC Content*	Source

	Emissions (Tons/yr)		(lbs/gal) Number(s)
Spare Parts ELPO	6.9	1.21	101, 102
Blackout Chasis	18.1	3.02	61
Final Repair	2	6.41	805
Protective Gas Tank	4	0.28**	62, 63
Repair Primer	5.1	5.83	805
~~Cavity Wax~~	~~2.5~~	~~0.94~~	~~71~~
Hinge	4.9	5.01	805
All Materials Used in Body & Assembly Areas	63.6	Not Applicable	801, 804, 805
Underbody Black	5.5	3.02	801, 804, 805
Total Emissions	~~112.6~~110.10		

(*) All VOC content are expressed excluding water.
(**) Expressed value includes water.

e. If any District regulation specifies more stringent requirements that those listed in the Emissions and VOC Content Limitation Table, or other parts of these conditions, then the more stringent requirement shall apply. (basis: Regulation 1-102)

2. Deleted for Application 16438

3. EMISSION CONTROL EQUIPMENT

Abatement device A102, Spare Parts ELPO Oven Catalytic Thermal Oxidizer, must be operating during periods of spare/small parts production and during subsequent clean-up operations. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

a. SPARE PARTS ELPO OVEN CATALYTIC THERMAL OXIDIZER (A102)

1. Catalytic thermal oxidizer (A102) shall be maintained and operated continuously for S102, Spare Parts ELPO Oven, with a minimum destruction efficiency of 60% or an outlet concentration of 10 ppm by volume or less.

The minimum destruction/operating temperature shall be 800 degree F. The destruction temperature shall be continuously recorded using chart or digital recorders. (basis: Cumulative Increase)

2. NUMMI shall conduct a source test for this abatement system (A102), once per calendar year. The source test shall measure both the inlet and outlet concentrations of the non-methane hydrocarbons abated by the system. (basis:

Cumulative Increase)

3. 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 testing indicates any violation of the permit conditions for Condition 207, NUMMI shall report such violation to the Director of Enforcement within 10 days of discovery pursuant to Standard Condition 1.F. (basis: Cumulative Increase, Regulation 2 -6-501, MOP Volume II, Part 3, Section 4.7)

b. PASSENGER SEALER OVEN

1. Emissions from sources S62 and S63 will not require abatement by thermal oxidization provided owner/operator limits coatings used at the source to those with a maximum VOC content of 0.28 lbs per gallon and total POC emissions, including emissions from cleanup activities for sources S62 and S63 do not exceed 4.0 tons for any 12 month consecutive period. (basis: Cumulative Increase, BACT)
2. To demonstrate compliance with Part 3.b.1 of Permit Condition 207, the owner/operator shall document and maintain objective evidence of the VOC content of all VOC containing materials used at S62 and S63. The owner/operator of S62 and S63 shall ensure that the laboratory VOC content is determined using EPA Method 24, or other method determined by the District to be equivalent to BAAQMD Laboratory Method 22. (basis: Cumulative Increase, BACT)

4. ALLOWABLE TEMPERATURE EXCURSION(S)

a. NUMMI may operate the Thermal Oxidizer (A102) below 800 degrees F only in compliance with the temperature excursion parameters set forth in Parts 4.b and 4.c of Condition 207. (basis: BACT)
b. The minimum temperature and abatement efficiency requirements for Thermal Oxidizers located at NUMMI shall not apply during an "Allowable Temperature Excursion", provided that the controller set temperature is at or above the minimum temperature requirement. An Allowable Temperature Excursion is one of the following:
   1. A temperature excursion not exceeding 20 degrees F below the minimum; or
   2. A temperature excursion period or period(s) aggregating 15 minutes or less in any hour or less; or

3.A temperature excursion greater than 15 minutes but less than 3 hours in duration, provided that all of the following are satisfied:
a.There are no more than 2 excursions per facility (Plant No. A1438) per calendar day;
b.There are no more than 2 excursions per abatement device per month; and
c.There are no more than 5 excursions per facility (Plant No. A1438) per month. (basis: Cumulative Increase)

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

d.The District may revise or revoke the allowable temperature excursion(s) section of Condition 207, if source operations change significantly such that the basis for granting this condition is no longer valid. (basis:Cumulative Increase)

5.RECORD KEEPING AND REPORTING

a.All records required by Condition 207 shall be kept and made available for District inspection for a period of 5 years following the date of entry. (basis: Cumulative Increase)
b.For all paints, primers, sealants, coatings, solvents and miscellaneous cleaning materials used for the sources listed for Condition 207, monthly records of material usage must be kept for five years. A monthly report including material usage and a summary of total actual organic emissions from all sources applicable to Condition 207 shall be submitted to the District within 30 days after the end of each month. If the total organic emissions for any month exceeds 14.00 tons, the District shall be notified in writing within 30 days of the report as to what steps will be taken to assure that the limit of 118.0 tons per year

will not be exceeded.(basis: Cumulative Increase)

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

6.SAMPLING

Samples of coating materials shall be made available to The District upon request by the APCO. (basis: Regulation 1-441)

7.ENFORCEMENT

Violation by NUMMI of any of the conditions set forth in this permit shall subject NUMMI to enforcement action under Chapter 4 of Part 4 of Division 26 of the California Health and Safety Code. (basis: Regulation 1-401)

8.MISCELLANEOUS

a.All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good working order. (basis: Cumulative Increase)

*b. For the purpose of these conditions, any reference to "NUMMI" shall be deemed to also refer to the NUMMI's agents, contractors, subcontractors, assignees, or joint venture partners, as well as to any party brought in to operate the proposed facility, as appropriate. (basis:Regulation 1-241)

c. The APCO shall have the right to inspect and audit all records required to be maintained by Section 5 of Condition 207, and any other records in the NUMMI's possession which may indicate the nature or quantity of emissions from the facility. (basis: Regulation 1-441)

d.The APCO shall have access to any portion of the plant to conduct source tests or inspections. (basis: Regulation 1-440)

e.Nothing in these conditions shall be construed to allow the violation of any law or of any rule or regulation of the Bay Area Air Quality Management District, the State of California or the United States Environmental Protection Agency. (basis: Regulation 1-103)

9.SEVERABILITY

The provisions of these conditions are intended to be severable, and, if any individual condition or provision hereof is held to be invalid by order of the Hearing Board of the Bay Area Air Quality Management District, by order of any court competent jurisdiction, or for any other reason,

the remainder of these conditions shall not be affected. (basis: Regulation 1-109)

10. CORRECTIVE PLAN

The corrective plan is a means for NUMMI to correct occasional exceedances, to stay within the yearly limits and thus to remain in compliance with District Regulations. If any of the annual or monthly material usage limits are exceeded, NUMMI shall implement abatement measures to prevent the recurrence of the type of incident which caused the excess. This plan is intended to provide a mechanism for bringing NUMMI back into compliance should a temporary exceedance occur. This plan does not constitute an alternative means of compliance. (basis: Cumulative Increase)

a. If an exceedance of emission limits specified in the Emission and VOC Content Limitation Table of Condition 207, from the applicable sources covered by Condition 207 becomes apparent, NUMMI shall notify the District and will include a Corrective Plan with the next monthly report for the month after the exceedance is reported.(basis:Cumulative Increase)
b. The corrective Plan will include a method to make up the exceedance within the three-months following the exceedance. For these purposes the exceedance will be calculated on a plant-wide basis, and an excess in one parameter can be balanced by an equivalent reduction in another. (basis:Cumulative Increase)
c. The plan to reduce emissions pursuant to part 10. b Will indicate the time periods during which each step will be taken. (basis: Cumulative Increase)
d. If a second or subsequent monthly exceedance occurs in any 12 month consecutive period for the same usage or emission limit, after the month following the first exceedance, the annual limit will be reduced for only the following year by one-half the amount of the second or subsequent exceedance. (basis: Cumulative Increase)
e. If, during any consecutive 12-month period, the annual emission limit is exceeded, the annual limit for only the following year will be reduced by an amount of one-half the exceedance. (basis: Cumulative Increase)
f. Correcting an exceedance may be accomplished by the following methods:

   1. reducing the production rate,
   2. altering the paint composition,
   3. improvement of transfer efficiencies,
   4. installation of abatement devices,
   5. any other method approved by the APCO.

(basis: Cumulative Increase)

Modifications to Condition 14205

COND# 14205 ----------

This condition was amended by Application 17748 in July, 2008

For S3007, NPS ELPO Oven
S3008, NPS PRIME BOOTH
S3009, NPS PRIME OVEN,
S3014, NPS TOP COAT BOOTH #1
S3015, NPS TOPCOAT OVEN #1,
S3016, NPS TOPCOAT BOOTH #2,
S3017, NPS TOPCOAT OVEN #2,
Conditions Common to All Sources of the Passenger Paint Shop:

1. All conditions shall be in effect at all times during equipment operation, including period of equipment start-up, unless otherwise indicated.

For the purposes of determining compliance with emissions and/or usage limits, a year is defined as any twelve month consecutive period; a month is defined as a calendar month. (basis: Cumulative Increase)

2. 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 less that or equal to 15 minutes 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 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)

3. 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 District. 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)

4. The District may revise or revoke parts 2 and 3 of Condition 14205 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

5. Total emissions of organic compounds from the North Passenger Paint Shop sources, calculated on the basis of coating and solvent usage and including any reductions due to abatement, shall not exceed ~~834.73~~828.53 tons per year (TPY) of POC. (basis: Cumulative Increase)

6. The combined total natural gas usage for all North Passenger Paint Shop combustion sources shall not exceed 9.63 Million (MM) Therms per year. Monthly records of natural gas usage shall be maintained for five years from the date of entry and shall be maintained available for District personnel upon request. NUMMI shall only use a District-approved gas meter. (basis: Cumulative Increase)

7. Only natural gas, propane, butane, and LPG shall be used as a fuel for combustion equipment for sources S3009, S3015, and S3017. (basis: Cumulative Increase)

8. Manual touch-up or repair operations may be performed in the North Passenger Paint Shop booth and oven sources. The total usage of coating for manual touch-up or repair shall not exceed 6,906 gallons per year, or result in POC emissions exceeding 19.91 tons per year. (basis: Cumulative Increase)

9. The total NOx emissions from the combustion equipment (including Booth Air Supply Houses, Oven Heater Boxes, and Thermal Oxidizers) of the North Passenger Paint Shop sources shall not exceed 40.54 tons per year. (basis: Cumulative Increase)

10. The total CO emissions from the combustion equipment (including Booth Air Supply Houses, Oven Heater Boxes, and Thermal Oxidizers) of the North Passenger Paint Shop sources shall not exceed 50.46 tons per year. (basis: Cumulative Increase)

11. NUMMI shall maintain the following data:

a. Usage records of each coating shall be kept on a monthly basis.

b) Amount of clean-up solvent used shall be kept on a monthly basis.

c) Monthly reports showing coating and clean-up usage and calculated emissions shall be submitted to the Director of Enforcement. If an exceedance is calculated, NUMMI shall submit a written report with this monthly report to the District to demonstrate that the overall North Passenger Paint Shop sources will not exceed the overall emissions limit specified in Part 5 of Condition 14205.

Records shall be available for District inspection for a period of at least five years following the date of entry. (basis: Cumulative Increase)

12. In order to demonstrate compliance with Parts 9 and 10 of Condition 14205, NUMMI shall calculate quarterly the NOx and CO mass emission rates, using natural gas usage records and District approved NOx and CO emission factors. The NOx and CO emission factors for the Thermal Oxidizers (A3008, A3010, A3014, and A3016), Booths (S3008, S3014, S3016) and Ovens (S3007, S3009, S3015, and S3017) shall be based on the results of the most recent source tests, required by the District. To verify compliance with Parts 9 and 10 of Condition 14205, NUMMI shall perform District approved source tests for nitrogen oxide and carbon monoxide emissions from the combustion equipment of the oven heater boxes, once per Title V permit term. (basis: Cumulative Increase)

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

14. All volatile organic compound (VOC) emissions from Source 3007, NPS ELPO Oven, shall be abated by thermal oxidizer, A3010, NPS ELPO Oven Thermal Oxidizer. (basis:Cumulative Increase, BACT)

15. Thermal oxidizer, A3010, shall be operated and maintained in accordance with manufacturer specifications. (basis: Cumulative Increase, BACT)

16. A3010 shall be equipped with APCO approved continuous temperature measuring and recording instrumentation. The temperature and measuring recording instruments shall be installed, calibrated and maintained according to the manufacturer's specification. Daily records of continuous temperature measurements for the Thermal Oxidizer (A3010) shall be made and made available to District inspection for a period of 5 years from the

date the record was made. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of District Regulation 1-523. [basis: BACT, Regulation 1-523]

17. The thermal oxidizer, A-3010, shall comply with the following parameters:

a. The minimum operating temperature shall be 1200 °F, regardless of the inlet concentration, unless owner/operator can prove to the satisfaction of the APCO that the required abatement efficiency can be achieved at a lower temperature.

b. The minimum abatement efficiency for A3010 shall be as follows:

i.90% destruction efficiency by weight or

ii. Total non-methane organic hydrocarbon emissions from the outlet of A3010 shall be 10 ppm or less by volume or

iii. Total emissions from outlet of A3010 shall not exceed 0.12 lbs VOC per gallon of electrophoretic primer used.

(basis: BACT, District Regulation 8-13-306)

18. To verify compliance with Parts 12 and 17 of Permit Condition 14205, thermal oxidizer A3010 shall be source tested once per calendar year. If the source test indicates any violation of the permit conditions, the owner/operator shall report such violation to the Director of Enforcement within 10 days of determining that a violation has occurred. Records of source test results shall be kept for a period of five years following the date of entry. (basis: BACT; Manual of Procedures, Volume II, Part 3, Section 4.7)

19. Only natural gas, propane, LPG, or butane shall be used as a fuel for abatement device A3010. (basis: Cumulative Increase)

Modifications to Condition 22541

COND# 22541 ----------

This condition was amended by Application 17748 in July, 2008

Conditions for S-3022, NPS Passenger ELPO Dip Tank:

1. EMISSIONS LIMITATION

The owner/operator shall ensure that ED6650 Lead-free Cationic bath or other equivalent material, applied at S-3022 satisfies all of the following conditions:

a.Total POC emissions from S-3022 do not exceed

~~66.40~~60.20 tons in any consecutive twelve-month period.
b. The VOC content of any material used at S-3022 does not exceed 0.61 pounds of VOC per gallon.
c. The usage of materials at S-3022 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

2. RECORD KEEPING AND REPORTING

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall document and maintain objective evidence of the following information:
   1) Type, monthly usage and VOC contents of all VOC containing materials (specifically ELPO Resin and ELPO Pigment) used at S-3022. The owner/operator of S-3022 shall ensure that the Laboratory VOC content value is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);
   2) If a material other than that specified in Part 1 is used, toxic component contents of each material used and
   3) Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase, BACT]
b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase, BACT]

Permit Condition 24057 for S71, Passenger Cavity Wax Booth

For S71, Passenger Cavity Wax Booth:

1. EMISSIONS LIMITATION

The owner/operator shall ensure that Tectyl 555 cavity wax or other equivalent material applied at S71satisfies all of the following conditions:

a. Total POC emissions from S71 do not exceed 8.70 tons in any consecutive twelve-month period.
b. The VOC content of any material used at S71 does not exceed 3.40 pounds of VOC per gallon.

c. The usage of materials at S71 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

2. RECORD KEEPING AND REPORTING

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall document and maintain objective evidence of the following information:
   1) Type, monthly usage and VOC contents of all VOC containing materials (specifically Cavity Wax) used at S71. The owner/operator of S71 shall ensure that the Laboratory VOC content value is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);
   2) If a material other than that specified in Part 1 is used, toxic component contents of each material used and
   3) Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase and BACT]

b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase and BACT]

5.0 RECOMMENDATION

Issue modified Permit to Operate to NUMMI after approving the following permit condition changes:

- **Create new permit condition (Condition No. 24057) for S71, Passenger Cavity Wax Booth. Change VOC limit for cavity wax used at S71 from current 0.94 lbs/gallon to 3.40 lbs/gallon.**

- **Modify permit condition 207 to remove all references to S71. Adjust the total emissions applicable to condition 207 to account for the effect of removing S71 from this condition.**

- **Modify permit condition 22541, part 1a, to lower POC emissions limit from S3022, North Paint Shop Passenger ELPO Dip Tank, from 66.40 tpy to 60.20 tpy.**

- **Modify permit condition 14205, part 5, to lower overall POC emissions from North Paint Shop sources from 834.73 tpy to 828.53 tpy.**

By: _____

Sanjeev Kamboj Date
Senior Air Quality Engineer

ATTACHMENT A (Cost-effectiveness Analysis and Con-Co$t Spreadsheets)

S71 cost-effectiveness analysis calculations

Data:

- Booth dimensions: 21’ by 40’
- OSHA required minimum flow rate: 100 fpm (feet per minute)

- Annual Emissions: 8.70 Tons
- Annualized Abatement cost calculated using Con Co$t program, Second Edition, 1998 per US EPA

Volumetric Flow Rate: (Booth area) (OSHA required minimum flow rate)

: (21' * 40') (100 fpm) = 84,000 cfm

The costs for abating POC emissions using Options 1 through 4 are as follows:

Option 1 --- Abate emissions using 84,000 cfm RTO

Annualized (1998 dollars) abatement cost = $ 965,847.47

Cost per ton = Total annual cost/Total tons
= $ 965,847.47/8.70 tons
= **$ 111,016.95/ton**

Option 2--- Abate emissions using 84,000 cfm direct-fired thermal oxidizer

Annualized (1998 dollars) abatement cost = $ 1,350,861.51

Cost per ton = Total annual cost/Total tons
= $ 1,350,861.51/8.70 tons
= **$ 155,271.44/ton**

Option 3--- Abate emissions using carbon concentrator and thermal oxidizer

Annualized (1998 dollars) abatement cost = $ 228,428

Cost per ton = Total annual cost/Total tons
= $ 228,428/8.70 tons
= **$ 26,256.09 /ton**

Option 4--- Abate emissions using catalytic thermal oxidizer

Annualized (1998 dollars) abatement cost = $ 806,897

Cost per ton = Total annual cost/Total tons
= $ 806,897/8.70 tons

= **$ 92,746.78 /ton**

ATTACHMENT B (Monthly Usage and VOC Emission Report)

ENGINEERING EVALUATION
New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 16438

I. Background

New United Motor Manufacturing, Inc (NUMMI), is an existing automobile manufacturing facility. The facility has proposed to modify their existing operation as follows:

- Lower Emissions from S62 (Passenger Gas Tank Paint Booth) and S63 (Passenger Gas Tank Oven)

- Combine S801 (Stamping Plant Fugitive Solvent Emissions) and S802 (Stamping Plant Fugitive Machining)
- Archive S1050, Truck Fuel Coating Tank Booth
- Delete Condition 10578 for S1050 (Truck Fuel Coating Tank Booth)
- Modify the Emissions Limitation table of Condition 207
- Remove existing abatement device, A809 (Passenger Antichip Incinerator)
- Delete use of underbody wax at S805 (Body Shop Assembly Areas)
- Delete use of engine and exterior wax at S72 (Passenger PVC Exterior, Underbody & Engine Wax Booth)
- Remove references to removed equipment in Permit Condition 207 and the Title V permit

Abatement device A809 was originally permitted to abate several sources (S62, S63, S808, S1050, and S1051). Of these original sources, only S62 and S63 remain active sources, reducing the amount of POC being controlled by the Incinerator. Further, the change in the coating used in S62 and S63 will result in an additional reduction in the amount of POC being controlled by the Incinerator. The removal of the incinerator will result in S62 and S63 operating without an abatement device.

Sources S72 (Passenger PVC Exterior, Underbody & Engine Wax Booth) and S73 (Passenger Exterior Wax Hot Air Dryer) were previously removed from the facility, but they remained referenced in Condition 207. These references will be removed.

Source S803 (Passenger Sealer Deck Line) was removed from Condition 207 by application 10005 and given a separate condition. Condition 207 was changed to reflect this removal, but a limit was left inadvertently unchanged. This will be corrected.

Copies of the existing conditions, as well as copies showing the revisions are included in Appendix A.

II. Emissions Calculations

NUMMI has proposed to change the coating for sources 62 and 63 to a formulation with lower VOC content. Additionally, they have proposed to limit the emissions from these sources to 4.0 tons per year. The previous limit was 19.1 tons per year, unabated, and 9.3 tons per year abated. The daily emissions are the annual emissions divided by 365 days.

POC Emissions	Tons per Year	Lbs/day
S62 & S63	4.0	21.9

These are modified sources, so the emissions increase is calculated as the new potential to emit minus the baseline emissions. The baseline for these units is shown in Appendix B.

Emissions Increase (Decrease, ton/yr)			
	New Potential	Baseline Emission	Decrease
S62 & S63	4.0	8.57	4.57

Sources S801 and S802 are both part of the stamping plant. Permit Condition 207, Part 1e, currently limits the emissions from the two sources by two bubble limits, 69.0 tons per year for Body & Assembly area, and 5.5 ton per year for Underbody Black. S804 and S805 are also included in this bubble. Combining S801 and S802 does not involve any changes to equipment or processes. The only change is to combine the two sources into one for tracking purposes. There will be no change in emissions for combining these two sources.

Application 10005 removed S803 from Condition 207, and adjusted permit levels accordingly. However, the 69.0 tons per year limit for Body & Assembly area should also have been adjusted to 63.6 tons per year. This will be corrected in this revision.

All sources subject to Condition 207 were previously limited to a combined emissions limit of 135 tons per year. The post project limit will be reduced to 112.6 tons per year, a reduction of 22.4 tons per year of permitted emissions, distributed as follows:

Source	Reduction in permitted emissions (ton/yr)
S62, S63 (Reduction of POV content)	5.3
S805 (Removal of underbody wax)	5.3
S72 (source removed)	0.5
S73 (source removed)	5.9
S803 (emissions moved off condition)	5.4
Total	22.4

S1050, Truck Fuel Tank Coating Booth, has been removed by the facility. Permit Condition 10578 limits emissions from S1050 and S1051 to 11.68 tons per year of POC. S1051 was previously removed, so the removal of S1050 will complete the removal of emissions associated with Condition 10578. Therefore, the removal of S1050 will result in a reduction of 11.68 tons per year of POC.

In order to increase their flexibility, NUMMI has asked to remove the annual and monthly material usage limits for different sources included in Condition 207. The annual emissions limits remain unchanged. This change is appropriate because the annual emissions of POC will decrease from 135 tons per year to 112.6 tons per year, because the allowable POC content of the coating at S62 and S63 will decrease from 0.95 lb/gal to 0.28 lb/gal, and because the monthly limits were not imposed to ensure compliance with any short-term limits, such as compliance with the NAAQS, CAAQS, or any acute toxic limits.

III. BACT Review and Determination

In accordance with Regulation 2, Rule 2, Section 301, BACT is triggered for any new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NOx, CO, SO_2 or PM_{10}.

Based on the emission calculations above, the owner/operator of S63 & -63 is subject to BACT for the following pollutant: POC. Document 161.4.2 of the BAAQMD BACT

Guidelines for Spray Booth (Automatic Zones) -
Coating of Motor Vehicles, Assembly Plant, covers these sources.

POLLUTANT	BACT 1. Technologically Feasible/ Cost Effective 2. Achieved in Practice 3. TBACT	TYPICAL TECHNOLOGY
POC	1. *Coating w/ VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/ destruction efficiency ≥60%*[a,T] 2. *Coating w/ VOC content and transfer efficiency complying w/ Reg. 8, Rule 13*[a,T]	1. *BAAQMD Approved Collection System Vented to Carbon Adsorber or Afterburner*[a,T] 2. *Low VOC Coatings and Solvents*[a,T]

Cost analysis for three collection and control systems are included in Appendix C: the existing Thermal Oxidizer, a Catalytic Oxidizer, and a Thermal Oxidizer with a carbon concentrator. The costs have been adjusted for inflation since 1988 with a 30% increase. The cost for the existing thermal oxidizer only includes operating cost, since the equipment is already in place.

	Reduction (lbs)	Cost	Cost Effectiveness ($/ton)
Existing			
Thermal Oxidizer	7600	$ 126,293.69	$ 33,235.18
New Options			
Catalytic Incinerator	7600	$ 114,594.00	$ 30,156.32
Carbon Concentrator & Thermal Oxidizer	7600	$ 156,825.23	$ 41,269.80

The cost for each option is above the cost effectiveness threshold of $17,500 per ton of VOC. Therefore, BACT1 is no longer applicable.

Achieved in Practice BACT for these sources is compliance with the POC content of Reg 8, Rule 13. Section 8-13-308 limits POC content for Off-Line coatings to 2.8 lb/gal. The sources do not coat components on the vehicle coating line and so are subject to Section 8-13-308. The proposed coating has a POC content of 0.28 lb/gal. Therefore, these sources meet BACT.

Application 13654 for NUMMI discusses a search for BACT for a primer booth. The lowest VOC content water-borne primer found to be in use by the Toyota Plant in Kentucky was 2.0 lbs/gallon. The primer proposed for that project by NUMMI had a VOC emission limit of 0.37 lb/gallon, and was determined to have a lower VOC content than the water-borne primers deemed BACT in the BACT clearinghouse. The coating proposed for the current project has a POC content of 0.28 lb/gal.

Since the thermal oxidizer is no longer required for BACT and there is a reduction in POC emissions, the thermal oxidizer may be removed.

The removal of the thermal oxidizer will also result in a reduction of secondary pollutants from the burning of fuel used to heat the thermal oxidizer. This will result in a reduction of 8 tons/yr of NOx and 32 tons/yr of CO. Additionally, while the District does not currently regulate CO2, the removal of the thermal oxidizer will reduce CO2 emissions by 4,680 tons/yr. The emissions reductions are calculated below:

Emissions Decrease				
Pollutant	EF (lb/MMBtu)	Rating (MMBtu)	Usage (hr/yr)	Reduction (ton/yr)
NOx	0.2	10	8000	8
CO	0.8	10	8000	32
CO2	117	10	8000	4680

The emission factors for NOx and CO are base on RACT levels that were set for the oxidizer when it was originally permitted (application 8370), and the CO2 EF is based on voluntary greenhouse gas data collected by the Energy Information Administration.

IV. Plant Cumulative Increase

Since there is a decrease in emissions for this project, the cumulative increase for this project is zero.

V. Statement of Compliance

Toxics NSR/TBACT

Since there are no toxic compounds in the proposed coating, a toxics risk screening in not triggered.

Offsets

Offsets are required for any increase in emissions at a facility the emits over 35 tons per year of POC or NOx, or located at a Major Facility and over 1.0 ton per year since April 5, 1991 for PM10 or SO2.

Since the annual emissions are reduced as a result of this modification, no offsets are required.

District Rules

The owner/operator of S62 and -63 shall comply with Regulation 8-13 (Light And Medium Duty Motor Vehicle Assembly Plants). Section 8-13-308 limits VOC content for Off-Line coatings to 2.8 lb/gal. The proposed coating has a VOC content of 0.28 lb/gal. Allowable VOC content will be included in the Permit Conditions below.

Federal Rules

This project involves a change to a case-by-case BACT determination, so the revision is considered a Significant Permit Revision. The facility has submitted a separate application to incorporate the change to their Title V permit.

MACT : This facility is subject to the following MACT standard: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, subpart IIII. This standard sets a facility wide emission limit of 0.6 lbs of HAP emissions per gallon of applied coating solids. Based on NUMMI's latest report to the District, their HAP emission were 0.34 lbs per gallon of applied coating solids. A review of the Material Data Safety Sheet for the new coating shows that it does not contain any HAPs, so the facility should remain in compliance with the standard.

CEQA

This application is considered to be ministerial under the District's 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 in accordance with Permit Handbook Chapter 5.1.

Public Notices

The facility is not subject to public school notification pursuant to Regulation 2-1-412 because it is more than 1000 feet from the nearest school.

VI. Recommendation

Waive the Authority to Construct and issue a Permit to Operate to New United Motor Manufacturing, Inc., for:

S62 : Passenger Gas Tank Paint Booth
S63 : Passenger Gas Tank Oven
S801 : Stamping Plant Fugitive Emissions

Archive the following sources and abatement device:

S802 : Stamping Plant Fugitive Machining
S1050 : Truck Fuel Tank Coating Booth
A809 : Passenger Antichip Incinerator

Archive Condition 10578 for S1050, Truck Fuel Tank Coating Booth

VII. Permit Conditions

The revised Permit Condition 207 is included in Appendix A.

By:_____
Donny Homer
Air Quality Engineer II

Date: _____

Appendixes

A: Permit Conditions
B: Baseline Emissions
C: BACT Guideline and Analysis

Appendix A
Permit Conditions

Appendix B
Baseline Emissions

Appendix C
BACT Guideline and Analysis

ENGINEERING EVALUATION

New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 13654

1.0 BACKGROUND

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

- **Modify Permit Condition No. 10320 to allow application of water-borne primer in S59, Bumper Prime Booth, without the requirement to abate the booth.**

- **Archive sources S960, Plastic Plant Booth and General Cleaning and S961, Bumper Release Cleaning and Polish, in the District databank and combine emissions applicable to them under S1072, General Cleaning and Paint Cleaning. This will result in simplified recordkeeping for NUMMI.**

Currently, emissions from S57 and S59, Bumper Topcoat Booth and Bumper Prime Booth respectively, are abated by A592, Plastic Plant VOC concentrator and A571, Plastic Plant Thermal Oxidizer.

Emissions from S58 and S65, Bumper Topcoat Oven and Bumper Prime Oven respectively, are abated by A571, Plastic Plant Thermal Oxidizer.

In 1993 NUMMI installed the S57, Bumper Topcoat Booth and S58, Bumper Topcoat Oven. The bumper topcoat booth and oven functioned as a twice-through system. The bumpers during their first travel through the booth would be coated with primer. Afterwards, they would go through the oven where the primer was cured. The bumpers would then travel through the booth and oven a second time. During the second pass through, the bumpers would receive topcoat paint. After the second pass through the booth, the bumpers would then go to the oven where they were cured.

When the second bumper prime booth and bumper prime oven were installed, sources 59 and 65 respectively, the operation changed to its current configuration. Bumpers initially pass through S-59, Bumper Prime Booth where primer is applied to the bumper. After the bumpers are coated with primer, they enter the Bumper Prime Oven, S65, where the primer is cured. Please see Attachment A for current and proposed process flows.

As approved by the District in previous NUMMI Applications 10005 and 10438, emission limits and VOC content limits will be included in the permit conditions for sources S57, S58, S59, and S65. Usage limits will be used by the applicant to calculate total emissions from different sources, but will not be included in the permit conditions.

3.0 EMISSIONS SUMMARY

There is no increase in annual emissions because sources S57, S58, S59, and S65 will continue to be subject to the current combined emission limit of 173 tons per year of POC contained in Part 9 of Condition 10320. Daily emissions from S59 may increase (See Attachment B for emission calculations).

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.

2.5 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, NOx, CO, SO_2 or PM_{10} must use BACT. S59 only emits POC. PM_{10} from the paint overspray is negligible since the spray booths are equipped with water contact scrubbing systems. Per 9/25/06 telephone conversation with Ed Moore of NUMMI, all their spray booths are equipped with these scrubbing systems. The District's BACT requirement for Spray Booth (Automatic Zones)- Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.2 dated December 16, 1991. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is shown as use of coatings with VOC content and transfer efficiency complying with Reg. 8, Rule 13. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

Two different abatement options are explored to determine the cost-effectiveness of abating S59. Option 1 is to abate POC emissions using a brand new 50,000 cfm Regenerative Thermal Oxidizer (RTO). Option 2 is the current abatement configuration using 50,000 cfm carbon concentration (A592) and 5,000 cfm RTO (A571). The EPA's Concost method is used to determine the cost-effectiveness of both options. Please see Attachment C for more details.

The annual cost for abating one ton of POC emissions for Option 1 is $183,837.64, which is greater than the District and EPA BACT threshold of $17,500 per ton. Similarly, the annual cost for abating one ton of POC emissions for Option 2 is $ 35,910.08, which is also greater than the District and EPA BACT threshold of $17,500. Therefore, it is **not** cost-effective to abate the POC emissions from S59.

As requested by the District, NUMMI has provided copies of natural gas invoices from May 2005 to April 2006, to justify higher natural gas costs associated with A571 and A592 operations than the default values used in the Concost spreadsheets. The 12-month average actual cost NUMMI paid for natural gas is $ 8.06 per MCF, which is higher than $ 6.26 per MCF used by NUMMI in Concost spreadsheets. Please refer to Attachment D that contains invoices from Constellation New Energy Gas Division and PG&E for more details.

NUMMI has also submitted electricity costs from August 2005 to July 2006, to justify higher electricity costs used in the Concost spreadsheets. This information is included in Attachment D.

NUMMI is proposing to use only one water-borne primer, MWPT3803 at S59, Bumper Prime Booth #2; that it is proposing to run unabated. Per MWPT3803 primer MSDS, it has a maximum

VOC content of 1.27 lbs/gallon. The District researched U.S. EPA's BACT Clearinghouse and found RBLC ID: KY-0097, which presents a VOC emission rate of 1.04 lb/unit for a Toyota Plant in Kentucky. I talked to Brian Ballard of the Kentucky Division for Air Quality to understand if 1.04 lb/unit is the VOC content of the primer. Mr. Ballard clarified that "unit" means one complete job or VOC emitted while applying primer to one set (i.e., rear and front bumpers) and is not the VOC content of the primer. He also mentioned that lowest VOC content water-borne primer in use by the Toyota Plant in Kentucky is 2.0 lbs/gallon, which is higher than 1.27 lbs/gallon proposed by NUMMI. The District also found RBLC ID: AL-0192, which presents a VOC emission limit of 4.1 lbs/gallon ACS for Primer operations at a Honda Plant in Kentucky. The primer proposed by NUMMI has a VOC emission limit of 0.37 lb/gallon ACS which is much lower than the emission limit mentioned in RBLC ID: AL-0192. Hence, the District came to the conclusion that MWPT3803 has a lower VOC content than the water-borne primers deemed BACT in the BACT clearinghouse. The CARB BACT clearinghouse does not include a BACT for this source category.

For this application, to ensure compliance with BACT2, a condition limiting primer VOC content to 1.27 lb/gallon will be included in the permit condition 10320.

2.6 Toxics

Basis:

- 61,606 gallons per year of MWPT 3803 primer usage at S59
- 1.97% by weight Isopropanol in the primer per Environmental Data Sheet
- 9.8 lbs/gallon primer density per Environmental Data Sheet
- 16 hours/day, 5 days/week and 50 weeks/yr operating time for S59

Isopropanol annual emissions = (61,606 gal/yr) (9.8 lb/gal) (0.0197) = **11,893.65 lb/yr**

Isopropanol hourly emissions = Annual Emissions (lbs/yr) / (250 days/yr) (16 hrs/day)
= (11,893.65 lbs/yr) / (4000 hr/yr) = **2.97 lbs/hr**

As shown above, both annual and hourly isopropanol emissions are below their respective chronic and acute trigger levels of 2.7E+05 lbs/yr and 7.1E+00 lbs/hr. Therefore, a toxics risk screening is not triggered.

2.7 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.

5.0 STATEMENTS OF COMPLIANCE

Sources S57, S58, S59, S65, and S-1072 will continue to comply with all applicable regulations. POC emissions from the S59, Bumper Prime Booth, will comply with the VOC standard of 490 grams of VOC per liter (4.10 lbs/gal) in Reg. 8-13-307.1 for Flexible Primer.

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.

S59 is not subject to the following MACT standard: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. Although this standard was promulgated on April 26, 2004, only new and reconstructed sources need to be in compliance upon initial startup of the affected source or by June 25, 2004, whichever is later. Since, S59 is neither a new nor a reconstructed source, it has until April 26, 2007 to comply with the final rule.

Per Section I.F. of the Major Facility Review Permit ("Title V Permit") and Section 2-6-502 of the District's rules and regulations, NUMMI has to report to the District as a deviation any instance of water-borne primer exceeding a VOC content value of 1.27 lb/gallon.

PSD, NSPS, and NESHAPS do not apply.

6.0 PERMIT CONDITIONS

```
COND#  10320   -------------------------------------

     For S57, BUMPER TOPCOAT BOOTH,
         S58, BUMPER TOPCOAT OVEN,
         S59, BUMPER PRIME BOOTH,
         S65, BUMPER PRIME OVEN,
         S960, PLASTIC PLANT BOOTH AND GENERAL CLEANING
         S961, BUMPER RELEASE CLEANING & POLISH
         S964, COLD CLEANER
         S965, PLASTIC PLANT THINNER STORAGE TANK
         S992, PLASTIC PLANT THINNER STORAGE TANK
         S1070, INSTRUMENT PANEL BOOTH,
         S1071 INSTRUMENT PANEL OVEN, AND
         S1072, GENERAL CLEANING & PAINT CLEANING
         S1509, PROTECTOSEAL CLEANING TANK:

     1.  All conditions shall be in effect at all times
     during equipment operation, including period of
     equipment start-up.  For the purposes of determining
     compliance with emissions and/or usage limits, a year
     is defined as a twelve month consecutive period; a
     month is defined as a calendar month. (basis:
     Cumulative Increase)
```

2. The combined total natural gas usage for all bumper and Instrument Panel line combustion sources shall not exceed 3.16 Million (MM) Therms per year. Records of natural gas usage shall be maintained for five (5) years from the date of entry and shall be made available to District personnel upon request. (basis: Cumulative Increase)

3. Only natural gas, propane, butane, and LPG shall be used as a fuel for any heater boxes used for sources S58, S65, and S1071. (basis: Cumulative Increase)

4. The total NOx emissions from the combustion equipment for the sources listed for Condition 10320 shall not exceed 26.16 tons per year. (basis: Cumulative Increase)

5. The total CO emissions from the combustion equipment for the sources listed for Condition 10320 shall not exceed 46.48 tons per year. (basis: Cumulative Increase)

*6. NUMMI shall not substitute any materials for those described in this permit application's Health Risk Assessment (HRA), which would trigger a toxics review, and which would result in:

a) an increase in the quantity of permitted air toxic compounds emitted,
b) The addition of unpermitted air toxic compounds emitted, which were not listed in the permit application HRA, or
c) an increase in the permitted VOC content or air toxic compound content for each coating category as specified in the permit application Health Risk Assessment without prior notification and approval of the APCO. (basis: Toxics)

7. In order to demonstrate compliance with Parts 4 and 5 of Condition 10320, NUMMI shall calculate the NOx and CO mass emission rates quarterly, using natural gas usage records and District approved NOx and CO emission factors. The NOx and CO emission factors for the thermal oxidizer (A571) for S57, S58, S59, S65, S1070 and S1071 shall be obtained from the results of the source tests, required by the District in Part 23 of Condition 10320. (basis: Cumulative Increase)

8. Abatement equipment (A571) must be operated during periods of instrument panel and/or bumper line production (sources S57, S58, S59, S65, S1070 and S1071) and during cleanup operations following

production. Abatement equipment is not required to operate during periods when there are no VOC emissions. For sources S59 and S1070, if waterborne coating is used exclusively, abatement by A571 is not required. (basis: BACT)

9. In no event shall the total combined, annual coating emissions from sources S57, S58, S59, and S-65 combined exceed 173 tons per year of POC. (basis: Cumulative Increase)

10. ~~The total coating usage for sources S57, S58, S59, and S65 shall not exceed the following specified limits unless NUMMI can demonstrate to the satisfaction of the APCO that a change in coating limits and/or composition will not result in emissions exceeding those in Part 9 of Condition 10320:~~

~~Primer 61,606 gallons per year~~
~~Non-Metallic~~
~~High Solids 32,586 gallons per year~~
~~Base Coat 37,127 gallons per year~~
~~Clear Coat 48,350 gallons per year~~

~~One or more of the usages may increase above the specified limit if there is a corresponding usage decrease for one or more of the other coatings, so that total emissions do not exceed the emission limit, specified in Part 9 of Condition 10320. NUMMI shall provide documentation to demonstrate compliance with Part 9 of Condition 10320 within 10 days of the exceedance of any of the coating limits. The total controlled emission limit for these spray booths (S57 and S59) and the associated ovens (S58 and S65) must be maintained at all times.~~ The owner/operator shall ensure that the following VOC content limits for different coatings mentioned below are not exceeded:

Coating	VOC Limit (lbsVOC/Gal)
Primer (solvent-borne)	4.10
Primer (water-borne)	1.27 (includes water)
Non-metallic high solids	4.70
Basecoat	4.70
Clearcoat	4.20

(basis: BACT, Cumulative Increase~~; MOP Volume II, Part 3, Section 4.7~~)

11. Adhesion promoting material may be used at sources S57, S58, S59, and S65 provided the total emissions for the sources do not exceed the limitations specified in Part 9 of Condition 10320. (basis: Cumulative Increase)

12. 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 in sources S57, S59, and S1070. (basis: BACT)

13. To minimize the amount of clean-up solvent used in the booths, NUMMI shall:
a. Provide a paper or 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)

14. NUMMI shall maintain the following data:

a) deleted 12/13/2004.
b) Amount and type of coating applied.
c) Amount of clean-up solvent used.
d) Amount of coating and solvents purchased.
e) Monthly compliance reports showing coating and clean-up usage and calculated emissions shall be submitted to the District Director of Enforcement.
f) Records shall be available for District inspection for a period of at least 5 years following the date of entry. (basis: Cumulative Increase)

15. Primary method for removal of particulate matter from S57 and S59 shall be a water contact scrubbing system. The overall control efficiency of the system shall be 98%. Any downtime of the water contact scrubber system shall be recorded. Such records shall be made available for inspection upon request and kept for a minimum of 5 years from the date of record.(basis: BACT, Cumulative Increase)

16. All VOC emissions from the automatic, flash off and setting zones of the Bumper Booths (S57 and S59) and the manual zone of Bumper Booth #2 (S59) shall be abated by the thermal oxidizer (A 571). This includes VOC emissions from clean-up and wet-down operations occurring during normal operating hours. (basis: BACT, Cumulative Increase)

17. The VOC emissions from sources S57, S58, S59, S65, S1070 and S1071 shall be abated by the thermal oxidizer (A571). This shall not apply to sources S-59 and S-1070 during periods when waterborne coating is used exclusively. (basis: BACT, Cumulative Increase)

a. The net mass emissions of POC shall be determined for the sources listed in Condition 10320 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 booth and oven Thermal Oxidizer (averaged, using the data obtained from at least 3 current source tests) shall be determined using District approved source testing methods [B].

d. Measured POC emissions from each booth and oven Thermal Oxidizer and carbon concentrator (averaged, using the data obtained from at least 3 current 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 yielding a pounds per unit basis. [B] and [C] shall each be multiplied by the annual 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 production 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)
(basis: BACT, Cumulative Increase)

19. The operating temperature for the Thermal Oxidizer (A571) may fall below 1400 degrees F if the source complies with the temperature excursion parameters set forth in Parts 26 and 27 of this condition. (basis: BACT, Cumulative Increase)

20. The minimum destruction efficiency of the Thermal Oxidizer (A571) shall be 98.5% by weight, whenever the VOC inlet concentration is greater than or equal to 500 ppmv, measured as methane. Below a concentration of 500 ppmv, the minimum destruction efficiency shall be 95% by weight or total non-methane organic carbon emissions from the outlet of the thermal oxidizer shall be 10 ppm by volume or less. (basis: BACT, Cumulative Increase)

21. The NOx emissions from the burners of the thermal oxidizer (A571) shall not exceed 1.72 tons per month. (basis: Cumulative Increase)

22. The combustion chamber for the thermal oxidizer (A571) shall be equipped with District 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)

23. The thermal oxidizer (A571) shall be source tested once per calendar year. After prior notification to the District's Source Test Manager, source testing shall be performed to determine the VOC control efficiency of the abatement devices and the nitrogen oxide and carbon monoxide emissions, in accordance with the District's Manual of Procedures. Records of the source test results shall be kept and made available for District inspection for a period of five years following the date the report was completed. (basis: BACT, Cumulative Increase)

24. Within 60 days of the completion of any source testing, a report documenting the results 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 source testing indicates any violation of the permit conditions, NUMMI shall report such violation to the Director of Enforcement within 10 days of determining that a violation has occurred and also within the final report. (basis: Cumulative Increase; MOP Volume II, Part 3, Section 4.7)

26. 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 less than or equal to 15 minutes 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 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)

27. 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 District. 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)

28. The District may revise or revoke Parts 26 and 27 of Condition 10320 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

31. In no event shall the total annual emissions from the combination of ~~S960, S961,~~ S964, S1072 and S1509 exceed 134.51 tons per year of POC. (basis: Cumulative Increase)

32. Clean-up solvent usage for sources ~~S960, S961,~~ S964, S1072, and S1509 shall be collected and

recovered at 77% or greater. Monthly excursions below the percent recovery limit are allowed as long as the annual VOC emission limit for clean up is not exceeded. (basis: BACT)

33. Paint and solvent from sources ~~S960, S961,~~ S964, S1072, and S1509 shall be recovered in an enclosed collection system and shipped to either a solvent recycler or proper disposal facility. (basis: BACT)

34. For the following sources, ~~S960, S961,~~ S1072, S964, and S1509, NUMMI shall record the amount of clean-up solvent used monthly. To verify compliance, monthly reports showing clean-up usage and calculated emissions shall be submitted to the Director of Enforcement. Records shall be available for District inspection for a period of at least 5 years following the date on which such data or reports are recorded or made. (basis: Cumulative Increase)

41. In no event shall the total combined, annual coating emissions from sources S1070 and S1071 exceed 21.49 tons per year of POC. (basis: Cumulative Increase)

42. ~~The total coating usage at sources S1070 and S1071 shall not exceed the following specified limits unless NUMMI can demonstrate to the satisfaction of the APCO that a change in coating limits and/or composition will not result in emissions exceeding those in Part 41 of Condition 10320:~~

~~Top Coat (Solventborne) 36,865 gal/year~~
~~Top Coat (Waterborne) 16,189 gal/year (less water)~~Coatings used at sources S1070 and S1071 shall not have a VOC content exceeding the limits in the following table:

Coating	VOC Limit (lbs VOC/Gal)
Topcoat (solvent-borne)	6.70
Topcoat (water-borne)	2.93 (less water)

(basis: Cumulative Increase)

43. The natural gas heater boxes for the IP Oven (S1071) shall utilize low-NOx burners. (basis: BACT)

44. The owner/operator shall abate S1070 with a water contact scrubbing system with an overall control efficiency of 90%. Any downtime of the water contact scrubber system shall be recorded. Such records shall be made available for inspection upon request and kept for a minimum of 5 years from the date of record. (basis: Cumulative Increase)

47. The permit holder shall operate the zeolite concentrator (A592) to abate the organic emissions from source S59 Bumper Prime Booth with a minimum ~~destruction effiency~~ removal efficiency of 90%. To verify compliance with this requirement, the permit holder shall conduct a District approved source test once per calendar year, unless a different schedule is approved. After prior notification to and approval from the District's Source Test Manager, source testing shall be performed to determine the VOC control efficiency of the abatement devices, in accordance with the District's Manual of Procedures. Records of the source test results and shall be kept. All records shall be kept and made available for District inspection for a period of five years following the date of entry. (basis: BACT).

48. If the owner/operator of S59 exclusively uses a water-borne primer with a VOC content not exceeding 1.27 lbs VOC per gallon of material, the requirement for abating POC emissions from S59 with abatement devices A571 and A592, or their subsequent replacements, shall not apply. (basis: BACT)

49. If the owner/operator of S59 exclusively uses a water-borne primer compliant with Part 48 of Permit Condition 10320, the annual total unabated POC emissions from S59 shall not exceed 38.30 tons. At no time shall the total annual POC emissions from S57, S58, S59 and S65 combined exceed 173 tons, as specified in Part 9 of Permit Condition 10320. (basis: Cumulative Increase)

50. If the owner/operator of S59 uses a solvent-borne primer with a VOC content greater than specified in Part 48 of Permit Condition 10320, the requirement for abating POC emissions from S59 using abatement devices A571 and A592, or their subsequent replacements, shall apply. (basis: BACT, Cumulative Increase)

5.0 RECOMMENDATION

Issue modified Permit to Operate to NUMMI after approving the following permit condition changes:

- **Modify Permit Condition No. 10320 to allow application of water-borne primer in S59, Bumper Prime Booth, without the requirement to abate the booth.**

- **Archive sources S960, Plastic Plant Booth and General Cleaning and S961, Bumper Release Cleaning and Polish, in the District databank and combine emissions applicable to them under S1072, General Cleaning and Paint Cleaning. This will result in simplified recordkeeping for NUMMI.**

By: _____

Sanjeev Kamboj
Air Quality Engineer II

Date: _____

ATTACHMENT A (PROCESS FLOW DIAGRAMS)

ATTACHMENT B (EMISSION CALCULATIONS)

(ii) Emission Calculations using PPG MWPT 3803 Waterborne Primer

Lbs VOC per gallon PPG MWPT 3803

(iii) Data from sections 2 and 9 of enclosed Material Safety Data Sheet

Density = 9.8 lbs/gal (section 9)
Maximum VOC content 13% (section 2)

VOC per gallon = (material density)VOC fraction of material)
= (9.8 lbs/gal)(0.13)

VOC per gallon MWPT 3803 = 1.27 lbs VOC

Current Total Bumper Operations After Abatement Emissions

Mass VOC generated solvent borne topcoat emissions = (118,063 gal/year)[(b)](4.5 lbs/gal)[(a)](ton/2,000 lbs) ≈ 265.6 TPY

Mass VOC generated water borne prime emissions = (61,606 gal/year)[(b)] (1.27 lbs/gal)[(c)](ton/2000 gal) ≈ 39.1 tons/year

Notes: (a) 4.5 lbs VOC/gallon maximum content data used is from BAAQMD Regulation 8 Rule 13, 8-13-307.3

(b) Volume of prime and topcoat usage based upon BAAQMD Permit Condition 10320 Part 10.
(c) 1.27 lbs/gallon VOC content for waterborne primer based upon the Material Safety Data Sheet for PPG MWPT 3803 Waterborne Primer.

Note: Emissions from the prime booth manual and automatic zones are abated by the RTO. Emissions from topcoat automatic zones abated by RTO.

Total emissions to atmosphere = Total emissions lost from prime booth operations + total emissions lost from prime oven operations + emissions lost from VOC concentrator + total emissions lost from topcoat booth operations + total emissions loss from topcoat oven operations + total emissions loss from RTO operations

Booth and Abatement Data

Waterborne Prime Booth Split Fraction = 0.98
Waterborne Prime Oven Split Fraction = 0.02

Automatic Zone Fraction = 0.90
Manual Zone Fraction = 0.10

Prime Booth Capture Efficiency = 0.85

Prime Oven Capture Efficiency *= 0.95*

VOC Concentrator Capture Efficiency *= 0.88*
VOC Concentrator Removal Efficiency *= 0.90 (min required by Permit Condition 10320 Part 47)*

Solventborne Topcoat Booth Split Fraction *= 0.96*
Solventborne Topcoat Oven Split Fraction *= 0.04*

Topcoat Booth Capture Efficiency *= 0.85*
Topcoat Oven Capture Efficiency *= 0.95*

RTO Destruction Efficiency *= 0.95 (min required by Permit Condition 10320 Part 20)*

(1) Total emissions lost from prime booth operations

Formula: (mass emissions generated in prime booth)(prime booth split fraction)[(1- prime booth capture efficiency)]

(39.1 TPY)(0.98)[(1-0.85)]
(39.1 TPY)(0.98)(0.15)

5.7 TPY lost from prime booth operations

[a] Prime emissions to VOC concentrator

(Total generated prime booth emissions)(prime booth split fraction) – emission lost from prime booth operations

(39.1 TPY)(0.98) – 5.7 TPY ≈ **33.4 TPY from Prime Booth to VOC concentrator**

(2) Total emissions lost from prime oven operations

Formula: (mass emissions generated in prime booth)(prime oven split fraction)(1-oven capture efficiency)

(39.1 TPY)(0.02)(1-0.95) = **0.04 TPY lost from Prime Oven**

[b] Prime oven emissions to RTO

(39.1 TPY)(0.02) – 0.04 TPY ≈ **0.7 TPY emissions from Prime Oven to RTO**

(3) Total emissions lost from topcoat booth operations

Formula: (mass emissions generated in topcoat booth)(topcoat booth split fraction)[(1-booth capture efficiency)(autozone fraction) + (manual zone fraction)]

(265.6 TPY)(0.96)[(1-0.85)(0.90) + 0.10] ≈ **59.9 TPY lost from topcoat booth operations**

[c] Topcoat booth emissions to either RTO or VOC concentrator

(265.6 TPY)(0.96) – 59.9 TPY ≈ **195.1 TPY emissions to either RTO or VOC concentrator**

(4) *Total emissions from topcoat oven*

Formula: (mass emissions generated in topcoat booth)(topcoat oven split fraction)(1- topcoat oven capture efficiency)

(265.6 TPY)(0.04)(1-0.95) ≈ **0.5 TPY lost from topcoat oven operations**

[d] Topcoat oven emissions to RTO

TPY – 0.5 TPY ≈ **10.1 TPY emissions from topcoat oven to RTO**

(iv) Current Configuration: Abate all emissions from prime and topcoat operations

(5) Total emissions lost from VOC Concentrator

Formula: ([mass emissions generated in topcoat booth – emissions lost from topcoat operations] + [mass emissions generated in prime booth – emissions lost from prime operations])(1-VOC concentrator capture efficiency)$^{(*)}$ + ([mass emissions generated in topcoat booth – emissions lost from topcoat operations] + [mass emissions generated in prime booth – emissions lost from prime operations])(1-VOC concentrator capture efficiency) + (VOC capture efficiency)(1-VOC concentrator removal efficiency) $^{(**)}$

Simplified formula for emissions lost from VOC concentrator: ([mass emissions generated in topcoat booth – emissions lost from topcoat operations] + [mass emissions generated in prime booth – emissions lost from prime operations])[(1-VOC concentrator capture efficiency) + (Capture Efficiency)(1-VOC removal efficiency)]

Note: * - Mass emissions lost from concentrator capture efficiency
** - Mass emissions lost from concentrator removal efficiency

[195.1 TPY from topcoat booth + 33.4 TPY from prime booth operations][(1-0.88) + (0.88)(1-0.90)] ≈ **47.5 TPY lost from VOC concentrator operations**

[e] Total emission from VOC concentrator to RTO

(33.4 TPY from Prime Booth + 195.1 TPY from Topcoat Booth) – 47.5 TPY lost from VOC concentrator

≈ **181 TPY to RTO**

(6) Total emission lost from RTO

Formula: (emissions from VOC concentrator + topcoat oven emissions + prime oven emissions)(1-minimum destruction efficiency)
(181 + 0.7 + 10.1)(1-.95) ≈ **9.6 TPY emission lost from RTO**

(v) Summary of emissions lost from current configuration

I.	Emission loss from prime booth operations ≈	5.7 TPY
II.	Emission loss from prime oven operations ≈	0.04 TPY
III.	Emission loss from topcoat booth operations ≈	59.9 TPY
IV.	Emission loss from topcoat oven operations ≈	0.5 TPY
V.	Emission loss from VOC concentrator operations ≈	47.5 TPY
VI.	Emission loss from RTO operations ≈	9.6 TPY

Total emissions lost to atmosphere from current configuration ≈ 123.2 TPY

Proposed configuration: Abate emissions from prime oven and topcoat operations. Do not abate emissions from prime booth operations

(7) Total emissions lost from prime booth operations

(Total emissions generated by booth operations)(Prime booth split fraction)
(39.1 TPY)(0.98)

38.3 TPY lost from Prime Booth operations

(8) Total emissions lost from prime oven operations

(39.1 TPY)(0.02)(1-0.95) = **0.04 TPY lost from Prime Oven emissions**

[b] Prime Oven emissions to RTO

(39.1TPY)(0.02) – 0.04 TPY ≈ **0.7 TPY emissions from Prime Oven to RTO**

(9) Total emissions lost from topcoat booth operations

(265.6 TPY)(0.96)[(1-0.85)(0.90) + 0.10] ≈ **59.9 TPY lost from Topcoat Booth operations**

[c] Topcoat booth emissions to either RTO or VOC concentrator

(265.6 TPY)(0.96) – 59.9 TPY ≈ **195.1 TPY topcoat emissions to RTO**

(10) Total emissions from topcoat oven

(256.6 TPY)(0.04)(1-0.95) ≈ **0.5 TPY lost from topcoat oven operations**

[d] Topcoat oven emissions to RTO

10.6 TPY – 0.5 TPY ≈ **10.1 TPY emissions from topcoat oven to RTO**
(11) Total emissions from RTO

Formula: (emissions from topcoat booth + topcoat oven emissions + prime oven emissions)(1-minimum destruction efficiency)

(195.1 + 0.7 + 10.1)(1-.95) ≈ **10.3 TPY loss from RTO**

(vi) Summary of emissions lost from proposed configuration

VII.	Emission loss from prime booth operations ≈	38.3 TPY
VIII.	Emission loss from prime oven operations ≈	0.04 TPY
IX.	Emission loss from topcoat booth operations ≈	59.9 TPY
X.	Emission loss from topcoat oven operations ≈	0.5 TPY
XI.	Emission loss from RTO operations ≈	10.3 TPY

Total emissions lost to atmosphere from proposed configuration ≈ 109 TPY

VOC emission savings using proposed versus current configuration

123.2 TPY – 109 TPY ≈ 14.2 TPY

CO_2 Emission Reduction Calculations

CO_2 reductions associated from greenhouse gases using Proposed Configuration. There are no reductions in CO_2 from greenhouse gasses applicable to Current Configuration1.

Annual electrical reduction from shutting down VOC Concentrator 141,800 Kw/hr (1)
Annual natural gas savings from shutting down VOC Concentrator 22,000 mmBTU (1)

Electrical factor = 0.663 lbs/Kw-hr(2)

Natural Gas factor = 52.78 Kg/mmBTU(2)

Electrical* CO_2 *reductions *= (141,800 Kw-hr/year)(0.663 lbs/Kw-hr)(ton/2,000 lbs) ≈ 47tons per year.*

Natural Gas* CO_2 *reductions *= (22,000 mmBTU/year)(52.78 Kg/mmBTU)(ton/907 Kg) ≈ 1,280 tons per year.*

Total CO_2 reductions from Proposed Configuration ≈ electrical savings (47 TPY) + natural gas savings (1,280 TPY) ≈ 1,327 TPY

Notes: (1) Electrical and natural gas usage based on BACT analysis for District Permit Application 8794, dated January 9, 2004

(2) Emission factors are from Table 5-1 page 3 of the California Climate Action Registry General Reporting and Certification Protocols.

Net VOC Reduction with Proposed Configuration: 11.2 TPY

Net CO_2 Reductions with Proposed Configuration: 1,327 TPY

ATTACHMENT C (COST-EFFECTIVENESS ANALYSIS)

BACT Cost Analysis

Annualized Abatement cost calculated using Con Co$t program, Second Edition, 1998 per US EPA

Utilizing the calculated BACT costs detailed on page 10 of the August 19, 2005 correspondence directed to your attention, the cost for abating emissions from options 1 and 2 are as follows:

Option 1 – Abate emissions using 50,000 cfm RTO

Annualized (1998 dollars) abatement cost =$5,827,653.35

Total emissions destroyed by RTO = 33.4 tpy * 0.95 = 31.7 tpy

Cost per ton abated emissions = (total annual cost/total mass VOC emissions destroyed)

= ($5,827,653.35/31.7 tons)

= **$183,837.64 per ton (in 1998 dollars)**

Option 2 – Abate emissions using 50,000 cfm carbon concentrator and 5,000 cfm RTO

Annualized (1998 dollars) abatement costs for option 2 are as follows:

$190,693.10 annual cost for 50,000 cfm carbon concentrator
$714,241.16 annual cost for 5,000 cfm RTO

Total cost $904,934.26 (in 1998 dollars)

Total mass VOC emissions sent to concentrator 33.4 tpy

Emission lost from carbon concentrator = (mass emissions)(1-capture efficiency) + (total emission – emissions lost to capture efficiency)(1-removal efficiency)

= (33.4 tpy)(1-0.88) + [33.4 tpy - (33.4 tpy)(1-0.88)](1 - 0.90)
= 4.0 + 2.9
≈ 6.9 tpy

Total mass destroyed by RTO = (mass emissions to RTO)*0.95

= (33.4 tpy – 6.9 tpy)*0.95 ≈ 25.2 tpy

Cost per ton abated emissions = (total annual cost/total mass VOC emissions destroyed)

= ($904,934.26/25.2 tpy)

= **$35,910.08 per ton (in 1998 dollars)**

ATTACHMENT D (NATURAL GAS AND ELECTRICITY COSTS INFO.)

New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 10438

1.0 BACKGROUND

New United Motor Manufacturing Inc. (NUMMI) submitted this application for an Authority to Construct and/or Permit to Operate the following new equipment for its North Paint Shop (NPS):

S-3022	**NPS Passenger ELPO Dip Tank**
S-3024	**NPS PVC Undercoat Booth**
S-3025	**NPS Passenger Bead Sealer Operations**
S-592	**NPS Passenger ELPO Resin Storage Tank, 10,000 gallons capacity**
S-593	**NPS Passenger ELPO Pigment Storage Tank, 10,000 gallons capacity**
A-3010	**NPS ELPO Oven Thermal Oxidizer, 12 MMBtu/hr firing rate**

Besides permitting the sources listed above, NUMMI has requested the following permit condition changes:

- **Modify Permit Condition No. 207 to delete various sources (S-2, S-3, S-60, S-807, S-808, S-813) that will be dismantled once new sources listed above begin operations**
- **Modify Permit Condition Nos. 14205 and 14206 to allow for application of Anti-chip EF626 and Anti-chip U-1051 coatings at currently existing S-3008 (NPS Prime Booth)**
- **Modify Permit Condition No. 14207 to replace usage amounts of different coatings with VOC content limits and emission limits to provide operational flexibility as agreed to between the District and NUMMI while processing Permit Application 10005**
- **Delete Permit Condition No. 22219 applicable to S-803 as the source will be dismantled once new source S-3025 begins operation**
- **Delete Permit Condition No. 4281 applicable to S-3 (Passenger Body ELPO Oven) and A-4 (Passenger Body ELPO Oven Thermal Oxidizer) as these will be dismantled once new source, S-3022 and abatement device, A-3010 commence operations**
- **Archive current sources S-421 (ELPO Paint Pigment Storage Tank) and S-422 (ELPO Resin Above Ground Storage Tank) in the District data bank as these will be shut down and dismantled once new similar sources S-592 and S-593 are installed and commence operation**
- **Rename S-3007 (NPS Dry Off Oven) to NPS ELPO Oven in the District data bank to reflect new operation of this source**

Process flow for S-3022

The car bodies will go from S-3022 to the NPS Dry Off Oven, S-3007. Thermal oxidizer, A-3010, will abate the emissions from S-3007.

Process flow for S-3024

The car bodies will go from S-3024 to the NPS Prime Booth, S-3008 and to NPS Prime Oven, S-3009. NPS Prime Booth Thermal Oxidizer, A-3008, will abate the emissions from S-3009.

Process flow for S-3025

The car bodies will go from S-3025 to the NPS Prime Booth, S-3008 and to the NPS Prime Oven, S-3009. NPS Prime Booth Thermal Oxidizer, A-3008, will abate the emissions from S-3009.

NUMMI is proposing to keep the same emission limits that are applicable to similar equipment at the South Paint Shop, which are currently operating and will be dismantled once the new sources begin operations. As approved by the District in previous NUMMI Application 10005, emission limits and VOC content limits will be included in the new permit conditions. Usage limits will be used by the applicant to calculate total emissions from different sources, but will not be included in the permit conditions.

4.0 EMISSIONS SUMMARY

Emission increases for the new sources of this application are calculated based on the procedures in Regulation 2-2-604. On-site contemporaneous emission reduction credits are calculated based on the procedures in Regulation 2-2-605.

The table below provides the summary of proposed emissions from all the new and modified sources covered in this application:

Source Number	Proposed Emissions (tpy)
3022	66.40
3024	14.50
3025	5.40
592	0.15
593	0.19
3008	9.40
Total	**96.04**

(vii) PROJECT EMISSIONS

The new sources (S-3022, S-3024 and S-3025) will continue to have the same Booth/Oven air emissions split of currently permitted similar sources. S-3022 will have the Bath/Oven split of 30%/70% that is currently applicable to S-2. S-3024 will have the Booth/Oven split of 1%/99% that is currently applicable to S-60. S-3025 will have the Booth/Oven split of 20%/80% that is

currently applicable to S-803. The splits were established in Permit Application No. 29614 in 1984, when the District originally permitted sources S-2, S-60 and S-803.
NUMMI submitted emission calculations as part of this application using the booth/oven splits mentioned above. NUMMI based these splits on testing done on the existing South Paint Shop sources that will be dismantled once these new sources commence operations. Edward Moore of NUMMI has agreed to accept start-up permit conditions that require source testing to verify the booth/oven splits for each of the above new sources.

S-3022 and S-3007 (NPS Dry Off Oven) emission calculations

Assumptions:

- Bath/Oven air emissions split of 30%/70% (based on NUMMI testing of similar operations in South Paint Shop and to be verified at start-up).
- A-3010 NPS ELPO oven thermal oxidizer POC emission capture and collection efficiency of 90% by weight.
- ED6650 Cationic Bath usage of 217,505 gal/yr (taken from an e-mail sent by NUMMI on March 13, 2006).
- Bath VOC content of 0.61 lb/gal (maximum VOC content taken from monthly reports for the months of November 2001 to November 2004)

S3022 and S-3007 POC emissions:

(217,505 gallons/year) * (0.61 lb/gallon) = **132,678.05 lb/yr or 66.40 ton/yr**

Considering the Bath/Oven split of 30%/70%, unabated emissions to the deck are 39,803.42 lbs/yr and unabated emissions to the oven are 92,874.64 lbs/year. This translates into unabated deck emissions of 159.21 lbs/day for 250 days/year of operations at S3022.

S-3024 and S-3009 (NPS Prime Oven) emission calculations

Assumptions:

- Booth/Oven air emissions split of 1%/99% (based on NUMMI testing of similar operations in South Paint Shop and to be verified at start-up).
- RTO/Carbon Concentrator (A-3008/A-30082) minimum POC emission capture and collection efficiency of 95% by weight as required in the permit condition
- Penguin Coating TU500 usage of 70,732 gal/yr (taken from an e-mail sent by NUMMI on March 13, 2006).
- Penguin Coating TU500 VOC content of 0.41 lb/gal

S3024 and S3009 POC emissions:

(70,732 gallons/year) * (0.41 lb/gallon) = **29,000.12 lb/yr or 14.50 ton/yr**

Considering the Booth/Oven split of 1%/99%, unabated emissions to the deck are 290 lbs/yr and unabated emissions to the oven are 28,710.12lbs/year. This translates into unabated deck emissions of 1.16 lbs/day for 250 days/year of operations at S3024.

S-3025 and S-3009 (NPS Prime Oven) emission calculations

Assumptions:

- Deck/Oven air emissions split of 20%/80% (based on NUMMI testing of similar operations in South Paint Shop and to be verified at start-up).
- RTO/Carbon Concentrator (A-3008/A-30082) minimum POC emission capture and collection efficiency of 95% by weight as required in the permit condition
- Bead sealer usage of 54,000 gal/yr (taken from an e-mail sent by NUMMI on March 13, 2006).
- Bead sealer VOC content of 0.20 lb/gal.

S3025 and S3009 POC emissions:

(54,000 gallons/year) * (0.20 lb/gallon) = **10,800 lb/yr or 5.40 ton/yr**

Considering the Deck/Oven split of 20%/80%, unabated emissions to the deck are 2,160 lbs/yr and unabated emissions to the oven are 8,640 lbs/year. This translates into unabated deck emissions of 8.64 lbs/day for 250 days/year of operations at S3025.

S-592 (NPS Passenger ELPO Resin Storage Tank) and S-593 (NPS Passenger ELPO Pigment Storage Tank)

The POC emissions from S-592 are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr (tpy)
ELPO Resin	111.50	182.26	**293.76 (0.15)**

As can be seen above, EPA Tanks 4.0 calculations estimate the emissions at 293.76 lbs POC/year or **0.80 lbs POC/day**. Hence, BACT is not triggered.

The POC emissions from S-593 are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr (tpy)
ELPO Pigment	22.30	364.51	**386.81 (0.19)**

As can be seen above, EPA Tanks 4.0 calculations estimate the emissions at 386.81 lbs POC/year or **1.06 lbs POC/day**. Hence, BACT is not triggered.

Please see Attachment E for tanks emissions reports.

(viii) S-3008 emission calculations

S-3008 (NPS Prime Booth) will be modified to allow the application of anti-chip coatings in addition to the primer that is currently applied at this booth.

S-3008 will continue to be abated by A-3008 (NPS Prime Booth Thermal Oxidizer and A-30082 (Carbon Concentrator).

The VOC concentrator, A-30082, does not capture 100% of the VOC. According to NUMMI, the vendor estimates that 88% of the emissions from the booth are routed to A-3008 (12% are lost to the atmosphere). For further description of the capture and removal efficiencies, see November 17, 2005 e-mail message from NUMMI, which is included in the application folder.

Booth and Abatement Data

VOC Concentrator Capture Efficiency	*= 0.88*
VOC Concentrator Removal Efficiency by Permit Condition 14206 Part 18)	*= 0.90 (min required*
Booth Split Fraction	*= 0.83*
Oven Split Fraction	*= 0.17*
Booth Capture Efficiency	*= 0.85*
Oven Capture Efficiency	*= 0.90*
RTO Destruction Efficiency	*= 0.95 (min req. by permit)*

The booth/oven split and the booth/oven capture efficiency data is based upon the current operation of S-3008, NPS Prime Booth and S-3009, NPS Prime Oven.

Total emissions to atmosphere = Total emissions lost from booth operations + total emissions lost from oven operations + emissions lost from VOC

Mass Antichip VOC emissions generated = 29.2 TPY (basis: maximum permit application limit)

(1) Total Antichip emissions lost from booth operations

Formula: (mass emissions generated in booth)(booth split fraction)[(1- booth capture efficiency)]

(29.2 TPY)(0.83)[(1-0.85)]
(29.2 TPY)(0.83)(0.15)

≈ 3.6 TPY lost from booth operations

[a] Total emissions to VOC concentrator

(Total generated booth emissions)(booth split fraction) – emission lost from topcoat booth operations

(29.2 TPY)(0.83) – 3.6 TPY ≈ 20.6 TPY from booth to VOC concentrator

(2) Total Antichip I emissions lost from oven operations
Formula: (mass emissions generated in topcoat booth)(topcoat oven split fraction)(1-oven capture efficiency)

(29.2 TPY)(0.17)(1-0.90) ≈ 0.5 TPY lost from oven

[b] Antichip oven emissions to RTO

(29.2 TPY)(0.17) – 0.5 TPY ≈ 4.5 TPY emissions from oven to RTO

(3) Total Antichip emissions lost from VOC Concentrator

The VOC concentrator, A-30082, does not capture 100% of the VOC. According to NUMMI, the vendor estimates that 88% of the emissions from the booth are routed to A-3008 (12% are lost to the atmosphere).

Formula: ([mass emissions from booth] [(1-VOC concentrator capture efficiency) + (Capture Efficiency)(1-VOC removal efficiency)]

(20.6 TPY from booth)[(1-0.88) + (0.88)(1-0.90)] ≈ 4.3 TPY lost from VOC concentrator operations

[e] Total emission from VOC concentrator to RTO

20.6 TPY – 4.3 TPY lost from VOC concentrator

≈ 16.3 TPY to RTO

(4) Total Antichip emissions lost from RTO

Formula: (emissions from VOC concentrator + topcoat oven emissions)(1-minimum destruction efficiency)

(16.3 + 4.5)(1-.95) ≈ 1.0 TPY emission lost from RTO

Summary of Antichip emissions to atmosphere due to this project

i. Emission loss from booth operations ≈ 3.6 TPY
ii. Emission loss from oven operations ≈ 0.5 TPY

iii. Emission loss from VOC concentrator operations ≈ 4.3 TPY
iv. Emission loss from RTO operations ≈ 1.0 TPY

Total Antichip VOC emissions to atmosphere ≈ **9.4 TPY**

(ix) A-3010 emission calculations

There is no increase in combustion related emissions attributed to A-3010, as similar currently permitted abatement device, A-4 (Passenger Body ELPO Oven Thermal Oxidizer), will be shutdown and dismantled once A-3010 comes into operation. Both of these thermal oxidizers have the same natural gas firing rate of 12 MMBtu/hr.

Total POC emissions for this application are **96.04 tpy** (i.e., sum total of POC emissions from S-3022, S-3024, S-3025, S-592, S-593 and S-3008).

(X) CONTEMPORANEOUS EMISSION REDUCTION CREDITS

The methodology mentioned in Regulation 2-2-605 was used to calculate emission reduction credits. The baseline period consisted of the 3 year period immediately preceding the date that the application was complete. NUMMI has provided sufficient records of various sources operations to substantiate the emission rates and throughputs during the entire baseline period.

The table below provides the summary of emission reduction credits that will result from the shutdown and dismantling of various sources once the new sources begin operations:

Source Number	Emission Reduction Credits (tpy)
2 and 3	66.40
60	14.50
803	5.40
421	0.19
422	0.13
807 and 808	29.20
Total	**115.82**

(xi) S-2, S-3, S-60 and S-803 (Paint Spray Booths and Oven)

These sources have been fully offset (Application 29614). Per Regulation 2-2-605.4, the baseline throughput and emission rates are based upon the levels allowed by the permit condition 207. Application 29614 is the application that established the current emission caps in condition 207

for these sources. Based on the engineering evaluation report of Application 29614, the VOC contents of the coatings permitted in the application were all below the current VOC content limits of Rule 8-13. Also, per the March 16, 2006 e-mail from Ed Moore of NUMMI, these four sources have always been operated in compliance with coating VOC content limits that meet the current District Regulation 8-13. Therefore, no RACT adjustment is required.

Thus, contemporaneous emission reduction credits for S-2, S-3, S-60 and S-803 are **86.30** tons per year as discussed above.

(xii) S-421 and S-422

These sources are not limited by any specific throughput and/or POC limits, as they are not subject to any permit conditions.

The emission calculation procedures of sections 2-2-605.1 to 2-2-605.3 (3-year baseline period) are used to determine the baseline emission rates and baseline throughputs.

The baseline data came from the "Usage and VOC Report" for the time period Nov. 2001-Nov. 2004, that was faxed to the District by NUMMI on October 25, 2005. The fax is included in the application folder.

The POC emissions from S-421 based on actual average annual throughput of 28,611 gallons are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr (tpy)
ELPO Pigment	15.19	364.51	**379.70 (0.19)**

The POC emissions from S-422 based on actual average annual throughput of 322,557 gallons are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr (tpy)
ELPO Resin	85.63	182.26	**267.89 (0.13)**

Please see Attachment E for tanks emissions reports.

Thus, contemporaneous emission reduction credits for S-421 and S-422 are **0.32** tons per year.

(xiii) S-807 and S-808

These sources have been fully offset (Application 6365). Per Regulation 2-2-605.4, the baseline throughput and emission rates are based upon the levels allowed by the permit condition 207. Application 6365 is the application that established the current emission caps in condition 207 for these sources. Based on the engineering evaluation report of Application 6365, the VOC contents of the coatings permitted in the application were all below the current VOC content limits of Rule 8-13. Also, per the March 16, 2006 e-mail from Ed Moore of NUMMI, these two sources have always been operated in compliance with coating VOC content limits that meet the current District Regulation 8-13. Therefore, no RACT adjustment is required.

Thus, contemporaneous emission reduction credits for S-807 and S-808 are **29.20** tons per year as discussed above.

Total POC contemporaneous emission reduction credits for this application are **115.82 tpy** (i.e., sum total of POC emissions from S-2, S-3, S-60, S-803, S-421, S-422, S-807 and S-808).

Contemporaneous Emission Reduction Credits Summary

2-2-242 Contemporaneous: The five-year period of time immediately prior to the date of application for an authority to construct or permit to operate.

POC outstanding balance for NUMMI (from the District Databank)

P O C E M I S S I O N I N C R E A S E (tpy, post 4/5/91)

New United Motor Manufacturing, Inc [plant: 1438] 18Oct05

Application	incr.	contemp reduction	ratio	offsets	Bank No.
3742	.040	.050	1.15		
4307	.210	.210	1.00		
5177	.080	.080	1.00		
5223	1.030	1.030	2.95		
6914	.140	.140	1.00		
7048	.120	.120	1.00		
14420	.030		1.00	.030	313
14637	.670		1.15	.770	496
16206	29.110		1.15	33.476	322
16263	.280		1.15	.322	440
17753	.050		1.15	.057	496
25397	711.030	711.030	1.00		
7692	.620	.170	1.20		
7692			1.20	.570	44
9520	.047		1.20	.056	313
9856	11.730	9.630	1.20		
9856			1.20	4.450	261
10339	.068		1.20	.082	313
10740	58.430		1.20	70.116	313
10741	36.380		1.20	43.656	260

```
 11586        .080                          1.15         .092          496
 12238        .520                          1.15         .598          496
 13651       4.070                          1.15        4.680          253



--------------------------------------------------------------------------
-
 Balance (tons/year):      .678     (* = ERCs returned to Small Facility
Bank)
```

Net Emission Increase/Decrease

Pollutant	Emission increase related to this application (tpy)	Outstanding balance from Databank (tpy)	Contemporaneous emission reduction credits for this application (tpy)	Net emission increase (tpy)
POC	96.04	0.678	115.82	< 0

As can be seen above, POC emission increases related to this application have been completely offset by the contemporaneous emission reduction credits. Therefore, NUMMI is not required to provide offsets for this application.

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 new or modified source with the potential to emit 10 pounds or more per highest day of POC, NPOC, NOx, CO, SO_2 or PM_{10} must use BACT.

S-3022 (NPS Passenger ELPO Dip Tank) and S-3007 (NPS Dry Off Oven)

S-3022 only emits POC. The District's BACT requirement for Spray Booth (Automatic Zones)-Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.2 dated December 16, 1991. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is shown as use of coatings with VOC content and transfer efficiency complying with Reg. 8, Rule 13. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

South Coast Air Quality Management District (SCAQMD) Rule 1115, Motor Vehicle Assembly Line Coating Operations, specifies that the VOC content of any electrophoretic primer (ELPO) shall not exceed 145 grams per liter (1.2 lbs/gal) of coating, less water and exempt compounds. The maximum VOC limit for NUMMI's permit application is 0.61 lbs per gallon, well below the limit specified in both SCAQMD Rule 1115 and BAAQMD Regulation 8-13-306.

The MACT standard specifically addresses only volatile hazardous air pollutants (HAPS), and was not written for total VOC emissions. None of the compounds emitted at S-3022 are contained in BAAQMD Table 2-5-1. Therefore, the MACT standard in this case is not directly comparable to the BACT standard.

Also, after reviewing the CARB and EPA BACT Clearing Houses, the District did not find any more stringent BACT requirements for ELPO dip tanks.

Since S-3022 unabated emissions to the deck are calculated to be 159.21 lbs/day, BACT is triggered. Please see Attachment A for the Cost-effectiveness analysis including POC emission calculations. The cost-effectiveness was done using EPA ConCo$t Spreadsheets.

The annual cost for abating one ton of POC emissions is $26,533, which is greater than the District and EPA BACT threshold of $17,500 per ton. Therefore, it is **not** cost-effective to abate the 30% deck emissions with an RTO/Carbon Concentrator system.

S-3024 (NPS PVC Undercoat Booth) and S-3009 (NPS Prime Oven)

S-3024 only emits POC. The District's BACT requirement for Spray Booth (Automatic Zones)-Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.2 dated December 16, 1991. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is shown as use of coatings with VOC content and transfer efficiency complying with Reg. 8, Rule 13. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

Since S-3024 unabated emissions to the deck are calculated to be 1.16 lbs/day, BACT is not triggered. Please see Attachment B for the POC emission calculations.

S-3025 (NPS Passenger Bead Sealer Operations) and S-3009 (NPS Prime Oven)

S-3025 only emits POC. The District's BACT requirement for Spray Booth (Automatic Zones)-Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.2 dated December 16, 1991. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is shown as use of coatings with VOC content and transfer efficiency complying with Reg. 8, Rule 13. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

Since S-3025 emissions to the deck are calculated to be 8.64 lbs/day, BACT is not triggered. Although no cost-effectiveness analysis is required, it was completed as the emissions are close to 10 lb/day trigger level. Please see Attachment C for the Cost-effectiveness analysis including POC emission calculations.

The annual cost of abating one ton of POC emissions is $148,888, which is greater than the District and EPA BACT threshold of $17,500 per ton. Therefore, it is **not** cost-effective to abate the 20% deck emissions with an RTO/Carbon Concentrator System.

Note: Please refer to Attachment D for ConCo$t spreadsheets.

S-592 (NPS Passenger ELPO Resin Storage Tank) and S-593 (NPS Passenger ELPO Pigment Storage Tank)

The POC emissions from S-592 are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr
ELPO Resin	111.50	182.26	**293.76**

As can be seen above, EPA Tanks 4.0 calculations estimate the emissions at 293.76 lbs POC/year or **0.80 lbs POC/day**. Hence, BACT is not triggered.

The POC emissions from S-593 are summarized below:

Components	Working loss, lb/yr	Breathing Loss, lb/yr	Total Emissions, lb/yr
ELPO Pigment	22.30	364.51	**386.81**

As can be seen above, EPA Tanks 4.0 calculations estimate the emissions at 386.81 lbs POC/year or **1.06 lbs POC/day**. Hence, BACT is not triggered.

Please see Attachment E for tanks emissions reports.

2.3 Toxics

The toxic compounds emissions are below their chronic trigger levels; therefore, a health risk screening analysis is not required pursuant to Regulation 2, Rule 1, Section 316.

Please see Attachment F for toxic compounds emissions calculations.

2.4 Offsets

Based on the emission calculations above, the emission increases minus the contemporaneous emission reduction credits are less than zero. Therefore, offsets are not required for this application.

7.0 STATEMENTS OF COMPLIANCE

S3022 (NPS Passenger ELPO Dip Tank) is subject to and in compliance with District Regulation 8, Rule 13, and Section 306. Regulation 8-13-306 identifies the VOC standards for electrophoretic primers. The ED6650 Lead-free Cationic bath proposed for use by NUMMI is complying (VOC <1.2 lb/gal).

Sources S3024 (NPS PVC Undercoat Booth) and S3025 (NPS Passenger Bead Sealer Operations) are subject to and in compliance with District Regulation 8, Rule 13, Section 302. Regulation 8-13-302 identifies the VOC standards for spray primers, primer surfacers and topcoat operations. The Penguin Coating TU500 and Penguin Seal 1652P bead sealer proposed for use by NUMMI are complying (VOC <15.0 lbs/gal of applied coating solids).

S3008 (NPS Prime Booth) will continue to comply with all applicable regulations. POC emissions from the Anti-chip EF626 and Anti-chip U-1051 coatings will comply with the VOC standard of 1.80 kilograms of VOC per liter (15.0 lbs/gal) of applied coating solids, in Reg. 8-13-302 for Topcoat, Spray Primer and Primer Surfacer coatings.

Sources S592 (NPS Passenger ELPO Resin Storage Tank) and S593 (NPS Passenger ELPO Pigment Storage Tank) are subject to and in compliance with all applicable sections of the District Regulation 8, Rule 5 (Storage of Organic Liquids) including section 8-5-302 (Requirements for Submerged Fill Pipes). These tanks qualify for the Low Vapor Pressure Exemption of Regulation 8-5-117 as ELPO resin and pigment materials stored in these tanks will have a true vapor pressure of less than 25.8 mm Hg (0.5 psia). Permit conditions for both S592 and S593 will include this vapor pressure limit.

MACT

The project is not subject to the following MACT standard: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks, 40 CFR 63, subpart IIII. This standard was promulgated on April 26, 2004. NUMMI is not a new source. It is an existing source, not subject as defined in the MACT standard.

Under the final AutoMACT rule promulgated April 26, 2004, source, new source and reconstructed source is described on page 22624 as:
§ 63.3082, What parts of my plant does this subpart cover?

(b) This subpart applies to each new, reconstructed, and existing affected source.

(b) The affected source is the collection of *all* items listed in paragraphs (b)(1) through (4) of this section are used for surface coating of new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks:

(1)All coating operations as defined in § 63.3176

(2) All storage containers and mixing vessels in which coatings, thinners, and cleaning materials are stored and mixed.

(3) All manual and automated equipment and containers used for conveying coatings, thinners, and cleaning materials

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

§ 63.3082 (e) defines a new affected source as follows:

An affected source is a new affected source if you commenced its construction after December 24, 2002, and the construction is of a completely new automobile and light-duty truck assembly plant where previously no automobile and light-duty truck assembly plant had existed, a completely new automobile and light-duty truck paint shop where previously no automobile and light-duty truck paint shop had existed, or a new automobile and light-duty truck topcoat operation where previously no automobile and light-duty truck topcoat operation had existed.

§ 63.3176 of the Federal Register, page 22651 defines paint shop as follows:

Paint shop means the collection of all areas at the facility in which new automobiles or new light-duty truck bodies, or body parts for new automobiles or new light duty truck bodies are phosphated and coated (including application, flash-off, drying and curing of electrodeposition primer, primer surfacer, topcoat, final repair, glass bonding adhesive, deadener, adhesives and sealers); all coating operations added to the affected source pursuant to §63.3082(c); all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or light-duty truck bodies, or coating operations added to the affected source pursuant to §63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobile or new light-duty trucks, or coating operations added to the affected source pursuant to §63.3082(c). If there is no application of topcoat to new automobile or light-duty truck bodies, or body parts for new automobiles or light-duty trucks at the facility, then for purposes of this subpart the facility does not have a paint shop.

Based upon the aforementioned federal regulations, this project is not a new source under the autoMACT definitions.

The equipment that will be installed for this application does not constitute a reconstructed source as specified in subpart f of § 63.3082. This subpart can be found on page 22624 of the Federal Register.

§ 63.3082 (f) An affected source is reconstructed if its paint shop undergoes replacement of components to such an extent that:

(1) The fixed capital cost of the new components exceeded 50 percent of the fixed capital cost that would be required to construct a new paint shop

The applicant in a fax dated March 13, 2006 provided the capital cost information in order to confirm that this is not a reconstructed source. The fax has been included in the application folder. After verifying the cost information, the District has come to the conclusion that the fixed capital cost of the new components covered in this application will not exceed 50 percent of the fixed capital cost required to construct a new paint shop.

In conclusion, MACT compliance is specific to paint shops, not individual sources and consequently the sources being evaluated for Permit Application 10438 do not have to comply with the AutoMACT standards for new sources. By April 26, 2007 the entire paint shop has to be in compliance as specified by §63.3083(b) of the AutoMACT standard. But, the MACT standards are considered in the BACT determinations for individual sources.

The California Environmental Quality Act (CEQA):

The CEQA Lead Agency for this project is the City of Fremont Building Department. The City of Fremont approved the building permit for this project on January 4, 2005. This approval was based on a 1999 Environmental Impact Report (EIR) done by the City of Fremont. NUMMI completed and submitted to the District a preliminary environmental study (Appendix H), which indicates that this project will have no environmental effects. The final action by the District was taken only after review and consideration of this information.

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.

PSD, NSPS, and NESHAPS do not apply.

8.0 PERMIT CONDITIONS

Note: Current permit condition 14205 applies to S-3007, NPS Dry off oven. This condition also contains periodic source test requirements for A-3010, NPS ELPO oven thermal oxidizer. Initial sources test requirements for A-3010 are contained in new condition 22546.

Conditions for S-3022, NPS Passenger ELPO Dip Tank:

1. **EMISSIONS LIMITATION**

   The owner/operator shall ensure that ED6650 Lead-free Cationic bath or other equivalent material, applied at S-3022 satisfies all of the following conditions:

   a. Total POC emissions from S-3022 do not exceed 66.40 tons in any consecutive twelve-month period.

b. The VOC content of any material used at S-3022 does not exceed 0.61 pounds of VOC per gallon.
c. The usage of materials at S-3022 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

2. **RECORD KEEPING AND REPORTING**

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall document and maintain objective evidence of the following information:
   i. Type, monthly usage and VOC contents of all VOC containing materials (specifically ELPO Resin and ELPO Pigment) used at S-3022. The owner/operator of S-3022 shall ensure that the Laboratory VOC content value is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);
   ii. If a material other than that specified in Part 1 is used, toxic component contents of each material used and
   iii. Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase, BACT]
b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase, BACT]

Conditions for S-3024, NPS PVC Undercoat Booth:

Note: S-3009, NPS Prime Oven, is subject to current permit condition 14205.

a. EMISSIONS LIMITATION

The owner/operator shall ensure that Penguin Coating TU500 or other equivalent material, applied at S-3024 satisfies all of the following conditions:

a. Total POC emissions from S-3024 do not exceed 14.50 tons in any consecutive twelve-month period.
b. The VOC content of any material used at S-3024 does not exceed 0.41 pounds of VOC per gallon.
c. The usage of materials at S-3024 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

2. RECORD KEEPING AND REPORTING

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall document and maintain objective evidence of the following information:
    i. Type, monthly usage and VOC contents of all VOC containing materials used at S-3024. The owner/operator of S-3024 shall ensure that the Laboratory VOC content value is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);
    ii. If a material other than that specified in Part 1 is used, toxic component contents of each material used and
    iii. Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase, BACT]
b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase, BACT]

Conditions for S-3025, NPS Passenger Bead Sealer Operations:

Note: S-3009, NPS Prime Oven, is subject to current permit condition 14205.

1. EMISSIONS LIMITATION

The owner/operator shall ensure that Penguin Seal 1652P bead sealer or other equivalent material, applied at S-3025 satisfies all of the following conditions:

a. Total POC emissions from S-3025 do not exceed 5.40 tons in any consecutive twelve-month period.
b. The VOC content of any bead sealer batch used at S-3025 does not exceed 0.20 pounds of VOC per gallon.
c. The usage of bead sealer at S-3025 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

2. RECORD KEEPING AND REPORTING

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall document and maintain objective evidence of the following information:
    i. Type, monthly usage and VOC contents of all VOC containing materials used at S-3025. Certificates of Analysis submitted with each batch by Sunnex and/or other NUMMI vendors shall be used to determine VOC contents of materials used at S-3025. The owner/operator of S-3025 shall

ensure that the Laboratory VOC content value listed on each Certificate of Analysis is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);

ii. For each batch delivered to NUMMI, Certificates of Analysis for all bead sealers used showing the VOC content in lbs/gallon and the test method used for the analysis;

iii. If a material other than that specified in Part 1 is used, toxic component contents of each material used and

iv. Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase, BACT]

b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase, BACT]

Conditions for S-592, NPS Passenger ELPO Resin Storage Tank:

1. The owner/operator shall not exceed a total liquid throughput at S-592 of 420,000 gallons during any consecutive twelve-month period. [Basis: Cumulative Increase]

2. The owner/operator shall ensure that only ELPO Resin materials with a vapor pressure less than 0.5 psia be stored in tank S-592. [Basis: Cumulative Increase]

3. The owner/operator shall ensure that loading of ELPO Resin materials into S-592 be accomplished using a submerged fill system complying with District Regulation 8-5-302. [Basis: District Regulation 8-5-302]

4. The owner/operator shall ensure that total POC emissions based on the maximum throughput in Part 1, do not exceed 294 pounds in any consecutive twelve-month period. [Basis: Cumulative Increase]

5. In order to demonstrate compliance with Part 1, the owner/operator of tank S-592 shall either maintain the total monthly throughput of each material stored, summarized on a consecutive twelve-month basis in a District approved log, or shall be able to generate these records within three business days. These records shall be kept on site and made available for District inspection for a period of five years from the date that the record was made. [Basis: Cumulative Increase, Recordkeeping]

Conditions for S-593, NPS Passenger ELPO Pigment Storage Tank:

1. The owner/operator shall not exceed a total liquid throughput at S-593 of 42,000 gallons during any consecutive twelve-month period. [Basis: Cumulative Increase]

2. The owner/operator shall ensure that only ELPO Pigment materials with a vapor pressure less than 0.5 psia be stored in tank S-593. [Basis: Cumulative Increase]

3. The owner/operator shall ensure that loading of ELPO Pigment materials into S-593 be accomplished using a submerged fill system complying with District Regulation 8-5-302. [Basis: District Regulation 8-5-302]

4. The owner/operator shall ensure that total POC emissions based on the maximum throughput in Part 1, do not exceed 387 pounds in any consecutive twelve-month period. [Basis: Cumulative Increase]

5. In order to demonstrate compliance with Part 1, the owner/operator of tank S-593 shall either maintain the total monthly throughput of each material stored, summarized on a consecutive twelve-month basis in a District approved log, or shall be able to generate these records within three business days. These records shall be kept on site and made available for District inspection for a period of five years from the date that the record was made. [Basis: Cumulative Increase, Recordkeeping]

Start-up conditions for A/C number 10438 (Permit Condition 22546)

Start-up conditions for A-3010, NPS ELPO Oven Thermal Oxidizer:

1. The owner/operator shall not exceed nitrogen oxides (NOx) emissions from thermal oxidizer A3010 of 50 ppmvd @ 15% O_2 (0.20 lb/MMBtu). [basis: RACT]

2. The owner/operator shall not exceed carbon monoxide (CO) emissions from thermal oxidizer A3010 of 350 ppmvd @ 15% O_2 (0.80 lb/MMBtu). [basis: RACT]

3. In order to demonstrate compliance with Parts 1 and 2 above and Part 17.b. of Condition # 14205, the permit holder shall perform a District approved source test within 90 days of startup of thermal oxidizer A3010, in accordance with the District's Manual of Procedures for NOx and CO emissions and VOC abatement efficiency. The owner/operator shall notify the Manager of the District's Source Test Section at least seven (7) days prior to the test, to provide the District staff the option of observing the testing. Within 45 days of test completion, the owner/operator shall submit a comprehensive report of the test results to the Manager of the District's Source Test Section for review and disposition. [basis: Regulation 2-1-403]

Start-up conditions for S-3022, NPS Passenger ELPO Dip Tank:

1. The owner/operator shall ensure that at least 70% of the bath's VOC content is captured by S3007, NPS Dry Off Oven whenever S3022 is in operation. [basis: Cumulative Increase; BACT]

2. To demonstrate compliance with Part 1, the owner/operator shall conduct a District approved source test to determine the split of emissions between the S3022 NPS Passenger Elpo Dip Tank and S3007 NPS Dry Off Oven. Any unaccounted for emission shall be assumed to be fugitive from the booth. [basis: Cumulative Increase; BACT]

3. The owner/operator shall submit a testing protocol to the Manager of the District's Source Test Section at least 30 days prior to any S3022 booth/S3007 oven split source test, to allow District staff to review and approve the proposed testing protocol. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition. [basis: Cumulative Increase; BACT]

Start-up conditions for S-3024, NPS PVC Undercoat Booth:

1. The owner/operator shall ensure that at least 99% of the coatings VOC content is captured by S3009, NPS Prime Oven whenever S3024 is in operation. [basis: Cumulative Increase]

2. To demonstrate compliance with Part 1, the owner/operator shall conduct a District approved source test to determine the split of emissions between the S3024 NPS PVC Undercoat Booth and S3009 NPS Prime Oven. Any unaccounted for emission shall be assumed to be fugitive from the booth. [basis: Cumulative Increase]

3. The owner/operator shall submit a testing protocol to the Manager of the District's Source Test Section at least 30 days prior to any S3024 booth/S3009 oven split source test, to allow District staff to review and approve the proposed testing protocol. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition. [basis: Cumulative Increase]

Start-up conditions for S-3025, NPS Passenger Bead Sealer Operations:

1. The owner/operator shall ensure that at least 80% of the coatings VOC content is captured by S3009, NPS Prime Oven whenever S3025 is in operation. [basis: Cumulative Increase; BACT]

2. To demonstrate compliance with Part 1, the owner/operator shall conduct a District approved source test to determine the split of emissions between the S3025 NPS Passenger Beal Sealer Operations and S3009 NPS Prime Oven. Any unaccounted for emission shall be assumed to be fugitive from the booth. [basis: Cumulative Increase; BACT]

3. The owner/operator shall submit a testing protocol to the Manager of the District's Source Test Section at least 30 days prior to any S3025 booth/S3009 oven split source test, to allow District staff to review and approve the proposed testing protocol. Within 45 days of test completion, a comprehensive report of the test results shall be submitted to the Manager of the District's Source Test Section for review and disposition. [basis: Cumulative Increase; BACT]

(xiv)

(xv)

(xvi) Modifications to Condition 207

Note: Sources S2, S3, S60, S807, S808 and S813 covered under permit condition 207 will be dismantled and shutdown once the new sources listed in Background section begin operations.

COND# 207 ----------

Condition # 207
For ~~S2, PASSENGER BODY ELPO DIP TANK,~~
~~S3, PASSENGER BODY ELPO OVEN~~
~~S60, PASSENGER UNDERCOATING BOOTH~~
S61, PASSENGER BLACKOUT CHASSIS BOOTH
S62, PASSENGER FUEL TANK BOOTH
S63, PASSENGER PROTECTIVE GAS TANK OVEN
S71, PASSENGER CAVITY WAX BOOTH
S72, PASSENGER PVC EXTERIOR, UNDERBODY & ENGINE WAX BOOTH
S73, PASSENGER EXTERIOR WAX HOT AIR DRYER
S101, SPARE PARTS ELPO DIP TANK
S102, SPARE PARTS ELPO OVEN
S801, STAMPING PLANT FUGITIVE SOLVENT EMISSION
S802, STAMPING PLANT FUGITIVE MACHINING
S804, PASSENGER FUGITIVE REPAIR PRIMING
S805, BODY SHOP ASSEMBLY AREAS
~~S807, PASSENGER ANTI-CHIP WHEELHOUSE BOOTH~~
~~S808, PASSENGER SEALER ANTICHIP OVEN~~
~~S813, PASSENGER FUGITIVE TRIAL APPLICATION AREA - BEAD SEALER~~

1. EMISSIONS LIMITATION

a. Total emissions for the sources listed for Condition 207, not including any reduction due to abatement devices and activities, shall not exceed ~~442.20~~ 155.10 tons

of VOC during any consecutive 12-month period. Total emissions of organic compounds, including reductions due to abatement measures, shall not exceed ~~245.10~~ 135 tons of VOC per year. (basis: Cumulative Increase)

b. Fugitive emissions for S801, S802, S804, and S805, ~~and S813~~ shall be calculated based upon materials used and the materials' VOC content. Total fugitive emissions from S801, S802, S804, and S805, ~~and S813,~~ shall not exceed 63.60 tons during any consecutive 12-month period or 6.35 tons per month. (basis: Cumulative Increase)

c. Compliance with emission limitations shall be demonstrated by calculation, utilizing material usage rates and VOC content, unless other methods are specified or approved in writing by the APCO. (basis: Cumulative Increase)

d. Calculated or Controlled emissions for the listed materials shall not exceed those listed in the Emissions Limitation Table for these sources:

Emission Limitation Table

Primer Material	Calculated Emissions (Tons/Yr)	Controlled Emissions (Tons/yr.)
~~Passenger Body Elpo~~	~~133.9~~	~~66.4~~
Spare Parts Elpo	17.2	6.9
~~Anti Chip II~~	~~31.4~~	~~7.2~~
~~Anti Chip IB~~	~~28.0~~	~~22.0~~
Blackout Chassis	18.1	Not Applicable
~~Undercoating~~	~~93.8~~	~~14.5~~
Final Repair (*)	2.0	Not applicable
Protective Gas Tank	19.1	9.3
Repair Primer (*)	5.1	Not applicable
Cavity Wax	2.5	Not applicable
Underbody Wax	5.3	Not applicable
Hinge	4.9	Not applicable
Engine Wax	0.5	Not applicable
Exterior Wax	5.9	Not applicable
All Materials Used In Body & Assembly Areas	69.0	Not applicable
Underbody Black (S801+S802+ S804+S805+S813)	5.5	Not applicable
Totals (Tons/Year)	~~442.20~~ 155.10	~~245.10~~ 135

(*) The final Repair and Repair Primer sections include prime and color touch-up coatings.

e. The total VOC emissions due to operation of the wax booths and oven (S-71, S-72 and S-73) shall not exceed 19 tons/year and 150 pounds/day. (basis: Cumulative Increase)

2. MATERIAL USAGE LIMITATIONS

a. Material usage for these sources cannot exceed the values listed this VOC Material Content and Use Table (Table 1). (basis: Cumulative Increase)

Material No.(s) Coating Type	Lbs VOC/Gal	Annual Limits (Gal)	Monthly Limits (Gal)	Condition 207 Source
~~Passenger Body ELPO~~	~~1.21~~	~~221,334~~	~~21,725~~	~~2, 3~~
Spare Parts ELPO	1.21	28,400	3,156	101, 102
~~Anti-Chip II~~	~~2.09~~	~~30,009~~	~~2,946~~	~~807~~
~~Anti-Chip IB~~	~~4.06~~	~~13,786~~	~~1,353~~	~~807~~
Blackout Chassis	3.02	11,990	1,177	61
~~Undercoating~~	~~0.57~~	~~328,967~~	~~32,290~~	~~60~~
Final Repair	6.41	637	63	805
Protective Fuel Tank	0.95	40,124	3,497	62, 63
Repair Primer	5.83	1,750	172	805
Cavity Wax	0.94	5,236	523	71
Underbody Wax	1.04	10,096	991	805~~, 807~~
Hinge Wax	5.01	1,962	193	71
Engine Wax	0.59	1,538	151	72
Exterior Wax	1.50	7,900	776	73
All materials used in Body & Assembly Areas	NA	NA	NA	801, 802, 804, 805~~, 813~~
Underbody Black (S801+S802+ S804+S805+S813)	3.02	3,642	357	801, 802, 804, 805~~, 813~~

(*) All material usage and VOC content are expressed excluding water.

b. NUMMI may petition the APCO to accept alternative usage and/or VOC content limits equivalent to the specified values in VOC Material Content and Use Table, Table 1. (basis: Cumulative Increase)

c. If any District regulation, specifies more stringent requirements that those listed in the VOC Material Content and Use Table, Table 1, or other parts of these conditions, then the more stringent requirement shall apply. (basis: Regulation 1-102)

3. EMISSION CONTROL EQUIPMENT

Abatement equipment must be operating during periods of passenger vehicle or passenger spare/small parts production and during subsequent clean-up operations. Abatement equipment is not required to operate during periods when

there are no VOC emissions. (basis: BACT)

a. SPARE PARTS ELPO OVEN CATALYTIC THERMAL OXIDIZER (A102)

1. Catalytic thermal oxidizer (A102) shall be maintained and operated continuously for S102, Spare Parts ELPO Oven, with a minimum destruction efficiency of 60% or an outlet concentration of 10 ppm by volume or less. The minimum destruction/operating temperature shall be 800 oF. The destruction temperature shall be continuously recorded using chart or digital recorders. (basis: Cumulative Increase)

2. NUMMI shall conduct a source test for this abatement system (A102), once per calendar year. The source test shall measure both the inlet and outlet concentrations of the non-methane hydrocarbons abated by the system. (basis: Cumulative Increase)

3. 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 testing indicates any violation of the permit conditions for Condition 207, NUMMI shall report such violation to the Director of Enforcement within 10 days of discovery pursuant to Standard Condition 1.F. (basis: Cumulative Increase, Regulation 2-6-501, MOP Volume II, Part 3, Section 4.7)

b. PASSENGER SEALER OVEN THERMAL OXIDIZER

1. All volatile organic compound (VOC) emissions from ~~S808, Passenger Sealer Antichip Oven~~ S62, Passenger Fuel Tank Booth and S63, Passenger Protective Gas Tank Oven, shall be abated by thermal incineration (A809). The thermal oxidizer (A809) shall be source tested as required in Part 3 of Condition # 207 to determine net mass emissions of POC as described in the following procedure:

a. The net mass emissions of POC shall be determined for the sources 62 and 63.~~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. POC emissions to each booth and oven Thermal Oxidizer (averaged, using the data obtained from at least 3 current source tests) shall be determined using District approved source testing methods [B].

d. POC emissions from each booth and oven Thermal Oxidizer (averaged, using the data obtained from

at least 3 current 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 yielding 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 production 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 testing 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 discovery pursuant to Standard Condition 1. F.
(basis: Cumulative Increase, Regulation 2-6-501, MOP Volume II, Part 3, Section 4.7)

2. ~~S808 Passenger Sealer Antichip Oven,~~ S62 and S63 ~~cooling tunnel and setting zone~~ emissions shall be controlled by thermal incineration with the following parameters.

a. 1400oF minimum destruction temperature unless NUMMI can demonstrate to the satisfaction of the APCO that the permit conditions can be met with the Thermal Oxidizer (A809) operating at a lower temperature.

b. VOC destruction efficiency of 98.5% by weight whenever the inlet concentration of VOC to the Thermal Oxidizer (A 808) is equal to or greater than 500 ppmv, measured as methane. Below a concentration of 500 ppmv, either the precursor organic destruction efficiency shall be a minimum of 95% by weight or total non-methane organic carbon emissions from the outlet of the Thermal Oxidizer (A809) shall be 10 ppm by volume or less.

c. The destruction temperature shall be recorded using chart or digital recorders. (basis: Cumulative Increase; BACT)

3 The thermal oxidizer shall be source tested once per calendar year, unless a different schedule is approved by the APCO, and maintained on a regular basis. Records of the source test results and completed maintenance activities shall be kept for a minimum of 5 years from the date of the

source test report and the date of the maintenance activity. (basis: BACT)

4.ALLOWABLE TEMPERATURE EXCURSION(S)

a.1. NUMMI may operate the Thermal Oxidizer (A809) below 1400 degrees F only in compliance with the temperature excursion parameters set forth in Parts 4b and 4c of Condition 207. (basis: BACT)

2. NUMMI may operate the Thermal Oxidizer (A102) below 800 degrees F only in compliance with the temperature excursion parameters set forth in Parts 4b and 4c of Condition 207. (basis: BACT)

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

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

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

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

d. The District may revise or revoke the allowable temperature excursion(s) section of Condition 207, if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

5 RECORD KEEPING AND REPORTING

a. All records required by Condition 207 shall be kept and made available for District inspection for a period of 5 years following the date of entry. (basis: Cumulative Increase)
b. For all paints, primers, sealants, coatings, solvents and miscellaneous cleaning materials used for the sources listed for Condition 207, monthly records of material usage must be kept for five years. A monthly report including material usage and a summary of total actual organic emissions from all sources applicable to Condition 207 shall be submitted to the District within 30 days after the end of each month. If the total organic emissions for any month exceeds ~~41.6~~14.00 tons, the District shall be notified in writing within 30 days of the report as to what steps will be taken to assure that the limit of ~~459.2~~155.10 tons per year will not be exceeded.(basis: Cumulative Increase)
c. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of Regulation 1-523. (basis: Regulation 1-523)

6. SAMPLING

Samples of coating materials shall be made available to the District upon request by the APCO. (basis: Regulation 1-441)

7. ENFORCEMENT

Violation by NUMMI of any of the conditions set forth in this permit shall subject NUMMI to enforcement action under Chapter 4 of Part 4 of Division 26 of the California Health and Safety Code. (basis: Regulation 1-401)

8. MISCELLANEOUS

a. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good working order. (basis: Cumulative Increase)

*b. For the purpose of these conditions, any reference to "NUMMI" shall be deemed to also refer to the NUMMI's agents, contractors, subcontractors, assignees, or joint venture partners, as well as to any party brought in to operate the proposed facility, as

appropriate. (basis:Regulation 1-241)

c. The APCO shall have the right to inspect and audit all records required to be maintained by Section 5 of Condition 207, and any other records in the NUMMI's possession which may indicate the nature or quantity of emissions from the facility. (basis: Regulation 1-441)

d. The APCO shall have access to any portion of the plant to conduct source tests or inspections. (basis: Regulation 1-440)

e. Nothing in these conditions shall be construed to allow the violation of any law or of any rule or regulation of the Bay Area Air Quality Management District, the State of California or the United States Environmental Protection Agency. (basis: Regulation 1-103)

9. SEVERABILITY

The provisions of these conditions are intended to be severable, and, if any individual condition or provision hereof is held to be invalid by order of the Hearing Board of the Bay Area Air Quality Management District, by order of any court competent jurisdiction, or for any other reason, the remainder of these conditions shall not be affected. (basis: Regulation 1-109)

10. CORRECTIVE PLAN

The corrective plan is a means for NUMMI to correct occasional exceedances, to stay within the yearly limits and thus to remain in compliance with District Regulations. If any of the annual or monthly material usage limits are exceeded, NUMMI shall implement abatement measures to prevent the recurrence of the type of incident which caused the excess. This plan is intended to provide a mechanism for bringing NUMMI back into compliance should a temporary exceedance occur. This plan does not constitute an alternative means of compliance. (basis: Cumulative Increase)

a. If an exceedance of either usage or emission limits specified in Sections 1 and 2 of Condition 207, from the applicable sources covered by Condition 207 becomes apparent, NUMMI shall notify the District and will include a Corrective Plan with the next monthly report for the month after the exceedance is reported. (basis: Cumulative Increase)

b. The corrective Plan will include a method to make up the exceedance within the three-months following the exceedance. For these purposes the exceedance will be calculated on a plant-wide basis, and an excess in one parameter can be balanced by an equivalent reduction in another. (basis: Cumulative Increase)

c. The plan to reduce emissions pursuant to part 10. b will indicate the time periods during which each step will be taken. (basis: Cumulative Increase)

d. If a second or subsequent monthly exceedance occurs in any 12 month consecutive period for the same usage or emission limit, after the month following the first exceedance, the annual limit will be reduced for only the following year by one-half the amount of the second or subsequent exceedance. (basis: Cumulative Increase)

e. If, during any consecutive 12-month period, the annual emission limit is exceeded, the annual limit for only the following year will be reduced by an amount of one-half the exceedance. (basis: Cumulative Increase)

f. Correcting an exceedance may be accomplished by the following methods:

1. reducing the production rate,
2. altering the paint composition,
3. improvement of transfer efficiencies,
4. installation of abatement devices,
5. any other method approved by the APCO.

(basis: Cumulative Increase)

(xvii) Modifications to Condition 14205

COND# 14205 ----------

For S3007, NPS ~~Dry Off~~ ELPO Oven
S3008, NPS PRIME BOOTH
S3009, NPS PRIME OVEN,
S3014, NPS TOP COAT BOOTH #1
S3015, NPS TOPCOAT OVEN #1,
S3016, NPS TOPCOAT BOOTH #2,
S3017, NPS TOPCOAT OVEN #2,
Conditions Common to All Sources of the Passenger Paint Shop:

1. All conditions shall be in effect at all times during equipment operation, including period of equipment start-up, unless otherwise indicated.

For the purposes of determining compliance with emissions and/or usage limits, a year is defined as any twelve month consecutive period; a month is defined as a calendar month. (basis: Cumulative Increase)

2. 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 less that or equal to 15 minutes 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 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)

3. 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 District. 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)

4. The District may revise or revoke parts 2 and 3 of Condition 14205 if source operations change significantly such that the basis for granting this condition is no longer valid. (basis: Cumulative Increase)

5. Total emissions of organic compounds from the North Passenger Paint Shop sources, calculated on the basis of coating and solvent usage and including any reductions due to abatement, shall not exceed ~~719.23~~834.73 tons per year (TPY) of POC. (basis: Cumulative Increase)

6. The combined total natural gas usage for all North Passenger Paint Shop combustion sources shall not exceed 9.63 Million (MM) Therms per year. Monthly records of natural gas usage shall be maintained for five years from the date of entry and shall be maintained available for District personnel upon request. NUMMI shall only use a District-approved gas meter. (basis: Cumulative Increase)

7. Only natural gas, propane, butane, and LPG shall be used as a fuel for combustion equipment for sources S3009, S3015, and S3017. (basis: Cumulative Increase)

8. Manual touch-up or repair operations may be performed in the North Passenger Paint Shop booth and oven sources. The total usage of coating for manual touch-up or repair shall not exceed 6,906 gallons per year, or result in POC emissions exceeding 19.91 tons per year. (basis: Cumulative Increase)

9. The total NOx emissions from the combustion equipment (including Booth Air Supply Houses, Oven Heater Boxes, and Thermal Oxidizers~~, and Boiler~~) of the North Passenger Paint Shop sources shall not exceed 40.54 tons per year. (basis: Cumulative Increase)

10. The total CO emissions from the combustion equipment (including Booth Air Supply Houses, Oven Heater Boxes, and Thermal Oxidizers~~, and Boiler~~) of the North Passenger Paint Shop sources shall not exceed 50.46 tons per year. (basis: Cumulative Increase)

11. NUMMI shall maintain the following data:
a) Usage records of each coating shall be kept on a monthly basis.
b) Amount of clean-up solvent used shall be kept on a monthly basis.
c) ~~d.~~ Monthly reports showing coating and clean-up usage and calculated emissions shall be submitted to the Director of Enforcement. If an exceedance is calculated, NUMMI shall submit a written report with this monthly report to the District to demonstrate that the overall North Passenger Paint Shop sources will not exceed the overall emissions limit specified in Part 5 of Condition 14205.

Records shall be available for District inspection for a period of at least five years following the date of entry. (basis: Cumulative Increase)

12. In order to demonstrate compliance with Parts 9 and 10 of Condition 14205, NUMMI shall calculate quarterly the NOx and CO mass emission rates, using

natural gas usage records and District approved NOx and CO emission factors. The NOx and CO emission factors for the Thermal Oxidizers (A3008, A3010, A3014, and A3016), Booths (S3008, S3014, S3016) and Ovens (S3007, S3009, S3015, and S3017) shall be based on the results of the most recent source tests, required by the District. To verify compliance with Parts 9 and 10 of Condition 14205, NUMMI shall perform District approved source tests for nitrogen oxide and carbon monoxide emissions from the combustion equipment of the oven heater boxes, once per Title V permit term. ~~The owner/operator shall perform District approved source test of nitrogen oxide and carbon monoxide emissions from the combustion equipment of the axle line once per Title V permit term to verify compliance with Part 9 and 10 of Condition 14205.~~ (basis: Cumulative Increase)

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

14. All volatile organic compound (VOC) emissions from Source 3007, NPS ELPO Oven, shall be abated by thermal oxidizer, A3010, NPS ELPO Oven Thermal Oxidizer. (basis: Cumulative Increase, BACT)

15. Thermal oxidizer, A3010, shall be operated and maintained in accordance with manufacturer specifications. (basis: Cumulative Increase, BACT)

16. A3010 shall be equipped with APCO approved continuous temperature measuring and recording instrumentation. The temperature and measuring recording instruments shall be installed, calibrated and maintained according to the manufacturer's specification. Daily records of continuous temperature measurements for the Thermal Oxidizer (A3010) shall be made and made available to District inspection for a period of 5 years from the date the record was made. The temperature chart or digital recorder is subject to the parametric monitoring and recordkeeping requirements of District Regulation 1-523. [basis: BACT, Regulation 1-523]

17. The thermal oxidizer, A-3010, shall comply with the following parameters:

    a. The minimum operating temperature shall be 1200 °F, regardless of the inlet concentration, unless owner/operator can prove to the satisfaction of the APCO that the required abatement efficiency can be achieved at a lower temperature.

    b. The minimum abatement efficiency for A3010 shall be as follows:

        i. 90% destruction efficiency by weight or

ii. Total non-methane organic hydrocarbon emissions from the outlet of A3010 shall be 10 ppm or less by volume or

iii. Total emissions from outlet of A3010 shall not exceed 0.12 lbs VOC per gallon of electrophoretic primer used.

(basis: BACT, District Regulation 8-13-306)

18. To verify compliance with Parts 12 and 17 of Permit Condition 14205, thermal oxidizer A3010 shall be source tested once per calendar year. If the source test indicates any violation of the permit conditions, the owner/operator shall report such violation to the Director of Enforcement within 10 days of determining that a violation has occurred. Records of source test results shall be kept for a period of five years following the date of entry. (basis: BACT; Manual of Procedures, Volume II, Part 3, Section 4.7)

19. Only natural gas, propane, LPG, or butane shall be used as a fuel for abatement device A3010. (basis: Cumulative Increase)

(xviii) Modifications to Condition 14206

COND# 14206 ----------

For S3008, PRIME BOOTH, AND
S3009, PRIME OVEN:

1. In no event shall the annual coating emissions (not including manual touch-up or repair) from these two sources (S3008 and S3009) combined exceed ~~130.94~~160.14 tons per year or ~~16.36~~20 tons per month of POC, unless NUMMI notifies the District within 30 calendar days of such an exceedance and submits a written report with the scheduled, monthly report to demonstrate that the overall North Passenger Paint Shop sources will not exceed the overall emissions limit specified in Part 5 of Condition 14205. (basis: Cumulative Increase)

2. ~~The total coating usage limits (not including manual touch up or repair) for these two sources (S3008 and S3009) shall not exceed the following specified limits unless NUMMI can demonstrate to the satisfaction of the APCO that a change in coating usage and/or composition will not result in emissions exceeding those in Part 1 of Condition 14206:~~

~~Coating~~	~~Gallons/Year~~	~~Gallons/Month~~
~~Primer~~	~~60,869~~	~~7,608~~
~~Interior Color~~	~~32,435~~	~~4,054~~
~~Black Out~~	~~8,105~~	~~1,013~~
~~Soft Chip~~	~~8,225~~	~~1,028~~

~~One or more of these usages may increase above the specified limit if there is a corresponding usage decrease for one or more of the other coatings, which is based on controlled emissions, so that total emissions do not exceed the limit, specified in Part 1 of Condition 14206. NUMMI shall provide documentation to demonstrate compliance with Part 1 of Condition 14206 within 30 days of the exceedance of any of the coating limits.~~ The owner/operator of S3008 and S3009 shall ensure that coatings used do not exceed the following VOC content limits:

Coating	VOC Limit (lbs VOC/Gal)
Primer	4.0
Interior Color	4.12
Black Out	4.12
Soft Chip	6.96
Antichip	4.13

(basis: Cumulative Increase)

3. The natural gas heater boxes for the Primer Oven (S3009) shall utilize low-NOx burners or equivalent. Low-NOx burners in heater boxes are typically estimated to emit 0.1 pound per million BTU. If source tests indicate that emissions are higher than 0.1 pound per million BTU, then NUMMI shall provide a detailed explanation and/or other documentation to verify that low-NOx burners are indeed being used correctly. (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 Thermal Oxidizer (A3008) shall remain in operation during clean-up operations for at least thirty minutes after production. (basis: BACT)

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

a. Provide a paper or 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)

7. NUMMI shall abate particulate emissions from S3008 with a water contact scrubber sytem with an

overall control efficiency of 98%. Any downtime of the water contact scrubber system shall be recorded. Such records shall be made available for inspection upon request and kept for a minimum of 5 years from the date of record.(basis: BACT)

8. POC emissions from the Primer Booth (S3008) autozone shall be controlled by ~~a~~ Thermal Oxidizer (A3008), with the option of being concentrated first by ~~an Activated Carbon Adsorber~~ a VOC Concentrator(A30082). This includes POC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)

9. The POC emissions from the Primer Oven (S3009) shall be abated by a Thermal Oxidizer (A3008). (basis: BACT)

10. The minimum operating temperature for the Thermal Oxidizer (A3008) shall be 1400 degrees F. The Thermal Oxidizer (A3008) may operate below 1400 degrees F if the source complies with the temperature excursion parameters set forth in Parts 2 and 3 of Condition 14205. (basis: BACT)

11. The VOC destruction efficiency of the Thermal Oxidizer (A3008) shall be maintained at a minimum of 98.5% by weight, whenever the inlet concentration of VOC to the Thermal Oxidizer (A3008) is equal to or greater than 500 ppmv, as measured as methane. Below a concentration of 500 ppmv, the precursor organic destruction efficiency shall be kept at a minimum of 95% by weight or total non-methane organic carbon emissions from the outlet of the Thermal Oxidizer (A3008) shall be 10 ppm by volume or less. (basis: BACT)

12. The combustion chamber of the Thermal Oxidizer (A3008) shall be equipped with District approved continuous temperature measuring and recording instrument (analog or digital). The temperature measuring and recording instrument shall be installed, calibrated and maintained according to the manufacture'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)

13. The Thermal Oxidizer (A3008) shall be source tested once per calendar year, unless a different schedule is approved. After prior notification to the District's Source Test Manager, source testing shall be performed to determine the VOC control

efficiency of the abatement devices, in accordance with the District's Manual of Procedures. Records of the source test results shall be kept. All records shall be kept and made available for District inspection for a period of five years following the date of entry. (basis: BACT)

14. Within 60 days of the completing any source testing, 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 testing indicates any violation of the permit conditions, NUMMI shall report such violation to the Director of Enforcement ~~in within~~ within 10 days of determining that a violation has occurred and also within the report. (basis: BACT; MOP Volume II, Part 3, Section 4.7)

~~17~~15. To demonstrate compliance with Part 3 of Condition 14206, the heater boxes of NPS Prime Oven (S3009) shall be source tested once per calendar year to determine the NOx emission rate (lb/MMBTU). After prior notification to the District's Source Test Manager, source testing shall be performed in accordance with the District's Manual of Procedures. Results of the source test shall be submitted to the District for review and approval within 60 days of the source test. Records of the source test results shall be kept and made available for District inspection for a period of five years following the date of entry. (basis: Regulation 2-6-409.2)

~~18~~16. The permit holder shall operate the ~~carbon~~ VOC concentrator (A30082) to abate the organic emissions from source S3008. NPS Booth ~~will~~ shall have a minimum ~~destruction~~ removal ~~effiency~~ efficiency of 90%. To verify compliance with this requirement, the permit holder shall conduct a District approved source test once per calendar year, unless a different schedule is approved. After prior notification to and approval from the District's Source Test Manager, source testing shall be performed to determine the VOC control efficiency of the abatement devices, in accordance with the District's Manual of Procedures. Records of the source test results and shall be kept. All records shall be kept and made available for District inspection for a period of five years following the date of ~~entry~~the source test. (basis: BACT).

(xix) Modifications to Condition 14207

COND# 14207 ----------

For S3014, NPS TOP COAT BOOTH #1,
S3015, NPS TOPCOAT OVEN #1,
S3016, NPS TOPCOAT BOOTH #2, AND
S3017, NPS TOPCOAT OVEN #2:

1. In no event shall the annual coating emissions (not including manual touch-up or repair) from the Topcoat Booths and Ovens (S3014, S3015, S3016, and S3017) combined exceed 250.5 tons per year or 31.3 tons per month of POC, unless NUMMI notifies the Director of Enforcement within 30 calendar days of such an exceedance and submits a written report with the scheduled, monthly report to demonstrate that the overall North Passenger Paint Shop sources will not exceed the overall emissions limit specified in Part 5 of Condition 14205. (basis: Cumulative Increase)

2. ~~The total coating usage (not including manual touch-up or repair) for the sources, S3014, S3015, S3016, and S3017, shall not exceed the following specified limits unless NUMMI can demonstrate to the satisfaction of the APCO that a change in coating limits and/or composition will not result in emissions exceeding those Part 1 of Condition 14207:~~

~~Coating~~	~~Gallons/Yr~~	~~Gallons/Mon~~
~~Base Coat~~	~~123,552~~	~~15,444~~
~~Clear Coat~~	~~91,289~~	~~11,411~~
~~Non-Met High Solids~~	~~52,452~~	~~6,557~~

~~One or more of these coatings limits may increase above the specified limit if there is a corresponding usage decrease for one or more of the other coatings, such that total emissions do not exceed the limit, specified in Part 1 of Condition 14207. NUMMI shall provide documentation to demonstrate compliance with Part 1 of Condition 14207 within 30 days of the exceedance of any of the coating limits.~~ The owner/operator of Topcoat Booths and Ovens (S3014, S3015, S3016 and S3017) shall ensure that the topcoat materials used do not exceed the following VOC content limits:

Coating	VOC Limit (lbs VOC/Gal)
Basecoat	4.88
Clear Coat	4.12
Non-Met High Solids	3.59

(basis: Cumulative Increase)

3. The natural gas heater boxes for the Topcoat #1 and #2 Ovens (S3015 and S3017) shall utilize low-NOx burners or equivalent. Low- NOx burners in heater boxes are typically estimated to emit 0.1 pound per million BTU. If source tests indicate that emissions are higher than 0.1 pound per million BTU, NUMMI shall provide a detailed explanation and/or other documentation to verify that low-NOx burners are

indeed being used correctly. (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, and Blackout coatings. (basis: BACT)

5. The Thermal Oxidizers (A3014 and A3016) shall remain in operation during clean-up operations for at least thirty minutes after production. (basis: BACT)

6. To minimize the amount of clean-up solvent used in the booth, NUMMI shall:
a. Provide a paper or 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)

7. Primary method for removal of particulate matter from S3014 and S3016 shall be a water contact scrubbing system (A30141). The overall control efficiency of the system shall be 98%. Any downtime of the water contact scrubber system shall be recorded. Such records shall be made available for inspection upon request and kept for a minimum of 5 years from the date of record. (basis: BACT)

8. POC emissions from each Topcoat #1 and 2 Booth (S3014 and S3016) autozone shall be controlled by a Thermal Oxidizer (A3014 abating S3014 and A3016 abating S3016) with the option of being concentrated by Activated Carbon Adsorbers (A30142 and A30162). This includes POC emissions from clean-up and wet-down operations occurring during the normal hours of operation. (basis: BACT)

9. The POC emissions from the Topcoat #1 and #2 Ovens (S3015 and S3017) shall be abated by a Thermal Oxidizer (A3014 and A3016, respectively). (basis: BACT)

10. The minimum operating temperature for the Thermal Oxidizers (A3014 and A3016) shall be 1400 degrees F. The Thermal Oxidizers (A3014 and A3016) may operate below 1400 degrees F if the source complies with the temperature excursion parameters set forth in Parts 2 and 3 of Condition 14205. (basis: BACT)

11. The minimum destruction efficiency of the Thermal Oxidizer (A3014 and A3016) shall be 98.5% by weight, whenever the POC inlet concentration is greater than or equal to 500 ppmv, measured as methane. Below a concentration of 500 ppmv, the minimum destruction efficiency shall be 95% by weight or total non-methane organic carbon emissions from the outlet of the Thermal Oxidizers (A3014 and A3016) shall be 10 ppmv or less. (basis: BACT)

12. The combustion chamber of the Thermal Oxidizers (A3014 and A3016) shall be equipped with District approved continuous temperature measuring and recording instrument (analog or digital). The temperature measuring and recording instrument shall be installed, calibrated and maintained in accordance with the manufacture's specifications.

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

13. The Thermal Oxidizers (A3014 and A3016) shall be source tested once per calendar year, unless a different schedule is approved. After prior notification to and approval from the District's Source Test Manager, source testing shall be performed to determine the VOC control efficiency of the abatement devices, in accordance with the District's Manual of Procedures. Records of the source test results and shall be kept. All records shall be kept and made available for District inspection for a period of five years following the date of entry. (basis: BACT)

14. Within 60 days of the above described source testing, 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 source testing indicates any violation of the permit conditions, NUMMI shall report such violation to the Director of Enforcement in the report. (basis: BACT)

~~17~~15. To demonstrate compliance with Part 3 of Condition 14207, the heater boxes of Topcoat Ovens #1 and #2 shall be source tested once per calendar year to determine the NOx emission rate (lb/MMBTU). After prior notification to the District's Source Test Manager, source testing shall be performed in accordance with the District's Manual of Procedures. Results of the source test shall be submitted to the District for review and approval within 60 days of the source test. Records of the source test results

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shall be kept and made available for District
inspection for a period of five years following the
date of entry. (basis: Regulation 2-6-409.2)
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9.0 RECOMMENDATION

a) Issue a conditional Authority to Construct to NUMMI for the following sources:

S-3022 NPS Passenger ELPO Dip Tank (subject to Permit Condition # 22541 and start-up condition # 22546)
S-3024 NPS PVC Undercoat Booth (subject to Permit Condition # 22542 and start-up condition # 22546)
S-3025 NPS Passenger Bead Sealer Operations (subject to Permit Condition # 22543 and start-up condition # 22546)
S-592 NPS Passenger ELPO Resin Storage Tank (subject to Permit Condition # 22544)
S-593 NPS Passenger ELPO Pigment Storage Tank (subject to Permit Condition # 22545)
A-3010 NPS ELPO Oven Thermal Oxidizer (subject to Permit Condition # 22546)

b) Approve changes to Condition # 14206 applicable to sources S-3008 and S-3009

c) Approve changes to Condition # 14207 applicable to sources S-3014, S-3015, S-3016 and S-3017

After Start-up recommendations

d) After successful start-up of the above sources, I recommend following actions:
1. Approve changes to Condition number 207
2. Approve changes to Condition number 14205
3. Delete Condition numbers 4281 and 22219
4. Archive sources S-421 and S-422 in the District databank
5. Archive abatement device, A-4, in the District databank
6. Rename S-3007 in the district databank and in condition number 14205

By: _____
Sanjeev Kamboj
Air Quality Engineer II

Date: _____

ATTACHMENT A

S-3022 emission calculations for BACT

Assumptions:

- Bath/Oven air emissions split of 30%/70%.
- RTO/Carbon Concentrator POC emission capture and collection efficiency of 90% by weight.
- ED6650 Cationic Bath usage of 217,505 gal/yr (taken from data form "S" submitted with this application).
- Bath VOC content of 0.61 lb/gal (maximum VOC content taken from monthly reports for the months of November 2001 to November 2004)

S3025 current POC emissions:

(217,505 gallons/year) * (0.61 lb/gallon) = **132,678.05 lb/yr or 66.40 ton/yr**

Considering the Bath/Oven split of 30%/70%, unabated emissions to the deck are 39,803.42 lbs/yr and unabated emissions to the oven are 92,874.64 lbs/year. This translates into unabated deck emissions of 159.21 lbs/day for 250 days/year of operations at S3022.

S-3022 cost effectiveness analysis calculations

Data: Source dimensions: 95' by 10'. NUMMI did not use the value of the housing structure to generate actual volumetric flow rate (surrounding housing structure would be approximately 100' by 20')

Booth/Oven Split 30/70 based on past testing done by both NUMMI and the District using the existing operations.

Annual Emissions 66.4 Tons

OSHA required minimum flow rate; 100 fpm (feet per minute)

Volumetric Flow Rate: (booth area)(OSHA required minimum flow rate)

$$(95'*10')(100') = 95{,}000\ ft^3$$

Volumes greater than 50,000 ft^3, need to use carbon concentrator prior to sending to thermal oxidizer.

Using Con Co$t program: Estimated Annual Cost for 95,000 ft^3 carbon concentrator is ***$244,891***

Carbon Concentrator reduces necessary air stream volume for RTO by 8:1 factor. Volume of air going to RTO (using approximately 5% safety factor) is 12,500 ft^3 (1.05*95,000 ft^3)/8

Using Con Co$t program: Estimated Annual Cost for 12,500 ft^3 RTO is ***$230,806***

Total estimated annual cost using Con Co$t program = $244,891 + $230,806 = ***$475,697***

$$\text{Annual Cost per ton emissions} = \frac{\text{(Annual Cost)}}{\text{(Destruction Efficiency)(Bath Split)(Annual Emissions)}}$$

$$= (\$475{,}697)/(0.90)(0.30)(66.4 \text{ tons})$$
$$= \$26{,}533/\text{ Ton}$$

Conclusion $26,533 per ton is greater than the District and EPA BACT threshold of $17,500 per ton, therefore it is **not** cost-effective to abate the 30% deck emissions with an RTO/Carbon Concentrator system.

If an RTO sized to handle 95,000 ft^3 is used to abate the ELPO Bath, the Con Co$t calculated annual cost for the unit would be $1,041,532. This is much greater than the annualized cost of the carbon-RTO combination unit.

Note: Capital cost included in the cost-effectiveness analysis is for new RTO/Carbon Concentrator System, as the existing one does not have enough capacity to handle emissions from the Bath. Permitted annual POC emissions (66.4 Tons) and not actual unabated annual emissions (10.51 Tons) were used to perform cost-effectiveness analysis. Annualized cost will be higher with actual emissions.

ATTACHMENT B

S-3024 emission calculations for BACT

Assumptions:

- Booth/Oven air emissions split of 1%/99%.
- RTO/Carbon Concentrator POC emission capture and collection efficiency of 98.5% by weight.
- Penguin Coating TU500 usage of 213,310 gal/yr (taken from an e-mail sent by NUMMI on March 13, 2006).
- Penguin Coating TU500 VOC content of 0.41 lb/gal

S3024 current POC emissions:

(70,732 gallons/year) * (0.41 lb/gallon) = **29,000.12 lb/yr or 14.50 ton/yr**

Considering the Booth/Oven split of 1%/99%, unabated emissions to the deck are 290 lbs/yr and unabated emissions to the oven are 28,710.12lbs/year. This translates into unabated deck emissions of 1.16 lbs/day for 250 days/year of operations at S3024.

ATTACHMENT C

S-3025 emission calculations for BACT

Assumptions:

- Deck/Oven air emissions split of 20%/80%.
- RTO/Carbon Concentrator POC emission capture and collection efficiency of 98.5% by weight.
- Bead sealer usage of 93,639 gal/yr (taken from an e-mail sent by NUMMI on March 13, 2006).
- Bead sealer VOC content of 0.20 lb/gal.

S3025 current POC emissions:

(54,000 gallons/year) * (0.20 lb/gallon) = **10,800 lb/yr or 5.40 ton/yr**

Considering the Deck/Oven split of 20%/80%, unabated emissions to the deck are 2,160 lbs/yr and unabated emissions to the oven are 8,640 lbs/year. This translates into unabated deck emissions of 8.64 lbs/day for 250 days/year of operations at S3025.

S-3025 cost effectiveness analysis calculations

Data: Source dimensions: 220' by 20'.

Annual Emission 5.40 Tons

OSHA required minimum flow rate; 100 fpm (feet per minute)

Volumetric Flow Rate: (booth area)(OSHA required minimum flow rate)

$$(220'*20')(100') = 440{,}000\ ft^3$$

Volume greater than 50,000 ft^3, need to use carbon concentrator prior to sending to thermal oxidizer.

Using Con Co$t program: Estimated Annual Cost for 440,000ft^3 carbon concentrator is ***$791,930***

Assuming 100% of the emissions go from Source 3025, NPS Passenger Bead Sealer Operations, to the carbon concentration system, the estimated annual emissions cost for the carbon system alone would be as follows:

Annual Cost per ton emissions = (Annual Cost)

(Destruction Efficiency) Annual Emissions)

= ($791,930)/(0.985)(5.4 tons)
= $148,888/ Ton

Conclusion $148,888 per ton is greater than the District and EPA BACT threshold of $17,500 per ton, therefore it is **not** cost-effective to abate the 20% deck emissions with an RTO/Carbon Concentrator System.

Note: Capital cost included in the cost-effectiveness analysis is for a new Carbon Concentrator, as the existing one does not have enough capacity to handle emissions from the Booth. Permitted annual POC emissions (5.40 Tons) and not actual unabated annual emissions (1.87 Tons) were used to perform cost-effectiveness analysis. Annualized cost will be higher with actual emissions.

ATTACHMENT D (CONCO$T SPREADSHEETS)

ATTACHEMNT E (TANKS EMISSIONS REPORTS)

ATTACHMENT F (TOXIC COMPOUNDS EMISSIONS REPORT)

ENGINEERING EVALUATION

New United Motor Manufacturing Inc.; PLANT # 1438; APPLICATION # 10005

1.0 BACKGROUND

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

- **Create new permit condition (Condition No. 22219) for S803, Passenger Sealer Deck Line (Bead Sealer).**
- **Modify Permit Condition No. 207 by deleting all parts that apply to S-803 (Bead Sealer).**

Condition Number 207 is applicable to various sources (i.e., S3, S60, S61, S62, S63, S71, S72, S73, S101, S102, S801, S802, S803, S804, S805, S807, S808 and S813), but only S803 will be affected by this change.

The reason for requesting this change is on one occasion (i.e., on July 9, 2004), NUMMI reviewed its bead sealer usage records and found that it had exceeded the annual usage limit for bead sealer. Per Section I.F. of the Major Facility Review Permit ("Title V Permit") and Section 2-6-502 of the District's rules and regulations, NUMMI reported this deviation to the District on July 12, 2004. In the report, NUMMI claimed that although it has exceeded the permitted annual usage limit (currently at 87,129 gallons), it is well below its permitted limits for the VOC content (currently at 0.39 lb/gallon) of the bead sealer, as well as the monthly usage limits (currently at 10,753 gallons) and the annual emission limits (currently at 5.40 tons). NUMMI also reported that all other sources mentioned above to which Condition No. 207 apply, are in compliance with all material usage limits specified in the Title V permit. To address this issue, NUMMI has requested to create a new permit condition for S803 that will have emission and VOC content limits, but no material usage limits. Deleting all parts that apply to S803 will modify Condition Number 207 accordingly.

NUMMI claims that removing the usage limits will have no detrimental affect on air quality, because NUMMI will still be limited to specific emission and VOC content limits. In other words, S803 will still be subject to the current emission limit of 5.40 tons per year and the material usage values will be used to calculate the total emissions from the bead sealer operation. The VOC content limit will be revised downward to 0.20 lb/gallon vs. 0.39 lb/gallon that is currently permitted.

5.0 EMISSIONS SUMMARY

There is no increase in annual emissions because S803 will continue to be subject to the current emission limit of 5.40 tons per year contained in Part 1(d) of Condition 207. Daily emissions may increase (See Attachment A for daily emission calculations). The current Deck/Oven air emissions split of 20%/80% will remain unchanged. The split was established in Permit Application No. 29614 in the year 1984 when the District originally permitted S803.

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.

2.8 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, NOx, CO, SO_2 or PM_{10} must use BACT. S803 only emits POC. The District's BACT requirement for Spray Booth (Automatic Zones)- Coating of Motor Vehicles, Assembly Plant, is addressed in the BACT/TBACT Workbook on page 161.4.2 dated December 16, 1991. BACT1 is shown as use of coatings with VOC content less than and transfer efficiency greater than that required by Reg. 8, Rule 13, and emissions controlled to overall capture/destruction efficiency of at least 60% by weight. BACT2 is shown as use of coatings with VOC content and transfer efficiency complying with Reg. 8, Rule 13. The owner/operator uses coatings and equipment that over-comply with the requirements of Regulation 8-13.

There is no current BACT limit. BACT did not apply when this source was originally permitted (threshold was 150 lbs/day). The current permit conditions are cumulative increase based requirements. BACT1 requires the lowest VOC content limit of Bead Sealer that is technologically feasible and has been achieved in practice by an auto assembly plant. Since current S803 emissions to the deck are calculated to be 14.98 lbs/day, BACT is triggered. Please see Attachment A for the Cost-effectiveness analysis including POC emission calculations.

The cost-effectiveness analysis assumes that the current Anti-chip thermal incinerator (A809) has enough capacity to handle the 20% deck emissions as well as continuing to abate the additional 80% emissions from the Anti-chip Oven (S808). Since, A809 is already installed and in operation, no abatement device capital costs are included in the cost-effectiveness determination. The "Ductwork and Supports" cost is taken from budgetary pricing provided by Haden, the thermal oxidizer vendor, for a Zeolite concentrator to concentrate the Prime Spray booth air with a 3,046 CFM Regenerative thermal oxidizer (RTO) Unit as requested by the District in Application No. 8794. The Ductwork and Supports cost of $ 325,000 is considered to be conservative as the firing rate of RTO mentioned in Application No. 8794 was only 5 MMBtu/hr vs. the A809 firing rate of 10 MMBtu/hr. The District's "Annualized method" is used to determine cost-effectiveness as EPA's Concost method is not designed to let a user include individual cost items like Ducting and Supports in our case. Please see Attachment A for more details. Since, it was not cost-effective to modify existing thermal incinerator, A809, for abating 20% deck emissions, it was decided not to perform the cost-effectiveness analysis for a new abatement device as it will include additional abatement equipment capital costs in addition to the costs captured in analyzing effectiveness for existing A809.

NUMMI uses only one bead sealer (Penguin Seal 1652P supplied by Sunnex) at S803. Per Sunnex, using EPA Test Method 24, 1652P bead sealer supplied to NUMMI has a maximum VOC content of 0.20 lbs/gallon. Per BAAQMD Laboratory Manager, James Hesson, EPA Method 24 is equivalent to the District Lab Method 22 for determining VOC contents of solvent-based coatings. NUMMI has provided to the District 48 Certificates of Analyses (approximately 6 months worth of data) from Sunnex that support the above listed VOC content value. The variation in the VOC values can come from one of many possibilities, which include but are not limited to the following: raw material variation, process variation, packaging variation, storage conditions, and testing variation (EPA method 24). NUMMI has talked to other manufacturers of automotive bead sealers and has provided the District with documentation of the contacts. NUMMI has determined that 1652P is the lowest VOC content sealer available in the market. The District also researched U.S. EPA's BACT Clearinghouse and came to the same conclusion as NUMMI.

For this application, to ensure compliance with BACT1, a condition limiting bead sealer VOC content to 0.20 lb/gallon will be included in the new permit condition. Since Sunnex (NUMMI's bead sealer vendor) tests and provides Certificates of Analysis per EPA Method 24 for each bead sealer batch that is shipped to NUMMI, the District may rely on these certificates (or other documentation of test results that use EPA Method 24 or District Lab Method 22) to ensure compliance with the VOC content limit condition.

2.9 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.

10.0 STATEMENTS OF COMPLIANCE

S803 will continue to comply with all applicable regulations. POC emissions from the Bead Sealer will comply with the VOC standard of 1.80 kilograms of VOC per liter (15.0 lbs/gal) of applied coating solids, in Reg. 8-13-302 for Topcoat, Spray Primer and Primer Surfacer coatings.

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.

S803 is not subject to the following MACT standard: National Emission Standards for Hazardous Air Pollutants: Surface Coating of Automobiles and Light-Duty Trucks. Although this standard was promulgated on April 26, 2004, only new and reconstructed sources need to be in compliance upon initial startup of the affected source or by June 25, 2004, whichever is later. Since, S803 is neither a new nor a reconstructed source, it has until April 26, 2007 to comply with the final rule. A separate Application will be created in the future to handle the reopening of NUMMI Title V permit to add these MACT requirements for all affected sources.

Per Section I.F. of the Major Facility Review Permit ("Title V Permit") and Section 2-6-502 of the District's rules and regulations, NUMMI has to report to the District as a deviation any instance of bead sealer exceeding an VOC content value of 0.20 lb/gallon.

PSD, NSPS, and NESHAPS do not apply.

11.0 PERMIT CONDITIONS

New Condition No. 22219 for S803, Passenger Sealer Deck Line (Bead Sealer)

Conditions for S803, Passenger Sealer Deck Line (Bead Sealer):

6. EMISSIONS LIMITATION

The owner/operator shall ensure that Penguin Seal 1652P bead sealer or other equivalent material, applied at S803 satisfies all of the following conditions:

d. Total POC emissions from S803 do not exceed 5.4 tons in any consecutive twelve-month period.
e. The VOC content of any bead sealer batch used at S803 does not exceed 0.20 pounds of VOC per gallon.
f. The usage of bead sealer at S803 does not cause toxic emissions above any chronic trigger level listed in Table 2-5-1 in District Regulation 2-5. [Basis: Cumulative Increase and BACT]

7. **RECORD KEEPING AND REPORTING**

a. To demonstrate compliance with Part 1 of this permit condition, the owner/operator shall maintain the following records, including but not necessarily limited to the following information:
    i. Type, monthly usage and VOC contents of all VOC containing materials used at S803. Certificates of Analysis submitted with each batch by Sunnex and/or other NUMMI vendors shall be used to determine VOC contents of materials used at S803. The owner/operator of S803 shall ensure that the Laboratory VOC content value listed on each Certificate of Analysis is determined per EPA Method 24 (or other method determined by the BAAQMD to be equivalent to BAAQMD Laboratory Method 22);
    ii. For each batch delivered to NUMMI, Certificates of Analysis for all bead sealers used showing the VOC content in lbs/gallon and the test method used for the analysis;
    iii. If a material other than that specified in Part 1 is used, toxic component contents of each material used and
    iv. Mass VOC emission calculations to demonstrate compliance with Part 1.a, on a monthly basis; Monthly emission calculations shall be totaled for each consecutive twelve-month period. [Basis: Cumulative Increase, BACT]
b. All records shall be retained on site for five years, from the date of entry and made available for inspection by the District staff upon request. These recordkeeping requirements shall not replace the recordkeeping requirements contained in any applicable District regulation. [Basis: Cumulative Increase, BACT]

(xx) Modifications to Condition 207

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COND#  207  ------------------------------------
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Condition # 207
For S2, PASSENGER BODY ELPO DIP TANK,
S3, PASSENGER BODY ELPO OVEN
S60, PASSENGER UNDERCOATING BOOTH
S61, PASSENGER BLACKOUT CHASSIS BOOTH
S62, PASSENGER FUEL TANK BOOTH
S63, PASSENGER PROTECTIVE GAS TANK OVEN
S71, PASSENGER CAVITY WAX BOOTH
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S72, PASSENGER PVC EXTERIOR, UNDERBODY & ENGINE WAX BOOTH
S73, PASSENGER EXTERIOR WAX HOT AIR DRYER
S101, SPARE PARTS ELPO DIP TANK
S102, SPARE PARTS ELPO OVEN
S801, STAMPING PLANT FUGITIVE SOLVENT EMISSION
S802, STAMPING PLANT FUGITIVE MACHINING
~~S803, PASSENGER SEALER DECK LINE (FUGITIVE)~~
S804, PASSENGER FUGITIVE REPAIR PRIMING
S805, BODY SHOP ASSEMBLY AREAS
S807, PASSENGER ANTI-CHIP WHEELHOUSE BOOTH
S808, PASSENGER SEALER-ANTICHIP OVEN
S813, PASSENGER FUGITIVE TRIAL APPLICATION AREA - BEAD SEALER

1. EMISSIONS LIMITATION

a. Total emissions for the sources listed for Condition 207, not including any reduction due to abatement devices and activities, shall not exceed ~~459.2~~ 442.20 tons of VOC during any consecutive 12-month period. Total emissions of organic compounds, including reductions due to abatement measures, shall not exceed ~~250.5~~ 245.10 tons of VOC per year. (basis: Cumulative Increase)

b. Fugitive emissions for S801, S802, ~~S803~~, S804, S805, and S813 shall be calculated based upon materials used and the materials' VOC content. Total fugitive emissions from S801, S802, ~~S803~~, S804, S805, and S813, shall not exceed ~~69~~ 63.60 tons during any consecutive 12-month period or ~~6.8~~ 6.35 tons per month. (basis: Cumulative Increase)

c. Compliance with emission limitations shall be demonstrated by calculation, utilizing material usage rates and VOC content, unless other methods are specified or approved in writing by the APCO. (basis: Cumulative Increase)

d. Calculated or Controlled emissions for the listed materials shall not exceed those listed in the Emissions Limitation Table for these sources:
Emission Limitation Table

Primer	Material	Calculated Emissions (Tons/Yr)	Controlled Emissions (Tons/yr.)
	Passenger Body Elpo	133.9	66.4
	Spare Parts Elpo	17.2	6.9
	Anti Chip II	31.4	7.2
	Anti Chip IB	28.0	22.0
	Blackout Chassis	18.1	Not Applicable
	Undercoating	93.8	14.5
	Final Repair (*)	2.0	Not applicable

Protective Gas Tank	19.1		9.3	
~~Fugitive Paint Shop Sealant~~	~~17.0~~		~~5.4~~	
Repair Primer (*)	5.1	Not applicable		
Cavity Wax	2.5	Not applicable		
Underbody Wax	5.3	Not applicable		
Hinge	4.9	Not applicable		
Engine Wax	0.5	Not applicable		
Exterior Wax	5.9	Not applicable		
All Materials Used In Body & Assembly Areas	69.0	Not applicable		
Underbody Black (S801+S802+S803+ S804+S805+S813)	5.5	Not applicable		
Totals (Tons/Year)	~~459.2~~ 442.20		~~250.5~~ 245.10	

(*) The final Repair and Repair Primer sections include prime and color touch-up coatings.

e. The total VOC emissions due to operation of the wax booths and oven (S-71, S-72 and S-73) shall not exceed 19 tons/year and 150 pounds/day. (basis: Cumulative Increase)

2. MATERIAL USAGE LIMITATIONS

a. Material usage for these sources cannot exceed the values listed this VOC Material Content and Use Table (Table 1). (basis: Cumulative Increase)

Coating	Material Type	Lbs VOC/Gal	Annual Limits (Gal)	Monthly Limits (Gal)	Condition 207 Source No.(s)
Passenger Body ELPO		1.21	221,334	21,725	2, 3
Spare Parts ELPO		1.21	28,400	3,156	101, 102
Anti-Chip II		2.09	30,009	2,946	807
Anti-Chip IB		4.06	13,786	1,353	807
Blackout Chassis		3.02	11,990	1,177	61
Undercoating		0.57	328,967	32,290	60, ~~803~~
Final Repair		6.41	637	63	805
Protective Fuel Tank		0.95	40,124	3,497	62, 63
Fugitive					
~~Paint Shop Sealant~~		~~0.39~~	~~87,129~~	~~10,753~~	~~805~~
Repair Primer		5.83	1,750	172	805
Cavity Wax		0.94	5,236	523	71
Underbody Wax		1.04	10,096	991	805, 807
Hinge Wax		5.01	1,962	193	71
Engine Wax		0.59	1,538	151	72
Exterior Wax		1.50	7,900	776	73
All materials used in Body & Assembly Areas		NA	NA	NA	801, 802,

				~~803,~~ 804, 805, 813
Underbody Black (S801+S802+S803+ S804+S805+S813)	3.02	3,642	357	801, 802, ~~803,~~ 804, 805, 813

(*) All material usage and VOC content are expressed excluding water.

b. NUMMI may petition the APCO to accept alternative usage and/or VOC content limits equivalent to the specified values in VOC Material Content and Use Table, Table 1. (basis: Cumulative Increase)

c. If any District regulation, specifies more stringent requirements that those listed in the VOC Material Content and Use Table, Table 1, or other parts of these conditions, then the more stringent requirement shall apply. (basis: Regulation 1-102)

3. EMISSION CONTROL EQUIPMENT

Abatement equipment must be operating during periods of passenger vehicle or passenger spare/small parts production and during subsequent clean-up operations. Abatement equipment is not required to operate during periods when there are no VOC emissions. (basis: BACT)

a. SPARE PARTS ELPO OVEN CATALYTIC THERMAL OXIDIZER (A102)

1. Catalytic thermal oxidizer (A102) shall be maintained and operated continuously for S102, Spare Parts ELPO Oven, with a minimum destruction efficiency of 60% or an outlet concentration of 10 ppm by volume or less. The minimum destruction/operating temperature shall be 800 oF. The destruction temperature shall be continuously recorded using chart or digital recorders. (basis: Cumulative Increase)

2. NUMMI shall conduct a source test for this abatement system (A102), once per calendar year. The source test shall measure both the inlet and outlet concentrations of the non-methane hydrocarbons abated by the system. (basis: Cumulative Increase)

3. 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 testing indicates any violation of the permit conditions for Condition 207,

NUMMI shall report such violation to the Director of Enforcement within 10 days of discovery pursuant to Standard Condition 1.F. (basis: Cumulative Increase, Regulation 2-6-501, MOP Volume II, Part 3, Section 4.7)

b. PASSENGER SEALER OVEN THERMAL OXIDIZER

1. All volatile organic compound (VOC) emissions from S808, Passenger Sealer-Antichip Oven, shall be abated by thermal incineration (A809). The thermal oxidizer (A809) shall be source tested as required in Part 3 of Condition # 207 to determine net mass emissions of POC as described in the following procedure:
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. POC emissions to each booth and oven Thermal Oxidizer (averaged, using the data obtained from at least 3 current source tests) shall be determined using District approved source testing methods [B].
d. POC emissions from each booth and oven Thermal Oxidizer (averaged, using the data obtained from at least 3 current 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 yielding 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 production 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 testing 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 discovery pursuant to Standard Condition 1.F.

(basis: Cumulative Increase, Regulation 2-6-501, MOP Volume II, Part 3, Section 4.7)

2. S808 Passenger Sealer-Antichip Oven, cooling tunnel and setting zone emissions shall be controlled by thermal incineration with the following parameters.

a. 1400oF minimum destruction temperature unless NUMMI can demonstrate to the satisfaction of the APCO that the permit conditions can be met with the Thermal Oxidizer (A809) operating at a lower temperature.

b. VOC destruction efficiency of 98.5% by weight whenever the inlet concentration of VOC to the Thermal Oxidizer (A 808) is equal to or greater than 500 ppmv, measured as methane. Below a concentration of 500 ppmv, either the precursor organic destruction efficiency shall be a minimum of 95% by weight or total non-methane organic carbon emissions from the outlet of the Thermal Oxidizer (A809) shall be 10 ppm by volume or less.

c. The destruction temperature shall be recorded using chart or digital recorders. (basis: Cumulative Increase; BACT)

3. The thermal oxidizer shall be source tested once per calendar year, unless a different schedule is approved by the APCO, and maintained on a regular basis. Records of the source test results and completed maintenance activities shall be kept for a minimum of 5 years from the date of the source test report and the date of the maintenance activity. (basis: BACT)

4. ALLOWABLE TEMPERATURE EXCURSION(S)

a. 1. NUMMI may operate the Thermal Oxidizer (A809) below 1400 degrees F only in compliance with the temperature excursion parameters set forth in Parts 4b and 4c of Condition 207. (basis: BACT)
2. NUMMI may operate the Thermal Oxidizer (A102) below 800 degrees F only in compliance with the temperature excursion parameters set forth in Parts 4b and 4c of Condition 207. (basis: BACT)

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

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

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

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

d. The District may revise or revoke the allowable temperature excursion(s) section of Condition 207, if source operations change significantly such that the basis for granting this condition is no longer valid.
(basis: Cumulative Increase)

5 RECORD KEEPING AND REPORTING

a. All records required by Condition 207 shall be kept and made available for District inspection for a period of 5 years following the date of entry.
(basis: Cumulative Increase)

b. For all paints, primers, sealants, coatings, solvents and miscellaneous cleaning materials used for the sources listed for Condition 207, monthly records of material usage must be kept for five years. A monthly report including material usage and

a summary of total actual organic emissions from all sources applicable to Condition 207 shall be submitted to the District within 30 days after the end of each month. If the total organic emissions for any month exceeds 41.6 tons, the District shall be notified in writing within 30 days of the report as to what steps will be taken to assure that the limit of 459.2 tons per year will not be exceeded. (basis: Cumulative Increase)

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

6. SAMPLING

Samples of coating materials shall be made available to the District upon request by the APCO. (basis: Regulation 1-441)

7. ENFORCEMENT

Violation by NUMMI of any of the conditions set forth in this permit shall subject NUMMI to enforcement action under Chapter 4 of Part 4 of Division 26 of the California Health and Safety Code. (basis: Regulation 1-401)

8. MISCELLANEOUS

a. All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Permit to Operate shall at all times be maintained in good working order. (basis: Cumulative Increase)

*b. For the purpose of these conditions, any reference to "NUMMI" shall be deemed to also refer to the NUMMI's agents, contractors, subcontractors, assignees, or joint venture partners, as well as to any party brought in to operate the proposed facility, as appropriate. (basis: Regulation 1-241)

c. The APCO shall have the right to inspect and audit all records required to be maintained by Section 5 of Condition 207, and any other records in the NUMMI's possession which may indicate the nature or quantity of emissions from the facility. (basis: Regulation 1-441)

d. The APCO shall have access to any portion of the plant to conduct source tests or inspections. (basis: Regulation 1-440)

e. Nothing in these conditions shall be construed to allow the violation of any law or of any rule or regulation of the Bay Area Air Quality Management District, the State of California or the United States Environmental Protection Agency. (basis: Regulation 1-103)

9. SEVERABILITY

The provisions of these conditions are intended to be severable, and, if any individual condition or provision hereof is held to be invalid by order of the Hearing Board of the Bay Area Air Quality Management District, by order of any court competent jurisdiction, or for any other reason, the remainder of these conditions shall not be affected. (basis: Regulation 1-109)

10. CORRECTIVE PLAN

The corrective plan is a means for NUMMI to correct occasional exceedances, to stay within the yearly limits and thus to remain in compliance with District Regulations. If any of the annual or monthly material usage limits are exceeded, NUMMI shall implement abatement measures to prevent the recurrence of the type of incident which caused the excess. This plan is intended to provide a mechanism for bringing NUMMI back into compliance should a temporary exceedance occur. This plan does not constitute an alternative means of compliance. (basis: Cumulative Increase)

a. If an exceedance of either usage or emission limits specified in Sections 1 and 2 of Condition 207, from the applicable sources covered by Condition 207 becomes apparent, NUMMI shall notify the District and will include a Corrective Plan with the next monthly report for the month after the exceedance is reported. (basis: Cumulative Increase)

b. The corrective Plan will include a method to make up the exceedance within the three-months following the exceedance. For these purposes the exceedance will be calculated on a plant-wide basis, and an excess in one parameter can be balanced by an equivalent reduction in another. (basis: Cumulative Increase)

c. The plan to reduce emissions pursuant to part 10.b will indicate the time periods during which each step will be taken. (basis: Cumulative Increase)

d. If a second or subsequent monthly exceedance occurs in any 12 month consecutive period for the

same usage or emission limit, after the month following the first exceedance, the annual limit will be reduced for only the following year by one-half the amount of the second or subsequent exceedance. (basis: Cumulative Increase)

e. If, during any consecutive 12-month period, the annual emission limit is exceeded, the annual limit for only the following year will be reduced by an amount of one-half the exceedance. (basis: Cumulative Increase)

f. Correcting an exceedance may be accomplished by the following methods:
1. reducing the production rate,
2. altering the paint composition,
3. improvement of transfer efficiencies,
4. installation of abatement devices,
5. any other method approved by the APCO.
(basis: Cumulative Increase)

5.0 RECOMMENDATION

Approve new condition number 22219 for S803 and modify existing permit condition 207 by deleting all parts that apply to S803. Issue modified Permit to Operate to NUMMI for:

S803 Passenger Sealer Deck Line (Bead Sealer)

By: _____

Sanjeev Kamboj
Air Quality Engineer II

Date: _____

ATTACHMENT A

Cost-Effectiveness Calculations for BACT:

Assumptions:

- Deck/Oven air emissions split of 20%/80%.
- Current Anti-chip thermal incinerator (A809) has enough capacity to handle 20%. emissions from S803 (Bead Sealer) in addition to the Oven emissions it already abates.
- A809 POC emission capture and collection efficiency of 98.5% by weight.
- Ductwork and Supports price of $ 325,000 (taken from Application No. 8794).
- Add-on Abatement Device Capital Equipment costs of S809 will not be considered as it is already in operation.
- Bead sealer usage of 93,639 gal/yr (taken from data form "S" included with Application # 10438 that was recently submitted to the District).

S803 current POC emissions:

(93,639 gallons/year) * (0.20 lb/gallon) = 18,727.80 lb/yr

Considering the Deck/Oven split of 20%/80%, emissions to the deck are 3,745.56 lbs/yr and emissions to the oven are 14,982.24 lbs/year. This translates into unabated deck emissions of 14.98 lbs/day for 250 days/year of operations at S803. Since emissions to the Anti-chip Oven (S808) are already abated by A809, only the deck emissions will be included in the cost-effectiveness analysis.

Reduction (tpy) = Emissions w/o abatement device – Emissions with abatement device
= 1.873 tpy – (1.873 tpy) (0.015)
= 1.845 tpy

Annualized Cost = Ductwork and support cost * [CRF +Tax Factor + Insurance Factor + G&A Factor + Annual Operating/Maintenance Factor]

$CRF = i (1+i)^n / (1+ i)^n – 1$

CRF = 0.163 at i = 0.10, n = 10 years

Therefore, Annualized Cost = $ 325,000 [0.163 + 0.01 + 0.01 + 0.02 + 0.05]
= **$ 82,225**
where CRF = 0.163, Tax = 0.01, Insurance = 0.01, G&A = 0.02, O&M = 0.05

Cost Effectiveness = (Annualized cost /year) /Reduction in annual pollutant emissions (tpy)
= ($ 82,225 /year) /(1.845 tpy) = **$ 44,566.39/ton**

Since the cost-effectiveness trigger for POC is 17,500 dollars per ton, it is **not** cost-effective to abate the 20% deck emissions with A809.

Also, since the cost to control the deck POC emissions to the existing thermal incinerator is not cost-effective, it is obviously not cost-effective to install a new add-on abatement device to control the deck POC emissions.

APPENDIX C

COMPLIANCE REPORT

Understanding how the District handles the violations associated with the NOVs is important to understanding how the District evaluated the facility's compliance status.

COMPLIANCE & ENFORCEMENT DIVISION

Inter-Office Memorandum

December 29, 2009

TO: BRIAN BATEMAN – DIRECTOR OF ENGINEERING

FROM: KELLY WEE – DIRECTOR OF ENFORCEMENT

SUBJECT: REVIEW OF COMPLIANCE RECORD OF:

NEW UNITED MOTOR MANUFACTURING, INC. (NUMMI) - SITE # A1438

Background

This review was initiated as part of the District evaluation of an application by New United Motor Manufacturing, Inc. (NUMMI) for a Title V Permit Renewal. It is standard practice of the Compliance and Enforcement Division to undertake a compliance review in advance of a renewal of a Title V Permit to Operate. The purpose of this review is to assure that any non-compliance problems identified during the prior five-year permit term have been adequately addressed by returning the facility to compliance, or, if non-compliance persists, that a schedule of compliance is properly incorporated into the Title V permit compliance schedule. In addition, the review checks for patterns of recurring violation that may be addressed by additional permit terms. Finally, the review is intended to recommend, if necessary, any additional permit conditions and limitations to improve compliance.

Compliance Review

Staff reviewed NUMMI's Annual Compliance Certifications for December 30, 2003 to December 30, 2008 and found no ongoing non-compliance and no recurring pattern of violations, which have not already been corrected.

The District has conducted a compliance review of 7 Notices of Violation (NOVs) issued to NUMMI from December 18, 2002 to November 30, 2009. All of the violations (7) associated with the NOVs were in compliance at the time of this review. Furthermore, the District's analysis of the NOVs indicated that there are no ongoing violations or pattern of recurring violations that would currently require a compliance schedule.

Understanding how the District handles the violations associated with the NOVs is important to understanding how the District evaluated the facility's compliance status.

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Whenever the District discovers a violation, it begins a two-step process. The first step is to end the violation and bring the alleged violator back into compliance. Once compliance is achieved, the second step is to proceed with penalty assessment. It is District policy to not proceed with penalty assessment until compliance has been achieved. If a facility has not achieved compliance in a timely fashion, the District proceeds with additional enforcement action. The vast majority of Notice of Violation penalties are resolved through settlement negotiations.

The violation details associated with the 7 Notices of Violation are summarized below and detailed in Table 1. More than half the violations (4) occurred when an abatement device was run below its required operating temperature. There were 2 violations related to NUMMI's gasoline dispensing facility (GDF) and 1 regarding recordkeeping. As stated above, the 7 violations were in compliance at the time of this review.

Violation Category	TOTAL
Emissions Related	6
Administrative	1
TOTAL	**7**

District Staff has conducted a compliance review of 2 Notices to Comply (NTCs) issued to NUMMI from December 18, 2002 through November 30, 2009. The District may use the NTC to achieve compliance by using enforcement action appropriate to the severity of the violation. In most cases, these violations involve procedural, administrative, or recordkeeping omissions that did not conceal a violation or were de minimis emissions. During this reporting period none of the NTC's resulted in the issuance of a Notice of Violation for failing to correct a minor NTC violation.

Staff also reviewed additional District compliance records for NUMMI for December 18, 2002 to November 30, 2009. During this period NUMMI activities known to the District include:

The District received two (2) air pollution complaints alleging NUMMI as the source. Both of these complaints were unconfirmed.

The District received two (2) notifications for Reportable Compliance Activity (RCA)[1]: one (1) indicated a monitor excess and one (1) in-operative monitor report. Neither of the two (2) RCAs resulted in NOVs.

[1] Reportable Compliance Activity (RCA), also known as "Episode" reporting, is the reporting of compliance activities involving a facility as outlined in District Regulations and State Law. Reporting covers breakdown requests, indicated monitor excesses, pressure relief device releases, inoperative monitor reports and flare monitoring.

The District processed four (4) dockets for variances and permit appeals, before the District's Hearing Board.

- Docket #3441 was filed to change NUMMI's permit conditions to allow the bumper line to meet its emission limit through use of water-borne coatings without an incinerator. The permit appeal was denied on January 7, 2004 and Docket #3449 was filed.
- Docket #3449 was filed to allow for continued use of the bumper coating booths while the abatement device, VOC Concentrator, was repaired. The variance was granted on February 12, 2004
- Docket #3462 was filed to appeal the issuance of an Authority to Construct which modified a permit condition. NUMMI withdrew the appeal on October 18, 2004.
- Docket #3506 was filed on December 1, 2005. NUMMI withdrew the application for an emergency variance on December 5, 2005.

Conclusion

The Compliance and Enforcement Division has made a determination that for the review period NUMMI was in intermittent compliance. There is no evidence of on-going non-compliance and no recurring pattern of violations that would warrant consideration of a Title V permit compliance schedule or additional permit terms. The Division does not have any recommendations for any additional permit conditions and limitations to improve compliance beyond what is already contained in the Title V Permit under consideration.

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BAAQMD Notices of Violation — New United Motor Manufacturing, Inc.(Site# A1438) — December 1, 2003-December 31, 2009

TABLE 1

V#	S#	Occur	Issue	Reg	Violation Comments	Compliance Achieved	Basis for No Compliance Schedule
A13417	3	09/04/02	03/07/03	2-1-307	T.O. operated below req'd temp	09/04/02	This violation was corrected within 1 day when the abatement equipment reached its operating temperature and brought this unit back into compliance.
A13422	3014	12/16/02	04/30/03	2-1-307	T.O. operated below req'd temp	10/19/04	This violation was corrected within 1 day when the abatement equipment reached its operating temperature and brought this unit back into compliance.
A13423	3016	12/17/02	04/30/03	2-1-307	T.O. operated below req'd temp	12/17/02	This violation was corrected within 1 day when the abatement equipment reached its operating temperature and brought this unit back into compliance.
A45132	1018	01/01/03	09/11/03	2-6-307	pressure drop readings missing	01/01/03	This was an administrative violation that did not affect emission reduction and was moved from the Title V permit condition.
A45140	102	03/19/04	04/07/04	2-6-307	T.O. operated below req'd temp	03/19/04	This violation was corrected within 1 day when the abatement equipment reached its operating temperature and brought this unit back into compliance.
A45435	806	10/17/03	10/17/03	8-7-302.2	Uncertified gasoline nozzle at PEP station	10/24/03	This violation was corrected within 1 day when the CARB Certified OPW 11VAI37 nozzle was installed.
A45436	806	10/18/02	10/17/03	8-7-302.9	Operated dual hose configuration at product lines	02/01/04	This violation was corrected when the District received application# 8564 on 11/25/03 to remove the non-compliant Phase II System.

December 29, 2009 — H:\Enforcement\Title V Cert\NUMMI 2009\NUMMI_TVComplianceMemo_12-29-09_Table1