Mr. Rick Smith AM General Corporation 13200 McKinley Highway Mishawaka, Indiana 46545

> Re: 141-12413- 00031 Third Administrative Amendment to Part 70 -141-6023-00031

Dear Mr. Smith:

AM General Corporation was issued a Part 70 operating permit T141-6023-00031 on February 25, 1999, for the production of Hummer vehicle. An application to modify the source was received on December 15, 1999. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

The administrative amendment consists of incorporating the operation conditions from the proposed PSD/Significant Source Modification (141-11673-00031) for the HUMMER II production:

All conditions of the Part 70 permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Aida De Guzman at (800) 451-6027, press 0 and ask for (Aida De Guzman) or extension (3-4972), or dial (317) 233-4972.

Sincerely,

Paul Dubenetzky, Chief Permits Branch Office of Air Management

Attachr APD	nents	
CC:	File - St. Joseph County	
	U.S. EPA, Region V	
	St. Joseph County Health Department	
	Northern Regional Office	
	Air Compliance Section Inspector - Rick Reynolds	
	Compliance Data Section - Karen Nowak	
	Administrative and Development - Janet Mobley	
	Technical Support and Modeling - Michele Boner	

# PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

# AM General Corporation 13200 McKinley Highway Mishawaka, Indiana 46545

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments) 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T141-6023-00031			
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 25, 1999		
Administrative Amendment No.: 141-12413-00031	Pages Affected: 6, 35 Pages Added: 6a through 6g, 35a through 35x		
Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date		

- (f) One (1) spray coating operation, constructed in 1983, identified as 006, for the camouflage painting of metal truck bodies, with a maximum capacity of 12.5 units per hour, with PM overspray controlled by water wash, and exhausting to stacks S15, S16, S17 and S18.
- (g) One (1) dual touch-up/repair small parts spray coating operation, constructed in 1983, identified as 007, for the coating of small metal truck components, with PM overspray controlled by dry filters, and exhausting to stack S19.
- (h) One (1) spray coating operation, constructed in 1991, identified as 008, for the prime coating and topcoating of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S21, S22, S23, S24, S25, S26 and S27.
- (i) One (1) spray coating operation, constructed in 1993, identified as 009, for accent and trim painting of metal commercial truck bodies, with a maximum capacity of 2 units per hour, with PM overspray controlled by dry filters, and exhausting to stacks S28 and S29.
- (2) Two (2) 25.2 MMBtu per hour natural gas-fired boilers, constructed in 1983, identified as 010 and 011, with no controls and exhausting to stacks S30 and S31, respectively.
- (3) Construction of the new HUMMER II Plant, which consists of the following:
  - (a) Changes to the existing HUMMER I plant:
    - (1) Relocation of the current sanding, masking, painting and final trim operation from the Armour Building to the existing main plant;
    - (2) Exterior painting of the existing HUMMER I vehicle to be performed either in the existing plant or in the proposed new paint shop;
  - (b) New HUMMER II Vehicle production plant:
    - Two (2) natural-gas-fired low NOx boilers (Categories #1 & #2), identified as boiler #1 and boiler #2, each has a heat input capacity of 25 million British Thermal Units per hour (mmBtu/hr);
    - (2) Miscellaneous natural gas-fired low NOx process ovens and various heaters, with a total heat input of 109 mmBtu/hr, and low NOx Thermal Oxidizer with a total heat input of 9.7 mmBtu/hr;
    - (3) Body Shop This is where the first major step of the assembly process will be performed, metal body components of the HUMMER II vehicle (i.e. door, deck lid, hood, roof, and side panels and frame) will be supplied by off-site contractors. Various types of welding, resistance spot welding, metal grinding/brazing will be performed;
    - (4) Painting Operations for the HUMMER I and HUMMER II:
      - (a) Electrodeposition dip prime process (ELPO) (Category #3) -Pre-clean wash, using a mixture of water and water reducible detergents and Phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.

The prime coating system (ELPO), which follows the phosphate cleaning will utilized waterborne coatings made up of a mixture

of resins, pigments and water. The coated vehicle will then enter the ELPO/E-coat drying oven.

The VOC and HAPs emissions from the ELPO will be controlled by a Regenerative Thermal Oxidizer

(b) Primer Surfacer/Guidecoat (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer surfacer booth where the exterior will be painted and primer surfacer drying oven. The coating will be manually applied or will use automatic spray systems.

> The VOC and HAPs emissions from the Primer Surfacer/Guidecoat automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a wet scrubber.

(c) Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.

> The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a wet scrubber.

- (d) Deadener Spray Booth (Category #6) After the topcoat a deadener material will be sprayed to the wheel wells to reduce the amount of noise passengers hear while in the vehicle. The deadener material will be air dried. The PM overspray from this system will be controlled by a wet scrubber or dry filters.
- (e) Vehicle Fluid Filling (Category #7) Where gasoline, diesel, antifreeze, transmission fluid, windshield washer fluid, power steering fluid, brake fluid, engine oil, will be filled into the vehicles.
- (f) Final and Spot Repair (Category #8) This includes, off-line spot and final repair. The PM overspray from this system will be controlled by dry filters.
- (g) Assembly Final Line (Category #9) After the paint shop, the painted vehicle components are routed to general assembly. General assembly consists of interior and exterior trim components and glass installation, chassis, wheel/tires, powertrain and final line assembly operations. The Vehicle startup and roll test verifies if powertrain is installed correctly.
- (h) Miscellaneous Solvent Purge Usage and Cleanup (Category #10) Solvents will be used in the body shop, paint shop, oven cleaning, general assembly areas and routine housekeeping. In the paint shop the purge material is reclaimed internally or

externally to the spray application equipment.

- (i) Miscellaneous Sealers and Adhesives (Category #11) Various sealers and adhesives will be used throughput the assembly process. Majority of these sealers and adhesives will be used in the paint shop. A special sealant will be used in the vehicle glass installation. These materials will be either air-dried or oven cured.
- (5) Bulk Storage Tanks (Category #12) Submerged fill pipes, and conservation vents on these tanks to further minimize VOC and HAPs emissions. Stage I vapor controls will also be installed where appropriate.

Tank ID No.	Storage Capacity (gallons)	Location	Material Stored
1	12,000	New Bulk Tank Farm	Unleaded Gasoline
2	12,000	New Bulk Tank Farm	Antifreeze
3	12,000	New Bulk Tank Farm	Transmission Fluid
4	12,000	New Bulk Tank Farm	Diesel Fluid
5	12,000	New Bulk Tank Farm	Purge Thinner
6	12,000	New Bulk Tank Farm	Windshield Washer
7	12,000	New Bulk Tank Farm	Power Steering Fluid
8	12,000	New Bulk Tank Farm	Waste Paint/Thinner
9	12.000	New Bulk Tank Farm	Engine Oil

A.1 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21).

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour. (two (2) 1.5 MMBtu per hour boilers)
- (2) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (3) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (4) Detail sanding prep for paint.

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General List of Trivial/Insignificant Activities for HUMMER II Plants			
(a)	Production of hot water for on-site personal use not related to any industrial or production process.		
(b)	Portable electrical generators that can be moved by hand from one location to another.		
(C)	Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants.		
(d)	Air vents from air compressors.		
(e)	Fuel use related to food preparation for on-site consumption.		
(f)	Activities performed using hand-held equipment including the following:- Application of hot melt adhesives with no VOC in the adhesive formulation- Drilling- Routing- Grinding- Sanding- Machining wood, metal or plastic- Sawing- Polishing- Turning wood, metal or plastic		
(g)	<ul> <li>Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following: <ul> <li>Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both or parking lots and roadways.</li> <li>Painting, including interior and exterior paintings or buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.</li> <li>Brazing, soldering, or welding operations and associated equipment.</li> <li>Batteries and battery charging stations, except at battery manufacturing plants.</li> <li>Lubrications, including hand-held spray can lubrication, dipping metal parts into lubrication of cutting oil and manual or automated addition of cutting oil in machining operations</li> </ul> </li> </ul>		
(h)	<ul> <li>Office related including the following:</li> <li>Office supplies and equipment.</li> <li>Photocopying equipment and associated supplies.</li> <li>Paper shredding.</li> <li>Blueprint machines, photographic equipment, and associated supplies.</li> </ul>		
(i)	Lawn care and landscape maintenance activities and equipment, including the storage, spraying, or application of insecticides, pesticides, and herbicides.		
(j)	<ul> <li>Storage equipment and activities including: <ul> <li>Pressurized storage tanks and associated piping for anhydrous ammonia, acetylene, acrbon monoxide, chlorine, inorganic compounds, liquid natural gas (LNG)(Propane), liquid petroleum gas (LPG), natural gas, nitrogen dioxide and sulfur dioxide.</li> <li>Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.</li> <li>Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions provided appropriate lids and covers are utilized.</li> <li>Storage of drums containing maintenance raw materials.</li> <li>Storage of castings, Lance rods, or any non-HAP containing material in solid form stored in a sealed or covered container</li> </ul> </li> </ul>		

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(k)	<ul> <li>Emergency and standby equipment including:</li> <li>Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.</li> <li>Vacuum producing devices for the purpose of removing potential accidental releases</li> </ul>
(1)	<ul> <li>Activities associated with production including the following: <ul> <li>Closed, non-vented, tumblers used for cleaning or deburring metal products without abrasive blasting.</li> <li>Electrical resistance welding.</li> <li>Application equipment for hot melt adhesives with no VOC in the adhesive formulation.</li> <li>Compressor or pump lubrication and seal oil systems.</li> <li>Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.</li> <li>Equipment for washing or drying fabricated glass or metal products, if no VOCs or HAPs are used in the process, and no gas, oil, or solid fuel is burned.</li> </ul> </li> </ul>
(m)	<ul> <li>Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following:</li> <li>Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOCs and HAPs.</li> <li>Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.</li> <li>Application equipment for hot melt adhesives with no VOC in the adhesive formulation.</li> </ul>
(n)	A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
(0)	A petroleum fuel, other than gasoline dispensing facility , having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
(p)	<ul> <li>The following VOC and HAP storage containers:</li> <li>Storage tanks with capacity less than 1,000 gallons and annual throughput less than 12,000 gallons.</li> <li>Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.</li> </ul>
(q)	Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
(r)	Machining where an aqueous cutting coolant continuously floods the machining interface.
(S)	Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
(t)	<ul> <li>Cleaners and solvents characterized as follows:</li> <li>having a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 °F) or</li> <li>having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 °C (68 °F).</li> <li>The used of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months</li> </ul>
(u)	The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
(v)	Closed loop heating and cooling systems.

AM General Corporation	Administrative Amendment No.141-12413-00031			
Mishawaka, Indiana	Reviewer: Aida De Guzman			
Permit Reviewer: Catherine Moore				

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(w)	Infrared cure equipment.		
(x)	Exposure chambers for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge.		
(y)	Solvent recycling systems with bath capacity less than or equal to 100 gallons.		
(z)	Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.		
(aa)	Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.		
(bb)	<ul> <li>Non-contact cooling tower systems with either of the following:</li> <li>Natural draft cooling towers not regulated under a NESHAP</li> <li>Forced and induced draft cooling tower system not regulated under a NESHAP.</li> </ul>		
(cc)	Heat exchanger cleaning and repair.		
(dd)	Process vessel degassing and cleaning to prepare for internal repairs.		
(ee)	Paved and unpaved roads and parking lots with public access		
(ff)	Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.		
(gg)	Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators tank and fluid handling equipment.		
(hh)	Emergency generators as follows: Gasoline generators not exceeding 110 horsepower, diesel generators not exceeding 1,600 horsepower, natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.		
(ii)	Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitations with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: 		
(jj)	<ul> <li>Space heaters, process heaters, or boilers using the following fuels:</li> <li>Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.</li> <li>Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.</li> <li>Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.</li> </ul>		
Plant Specific Trivial / Insignificant Activities			
(a)	Sludge room water treatment (Emissions accounted for in the emission determinations at each respective source)		

(b)	Sludge room (Emissions accounted for in the emission determinations at each respective source)		
(C)	Laboratories		
(d)	Print/Copy shops		
(e)	Wet/dry sanding booths		
(f)	Open metal grinding - Performed in the body shop		
(g)	Resistance Welding - Majority of welding operations performed in the body shop		
(h)	Property Maintenance - Landscaping, paving, roofing, and painting		
(i)	Material Storage		
(j)	Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source)		
(k)	Non-VOC parts washing.		
(I)	Equipment maintenance lube/degreaser.		
(m)	Vehicle washers prior to shipping.		
(n)	Vehicle fluid fill operations:-Engine oilWindshield fluidEngine coolantPower steering fluid		
(0)	Storage tanks for brake fluid, gear oil and engine oil.		
(p)	Engine sub-assembly line - Assembly of engine components.		
(q)	Radiator sub-assembly line - Assembly of radiator components.		
(r)	Trim assembly line - Installation of various interior/exterior vehicle components.		
(s)	Paint pump repair shop.		
(t)	Leak test areas.		
(u)	Pre-washers.		
(v)	Spot sanding and painting.		
(w)	Phosphate system.		
(x)	Masking and polishing areas.		
(y)	Turbo blower - Power blowing of vehicle.		
(z)	Dolly touch-up.		
(aa)	Dolly cleaning (water blast) - Cleaning of vehicle carrier.		
(bb)	Inspection and audit areas.		
(cc)	Emergency generators less than 1600 hp and fire pumps.		

# A.2 Part 70 Permit Applicability [326 IAC 2-7-2]

- This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:
- (a) It is a major source, as defined in 326 IAC 2-7-1(22).
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

D.5	FACILITY OPERATION CONDITIONS				
(a)	Chang	Changes to the existing HUMMER I plant:			
	(1)	Relocation of the current sanding, masking, painting and final trim operation from the Armour Building to the existing main plant;			
	(2)	Exterio existino	rior painting of the existing HUMMER I vehicle to be performed either in the ting plant or in the proposed new paint shop;		
(b)	New ⊢	IUMMER II V	Vehicle production plant:		
	(1)	(1) Two (2) natural-gas-fired low NOx boilers (Categories #1 & #2), identified as boiler #1 and boiler #2, each has a heat input capacity of 25 million British Thermal Units per hour (mmBtu/hr);			
	(2) Miscellaneous natural gas-fired low NOx process ovens and various heaters, with a total heat input of 109 mmBtu/hr, and low NOx Thermal Oxidizer with a total heat input of 9.7 mmBtu/hr;				
	(3) Body Shop - This is where the first major step of the assembly process will be performed, metal body components of the HUMMER II vehicle (i.e. door, deck lid, hood, roof, and side panels and frame) will be supplied by off-site contractors. Various types of welding, resistance spot welding, metal grinding/brazing will be performed;				
	(4)	Paintin (a)	g Operations for the HUMMER I and HUMMER II: Electrodeposition dip prime process (ELPO) (Category #3) - Pre-clean wash, using a mixture of water and water reducible detergents and Phosphate application. These cleaners are applied to the vehicle surface using a combination of spray nozzles and/or dip tanks, to remove oils and grease that may have accumulated on the vehicle parts.		
		The prime coating system (ELPO), which follows the phosphate cleaning we utilized waterborne coatings made up of a mixture of resins, pigments and water. The coated vehicle will then enter the ELPO/E-coat drying oven.			
	The VOC and HAPs emissions from the ELPO will be controlled by a Regenerative Thermal Oxidizer		The VOC and HAPs emissions from the ELPO will be controlled by a Regenerative Thermal Oxidizer		
		(b)	Primer Surfacer/Guidecoat (Category #4) - Body sealers and/or fillers, prep operation which involves scuff sanding and manual wiping using solvent and tack cloths to remove particles, then to antichip booth, then to primer surfacer booth where the exterior will be painted and primer surfacer drying oven. The coating will be manually applied or will use automatic spray systems.		
			The VOC and HAPs emissions from the Primer Surfacer/Guidecoat automatic zones and from the curing oven will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a wet scrubber.		

(c)	Topcoat System (Category #5) - This system will consists of a preparation area, which involves minor scuffing and manual wiping using solvent and tack cloths to remove particles and/or otherwise prepare the surface for painting, basecoat spray booth, clearcoat spray booth, flash-off area and natural gas-fired drying oven, repair/polish. The coating will be applied to the vehicle parts using various types of spray applicators.
	The VOC and HAPs emissions from the basecoat/clearcoat automatic spray application zones and from the curing oven of the topcoat system will be controlled by a Regenerative Thermal Oxidizer. The PM overspray will be controlled by a wet scrubber.
(d)	Deadener Spray Booth (Category #6) - After the topcoat a deadener material will be sprayed to the wheel wells to reduce the amount of noise passengers hear while in the vehicle. The deadener material will be air dried. The PM overspray from this system will be controlled by a wet scrubber or dry filters.
(e)	Vehicle Fluid Filling (Category #7) - Where gasoline, diesel, antifreeze, transmission fluid, windshield washer fluid, power steering fluid, brake fluid, engine oil, will be filled into the vehicles.
(f)	Final and Spot Repair (Category #8) - This includes, off-line spot and final repair. The PM overspray from this system will be controlled by dry filters.
(g)	Assembly Final Line (Category #9) - After the paint shop, the painted vehicle components are routed to general assembly. General assembly consists of interior and exterior trim components and glass installation, chassis, wheel/tires, powertrain and final line assembly operations. The Vehicle start-up and roll test verifies if powertrain is installed correctly.
(h)	Miscellaneous Solvent Purge Usage and Cleanup (Category #10) - Solvents will be used in the body shop, paint shop, oven cleaning, general assembly areas and routine housekeeping. In the paint shop the purge material is reclaimed internally or externally to the spray application equipment.
(i)	Miscellaneous Sealers and Adhesives (Category #11) - Various sealers and adhesives will be used throughput the assembly process. Majority of these sealers and adhesives will be used in the paint shop. A special sealant will be used in the vehicle glass installation. These materials will be either air-dried or oven cured.

(5) Bulk Storage Tanks (Category #12) - Submerged fill pipes, and conservation vents on these tanks to further minimize VOC and HAPs emissions. Stage I vapor controls will also be installed where appropriate.

Tank ID No.	Storage Capacity (gallons)	Location Ma	terial Stored
1	12,000	New Bulk Tank Farm	Unleaded Gasoline
2	12,000	New Bulk Tank Farm	Antifreeze
3	12,000	New Bulk Tank Farm	Transmission Fluid
4	12,000	New Bulk Tank Farm	Diesel Fluid
5	12,000	New Bulk Tank Farm	Purge Thinner
6	12,000	New Bulk Tank Farm	Windshield Washer
7	12,000	New Bulk Tank Farm	Power Steering Fluid
8	12,000	New Bulk Tank Farm	Waste Paint/Thinner
9	12,000	New Bulk Tank Farm	Engine Oil

	AIR POLLUTION CONTROL SUMMARY		
CATEGORY	OPERATION	CONTROL EQUIPMENT/TECHNOLOGY	
1	Miscellaneous natural gas-fired process ovens, heaters and control equipment (RTO)	Low NOx Burners	
2	Two Boilers	Low NOx Burners	
3	<ul> <li>Electrodeposition dip prime,</li> <li>E-Coat process (ELPO)</li> <li>E-Coat Oven</li> </ul>	Regenerative Thermal Oxidizer (RTO)	
4	<ul> <li>Primer Surfacer/Guidecoat Spray System</li> <li>Primer Surfacer/Guidecoat Drying Oven</li> </ul>	Regenerative Thermal Oxidizer for VOC and HAP control (paint automatic applicator sections only). Wet Scrubber for PM overspray.	
5	<ul> <li>Topcoat Spray System</li> <li>Topcoat Drying Oven</li> </ul>	Regenerative Thermal Oxidizer (paint automatic applicator sections only). Wet Scrubber for PM overspray.	
12	Bulk Storage Tanks	Submerged fill pipes, conservation vents, and Stage I vapor controls.	

# SECTION D.5 GENERAL CONSTRUCTION CONDITIONS

- D.5.1Permit No Defense [IC 13]This approval to construct does not relieve the Permittee of the responsibility to comply with the<br/>provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22<br/>through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated<br/>thereunder, as well as other applicable local, state, and federal requirements.
- D.5.2
   Definitions [326 IAC 2-7-1]

   Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.
- D.5.3 Effective Date of the Permit [40CFR 124] Pursuant to 40 CFR 124.15, 40 CFR 124.19, and 40 CFR 124.20, this permit is effective upon issuance.

Expiration of Permits [326 IAC 2-2-8] Pursuant to 326 IAC 2-2-8(a)(1), this permit to construct shall expire if construction is not commenced within eighteen (18) months after receipt of this approval, or if construction is suspended for a continuous period of eighteen (18) months or more.

# D.5.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

D.5.4

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

- (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emissions units differs significantly from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.
- If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

# **OPERATION CONDITIONS**

# **Emission Limitations and Standards**

# D.5.6 PSD BACT Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR Part 52.21, the HUMMER II plant shall be limited as follows:

(a) The HUMMER II plant production rate shall be limited to 86,000 vehicles per 12consecutive month period, rolled on a monthly basis. Daily maximum production shall not exceed 364 vehicles.

During the first twelve (12) months of operation, the vehicle shall be limited such that the total vehicle produced divided by the accumulated months of operation shall not exceed 86,000 vehicles per year divided by twelve (12) months, which equals an average of 7,166 vehicles per month, rolled on a monthly basis.

(b) The volatile organic material (VOC) usages, and natural gas usages from the HUMMER II plant shall be limited such that the summation of the VOC emissions from all facilities at this plant shall not exceed 260 tons per 12-month period, rolled on a monthly basis.

During the first twelve (12) months of operation, the volatile organic material (VOC) usages, and natural gas usages shall be limited such that the summation of the VOC emissions from all facilities at this HUMMER II plant divided by the accumulated months of operation shall not exceed 260 tons per year divided by twelve (12) months, which equals an average of 21.7 tons per month, rolled on a monthly basis.

(c) The limitations for the following HUMMER II surface coating facilities shall be as follows:

Facilities/Operations	VOC Limit (Pounds of VOC/Gallon Applied Coating Solids)
ELPO / E-Coat System	0.04
Primer Surfacer/Guidecoat System	2.9
Topcoat System	5.3

The VOC limit in pounds of VOC/gallon applied coating solids shall be determined on a daily-volume-weighted average and actual transfer efficiencies.

- (d) Good Work Practices To Reduce VOC Emissions:
  - (1) Conservation vents, submerged fill pipes and Stage I Vapor Recovery System where appropriate shall be installed for the gasoline storage tanks.
  - (2) High efficiency spray applicators shall be utilized for all the surface coating facilities.
  - (3) Capturing of paint lines solvent for recycling.
  - (4) Capturing of solvent purged from paint lines for off-site recycling and/or other processing.
  - (5) The use of masking material to protect certain equipment, walls, and floors around the booths from overspray, thus reducing the cleaning solvent usage.
  - (6) The use of water-based coatings when feasible.
  - (7) Water blasting of vehicle carriers.
  - (8) The use of closed containers to store or dispose of cloth, paper, or other materials impregnated with VOC.
  - (9) The use of Stage 2 Recovery System in the fluid filling operation.
  - (10) Minimizing spills in the vehicle fluid filling operation, and
  - (11) Closing the receiving vessel after it has been filled with the fluid.
- (e) Compliance with sections (a) through (d) of this PSD BACT condition and condition D.6.3 of this permit shall satisfy 326 IAC 2-2, the Prevention of Significant Deterioration and also satisfy 326 IAC 2-4.1-1 (New Source Toxic Control) and 326 IAC 8-1-6 (General VOC Reduction Requirements).

# D.5.7 Volatile Organic Compound (VOC) [326 IAC 8-2-9]

(a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volume weighted average volatile organic compound (VOC) content of coating applied to the metal part of the HUMMER II shall be limited as follows:

Type of Coating	VOC Emissions Limit (pounds per gallon of coatings less water
Clear Coatings	4.3
Forced Warm Air Dried Coatings	3.5
Air Dried Coatings	3.5
Extreme Performance Coatings	3.5
All Other Coating	3.0

(b) The VOC limit in this condition shall be determined on a daily-volume- weighted average, using the following equation:

Lb VOC	=	•	coatings	[D *	0 * Q	/	[1 - w *	Dc/Dw]
Gallon less water			' <sup>°</sup> C			-	-	-

Where: Dc = density of coating, lb/gal Dw = density of water, 8.33 lb/gal O = weight percent organics, % W = percent volume water, % Q = guantity of coating, gal/unit

C = total coatings used, gal/unit

- (c) The VOC input usage from the Spot and Final Repair operation shall be limited to less than 15 pounds per day (lbs/day). Compliance with this limit shall make 326 IAC 8-2-9 (Miscellaneous Metal Coating) not applicable. This limit shall be based on daily-volumeweighted average.
- (d) Solvent sprayed from application equipment during cleanup or color changes shall be directed into appropriately designed reclaim equipment. Such equipment shall be designed to effectively capture purge solvent and minimize evaporation. The waste solvent shall be disposed of in such a manner that evaporation is minimized.

# D.5.8 Volatile Organic Compounds [326 IAC 8-1-2(a) Pursuant to 326 IAC 8-1-2(a), the Topcoat System and the Primer Surfacer/Guidecoat System VOC emission limitations specified under 326 IAC 8-2-9, shall be achieved through one (1) or any combination of the following:

- (a) Thermal or catalytic incineration;
- (b) Equivalent emissions limitations based on actual transfer efficiency higher than specified baseline transfer efficiency as follows:

Miscellaneous Metal Coating	Equivalent Emission Limit			
	kg/liter Solids Deposited	Lbs/gal Solids Deposited		
Clear Coatings	2.08	17.3		
Air Dried up to 90°C	1.34	11.2		
Extreme Performance Coatings	1.34	11.2		
All Other Coatings and Coating Systems	1.01	8.4		

Compliance with the equivalent emissions limits in this condition shall be determined according to the following equation:

$$E = \underline{L}$$
  
[(1-(L/D)) \* (T)]

- Where: E = Equivalent emission limit in pounds of VOC per gallon coating solid deposited.
  - L = Actual VOC content in coating in pounds per gallon of coating, as applied.
  - D = Actual density of VOC in coating in pounds per gallon of VOC.
  - T = Actual measured transfer efficiency.

# D.5.9 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM overspray emissions from the Primer Surfacer/Guidecoat System, Deadener, Topcoat System, Spot and Final Repair operations shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 4.10 P <sup>0.67</sup>	where	E = rate of emission in pounds per hour; and
		P = process weight rate in tons per hour

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

E = 55.0 P <sup>0.11</sup> - 40	where	E = rate of emission in pounds per hour; and
		P = process weight rate in tons per hour

D.5.10 New Source Performance Standards (NSPS) [326 IAC 12 and 40 CFR § 60.110b, Subpart Kb] Pursuant to 326 IAC 12 and 40 CFR § 60.110b, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels), the following storage tanks are subject to this NSPS: Administrative Amendment No.141-12413-00031 Reviewer: Aida De Guzman

Tank ID No.	Storage Capacity (gallons)	Location	Material Stored
1	12,000	New Bulk Tank Farm	Unleaded Gasoline
2	12,000	New Bulk Tank Farm	Antifreeze
3	12,000	New Bulk Tank Farm	Transmission Fluid
4	12,000	New Bulk Tank Farm	Diesel Fluid
5	12,000	New Bulk Tank Farm	Purge Thinner
6	12,000	New Bulk Tank Farm	Windshield Washer
7	12,000	New Bulk Tank Farm	Power Steering Fluid
8	12,000	New Bulk Tank Farm	Waste Paint/Thinner
9	12,000	New Bulk Tank Farm	Engine Oil

- (a) Pursuant to Section (b) of this NSPS the owner or operator of these storage vessels shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
- (b) Pursuant to Section (a) of this NSPS the owner or operator of these storage vessels shall keep copies of the records required in Section (b) for the life of the source.
- D.5.11 New Source Performance Standards [326 IAC 12 and 40 CFR § 60.40c, Subpart Dc] Pursuant to 326 IAC 12 and 40 CFR § 60.40c, Subpart Dc- Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, the proposed two (2) 25 mmBtu/hr boilers #1 and #2 are subject to the § 60.48 Subsections (a), (g) and (i) of this NSPS.
  - (a) Pursuant to Subsection (a) of § 60.48, the owner/operator of the two (2) boilers shall submit notification of the date of construction, or reconstruction, anticipated startup and actual startup as provided by § 60.7 of this part. The notification shall include:
    - (1) The design heat input capacity of the two (2) boilers and identification of the fuel to be combusted; and
    - (2) The annual capacity factor at which the owner/operator anticipates operating the two (2) boilers, based on all fuels fired and based on individual fuel fired.
  - (b) Pursuant to Subsection (g) § 60.48, the owner/operator of the two (2) boilers shall maintain records of the amounts of fuel combusted during each month.
  - (c) Pursuant Subsection (i) § 60.48, all records required in this Section shall be maintained by the owner or operator of the two (2) boilers for a period of two (2) years following the date of such record.
- D.5.12 Particulate Emissions Limitation for Sources of Indirect Heating [326 IAC 6-2-4] Pursuant to 326 IAC 6-2-4, the Particulate Matter (PM) emissions from the two (2) 25 million British Thermal Units (mmBtu) boilers shall:

(a) Be limited as follows:

Facility	PM Emissions Limit (lb/mmBtu)
Boiler #1	0.33
Boiler #2	0.33

The PM emissions limits shall be determined using the following equation:

Pt = 1.09 $Q^{0.26}$ 

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input. Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

- (b) Be equipped with Low NOx burners; and
- (c) Combust only natural gas.

D.5.13 Gasoline Dispensing Facilities [326 IAC 8-4-6]

- (a) Pursuant to 326 IAC 8-4-6(b) No owner or operator shall allow the transfer of gasoline between any transport and any storage tank unless such tank is equipped with the following:
  - (1) A submerge fill pipe.
  - (2) Either a pressure relief valve set to release at no less than seven-tenths (0.7) pounds per square inch or an orifice of five-tenths (0.5) inch in diameter.
  - (3) A vapor balance system connected between the tank and the transport, operating according to manufacturer's specifications.
- (b) It shall be the responsibility of the owner or operator of the transport to make certain that the vapor balance system is connected between the transport and the storage tank and is operating according to the manufacturer's specifications.
- (c) The storage tank will dispense gasoline to fuel the manufactured vehicles for testing. AM General Corporation is proposing to install submerged fill pipes and pressure relief valves on the gasoline storage tank and will employ a vapor balancing system for gasoline tank truck unloading activities, to comply with 326 IAC 8-4-6.

# D.5.14 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

# D.5.15 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

# **Compliance Determination Requirements**

- D.5.16 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
  - (a) Compliance stack tests shall be performed on the Regenerative Thermal Oxidizer (RTO) to determine the operating temperature that will achieve the following destruction efficiency and to determine the capture system efficiency for each coating system:

Facility	Destruction Efficiency
ELPO/E-Coat	95%
Primer Surfacer/Guidecoat System	95%
Topcoat System	95%

- (b) The Compliance stack tests for the Primer Surfacer/Guidecoat System and Topcoat System in (a) of this condition shall be made utilizing Method 25 for destruction efficiency, and or other methods as approved by the Commissioner for capture efficiency. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (c) The compliance stack tests shall perform on the Primer Surfacer/Guidecoat, Topcoat, and Deadener operations for PM and PM-10 utilizing Methods 5 or 17 (40 CFR 60, Appendix A) for PM and Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM-10, or other methods as approved by the Commissioner. The PM and PM10 testing is required to demonstrate that the source is not major for either pollutant, under 326 IAC 2-2, Prevention of Significant Deterioration. This test shall be repeated at least once every two and half (2.5) years from the date of this valid compliance demonstration. PM-10 includes filterable and condensible PM-10. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.
- (d) The compliance tests required in (a), (b) and (c) of this condition shall be made within 180 days after achieving maximum production rate, but no later than 365 days after receipt of the Validation Letter from the IDEM, OAM.
- D.5.17 Volatile Organic Compounds (VOC) Compliance with the VOC content and usage limitations contained in Conditions D.5.6 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- D.5.18 Permanent or Temporary Total Enclosure
  - (a) The capture system for the ELPO/E-Coat System shall meet the following criteria for a Permanent or Temporary Total Enclosure:
    - (1) Any Natural Draft Opening (NDO) shall be at least four (4) equivalent opening diameters from each VOC emitting point.
    - (2) Any exhaust point from the enclosure shall be at least four (4) equivalent duct or hood diameters from each NDO.

- (3) The total area of all NDO's shall not exceed five (5) percent of the surface area of the enclosure's four (4) walls, floor, and ceiling.
- (4) The average facial velocity (FV) of air through all NDO's shall be at least 3,600 meter per hour (200 fpm). The direction of air through all NDO's shall be into the enclosure.
- (5) All access doors and windows whose areas are not included in Section (c) and are not included in the calculations in Section (d) shall be closed during routine operation of the process.

or

- (b) Verify 100% capture through other methods as approved by the Commissioner.
- D.5.19 Volatile Organic compounds
  - (a) The Regenerative Thermal Oxidizer (RTO) shall be in operation at all times when the ELPO/E-Coat System and the automatic zones for the Primer Surface/Guidecoat System, and Topcoat System are in operation.
  - (b) The RTO shall be calibrated, operated and maintained in accordance with the manufacturer's specifications.
- D.5.20 Particulate Overspray
  - (a) The wet scrubbers, or dry filters shall be in operation or in place at all times when the Primer Surfacer/Guidecoat System, Topcoat System, and Deadener Spray System are in operation.
  - (b) The dry filters shall be in place at all times the Final and Spot Repair System are in operation.
- D.5.21 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

- D.5.22 Performance Testing [326 IAC 3-6]
  - (a) All testing required in D.5.15 shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

# **Compliance Monitoring Requirements**

D.5.23 Operating Parameters

The Regenerative Thermal Oxidizer shall maintain a minimum operating temperature of 1350°F or a minimum operating temperature determined in the most recent stack tests to maintain at least 95% destruction efficiency, that is necessary to achieve compliance with condition D.5.6(c) and D.5.8. The operating temperature of the exhaust of the RTO shall be continuously recorded whenever it is operating.

#### D.5.24 Monitoring

- (a) Daily inspections shall be performed to verify that the liquid levels and flow rates of the wet scrubbers meet the manufacturer's recommended level. To monitor the performance of the wet scrubbers, the scrubbant level of the wet scrubbers shall be maintained weekly at a level where surface agitation indicates impact of the air flow. To monitor the performance of the baffles, weekly inspections of the baffle panels shall be conducted to verify placement and configuration meet recommendations of the manufacturer. In addition, weekly observations shall be made of the overspray from the surface coating booths (Primer Surfacer/Guidecoat, Topcoat, Deadener, and Final and Spot Repair) exhaust stacks while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response Steps, shall be considered a violation of this permit.
- (b) Monthly inspections shall be performed of the coating emissions from the stack to determine the presence of paint overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change or excessive accumulation in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C Compliance Monitoring Plan Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

# **Record Keeping and Reporting Requirements**

#### D.5.25 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.6, 5.7 and D.5.8, the Permittee shall maintain records in accordance with (1) through (9) below. Records maintained for (1) through (9) shall be sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.5.6, 5.7 and D.5.8.
  - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
  - (2) A log of the dates of use;
  - (3) The volume weighted VOC content of the coatings used for each day;

- (4) The volume weighted VOC content of the coatings used each day for the Final and Spot Repair;
- (5) The cleanup solvent usage for each month;
- (6) The total VOC usage for each month;
- (7) The weight of VOCs emitted for each compliance period;
- (8) A statement that the rate of the liquid level and flow at the wet scrubber was maintained according to vendor recommended specification;
- (9) Continuous recorder operating temperature readings from the RTO.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

# D.5.26 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.5.6 shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. These reports shall be submitted to the following address:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Management 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Pursuant to 326 IAC 12 (New Source Performance Standards (NSPS)) 40 CFR Part 60.40c, Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), and 40 CFR Part 60.110b, Subpart Kb (Standards of Performance for Volatile Organic Liquid (VOL) Storage Vessels, Including Petroleum Liquid Storage Vessels), AM General Corporation shall report the following for boiler #1, boiler #2, and VOL vessels:
  - (1) Commencement of construction date (no later than 30 days after such date);
  - (2) Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
  - (3) Actual start-up date (within 15 days after such date); and
  - (4) Date of performance testing (at least 30 days prior to such date), when required by a condition elsewhere in this permit.

# Section D.6

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# **Operation Conditions**

	General List of Trivial/Insignificant Activities
(a)	Production of hot water for on-site personal use not related to any industrial or production process.
(b)	Portable electrical generators that can be moved by hand from one location to another.
(c)	Ventilation exhaust, central chiller water systems, refrigeration and air conditioning equipment, not related to any industrial or production process, including natural draft hoods or ventilating systems that do not remove air pollutants.
(d)	Air vents from air compressors.
(e)	Fuel use related to food preparation for on-site consumption.
(f)	Activities performed using hand-held equipment including the following:- Application of hot melt adhesives with no VOC in the adhesive formulation- Drilling- Routing- Grinding- Sanding- Machining wood, metal or plastic- Sawing- Polishing- Turning wood, metal or plastic
(g)	<ul> <li>Activities related to routine fabrication, maintenance and repair of buildings, structures, equipment or vehicles at the source where air emissions from those activities would not be associated with any commercial production process including the following: <ul> <li>Activities associated with the repair and maintenance of paved and unpaved roads, including paving or sealing, or both or parking lots and roadways.</li> <li>Painting, including interior and exterior paintings or buildings, and solvent use, excluding degreasing operations utilizing halogenated organic solvents.</li> <li>Brazing, soldering, or welding operations and associated equipment.</li> <li>Batteries and battery charging stations, except at battery manufacturing plants.</li> <li>Lubrications, including hand-held spray can lubrication, dipping metal parts into lubricating oil, and manual or automated addition of cutting oil in machining operations.</li> </ul> </li> </ul>
(h)	<ul> <li>Office related including the following:</li> <li>Office supplies and equipment.</li> <li>Photocopying equipment and associated supplies.</li> <li>Paper shredding.</li> <li>Blueprint machines, photographic equipment, and associated supplies.</li> </ul>
(i)	Lawn care and landscape maintenance activities and equipment, including the storage, spraying, or application of insecticides, pesticides, and herbicides.
(j)	<ul> <li>Storage equipment and activities including: <ul> <li>Pressurized storage tanks and associated piping for anhydrous ammonia, acetylene, acrbon monoxide, chlorine, inorganic compounds, liquid natural gas (LNG)(Propane), liquid petroleum gas (LPG), natural gas, nitrogen dioxide and sulfur dioxide.</li> <li>Storage tanks, vessels, and containers holding or storing liquid substances that do not contain any VOC or HAP.</li> <li>Storage tanks, reservoirs, and pumping and handling equipment of any size containing soap, wax, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions provided appropriate lids and covers are utilized.</li> <li>Storage of drums containing maintenance raw materials.</li> <li>Storage of castings, Lance rods, or any non-HAP containing material in solid form stored in a sealed or covered container</li> </ul> </li> </ul>
(k)	<ul> <li>Emergency and standby equipment including:</li> <li>Safety and emergency equipment, except engine driven fire pumps, including fire suppression systems and emergency road flares.</li> <li>Vacuum producing devices for the purpose of removing potential accidental releases</li> </ul>

(1)	<ul> <li>Activities associated with production including the following: <ul> <li>Closed, non-vented, tumblers used for cleaning or deburring metal products without abrasive blasting.</li> <li>Electrical resistance welding.</li> <li>Application equipment for hot melt adhesives with no VOC in the adhesive formulation.</li> <li>Compressor or pump lubrication and seal oil systems.</li> <li>Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.</li> <li>Equipment for washing or drying fabricated glass or metal products, if no VOCs or HAPs are used in the process, and no gas, oil, or solid fuel is burned.</li> </ul> </li> </ul>
(m)	<ul> <li>Miscellaneous equipment, but not emissions associated with the process for which the equipment is used, and activities including the following: <ul> <li>Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit VOCs and HAPs.</li> <li>Electric or steam heated drying ovens and autoclaves, including only the heating emissions and not any associated process emissions.</li> <li>Application equipment for hot melt adhesives with no VOC in the adhesive formulation.</li> </ul> </li> </ul>
(n)	A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
(0)	A petroleum fuel, other than gasoline dispensing facility , having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
(p)	<ul> <li>The following VOC and HAP storage containers:</li> <li>Storage tanks with capacity less than 1,000 gallons and annual throughput less than 12,000 gallons.</li> <li>Vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.</li> </ul>
(q)	Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
(r)	Machining where an aqueous cutting coolant continuously floods the machining interface.
(S)	Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
(t)	<ul> <li>Cleaners and solvents characterized as follows:</li> <li>having a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 °F) or</li> <li>having a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 °C (68 °F).</li> <li>The used of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months</li> </ul>
(u)	The following equipment related to manufacturing activities not resulting in the emissions of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
(v)	Closed loop heating and cooling systems.
(w)	Infrared cure equipment.
(x)	Exposure chambers for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge.
(y)	Solvent recycling systems with bath capacity less than or equal to 100 gallons.
(z)	Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.

(aa)	Water based adhesives that are less than or equal to 5% by volume of VOCs excluding HAPs.
(bb)	<ul> <li>Non-contact cooling tower systems with either of the following:</li> <li>Natural draft cooling towers not regulated under a NESHAP</li> <li>Forced and induced draft cooling tower system not regulated under a NESHAP.</li> </ul>
(cc)	Heat exchanger cleaning and repair.
(dd)	Process vessel degassing and cleaning to prepare for internal repairs.
(ee)	Paved and unpaved roads and parking lots with public access
(ff)	Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
(gg)	Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators tank and fluid handling equipment.
(hh)	Emergency generators as follows: Gasoline generators not exceeding 110 horsepower, diesel generators not exceeding 1,600 horsepower, natural gas turbines or reciprocating engines not exceeding 16,000 horsepower.
(ii)	Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitations with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following:  - Deburring - Pneumatic conveying - Buffing - Woodworking operations - Polishing - Abrasive blasting
(jj)	<ul> <li>Space heaters, process heaters, or boilers using the following fuels:</li> <li>Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.</li> <li>Propane or liquified petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.</li> <li>Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.</li> </ul>
	Plant Specific Trivial / Insignificant Activities
(a)	Sludge room water treatment (Emissions accounted for in the emission determinations at each respective source)
(b)	Sludge room (Emissions accounted for in the emission determinations at each respective source)
(C)	Laboratories
(d)	Print/Copy shops
(e)	Wet/dry sanding booths
(f)	Open metal grinding - Performed in the body shop
(g)	Resistance Welding - Majority of welding operations performed in the body shop
(h)	Property Maintenance - Landscaping, paving, roofing, and painting
(i)	Material Storage

(j)	Paint Mix Rooms (Emissions accounted for in the emission determinations at each respective source)		
(k)	Non-VOC parts washing.		
(I)	Equipment maintenance lube/degreaser.		
(m)	Vehicle washers prior to shipping.		
(n)	Vehicle fluid fill operations:-Engine oil-Brake fluid-Windshield fluid-Air conditioning refrigerant-Engine coolant-Power steering fluid		
(0)	Storage tanks for brake fluid, gear oil and engine oil.		
(p)	Engine sub-assembly line - Assembly of engine components.		
(q)	Radiator sub-assembly line - Assembly of radiator components.		
(r)	Trim assembly line - Installation of various interior/exterior vehicle components.		
(s)	Paint pump repair shop.		
(t)	Leak test areas.		
(u)	Pre-washers.		
(v)	Spot sanding and painting.		
(w)	Phosphate system.		
(x)	Masking and polishing areas.		
(y)	Turbo blower - Power blowing of vehicle.		
(z)	Dolly touch-up.		
(aa)	Dolly cleaning (water blast) - Cleaning of vehicle carrier.		
(bb)	Inspection and audit areas.		
(cc)	Emergency generators less than 1600 hp and fire pumps.		

# Boilers Natural Gas-fired Boilers less than 10 MMBtu/hr

# **Emission Limitations and Standards**

# D.6.1 Particulate Matter (PM)

Pursuant to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating, all the boilers with heat input rating of less than ten (10) mmBtu/hr each shall have a PM emissions limit to be determined by the following equation:

$$Pt = 1.09$$
  
 $Q^{0.26}$ 

Where: Pt = Pounds of particulate matter emitted per million Btu (lb/mmBtu) heat input. Q = Total source maximum operating capacity rating in million Btu per hour (mmBtu/hr) heat input.

#### <u>Degreasing operations</u> And certain cleaners and solvents, that do not exceed 145 gallons usage per 12 months, except if subject to 326 IAC 20-6):

- D.6.2 Volatile Organic Compounds (VOC) Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the owner or operator shall:
  - (a) Equip the cleaner with a cover;
  - (b) Equip the cleaner with a facility for draining cleaned parts;
  - (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
  - (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
  - (e) Provide a permanent, conspicuous label summarizing the operation requirements;
  - (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

# D.6.3 PSD BACT

The PSD BACT for the insignificant activities shall be as follows:

- (a) Gasoline fuel transfer and dispensing operation shall not exceed 1,300 gallons per day.
- (b) The petroleum fuel dispensing facility, shall not exceed a storage capacity greater 10,500 gallons, and shall not dispense fuel greater than 230,000 gallons per month.
- (c) Storage tanks with capacity less than 1,000 gallons shall have annual throughput less than 12,000 gallons. This shall include vessels storing lubricating oils, hydraulic oils, machining oils and machining fluids.
- (d) Cleaners and solvents used in this section shall have a vapor pressure equal to or less than 2 kPa; 15 mmHg, or 0.3 psi measured at 38 degrees C (100 °F) or shall have a vapor pressure equal to or less than 0.7 kPa; 5 mmHg; or 0.1 psi measured at 20 °C (68 °F).

The used of which for all cleaners and solvents combined shall not exceed 145 gallons per 12 months.

(e) Compliance with this condition and condition D.5.6 of this permit shall satisfy 326 IAC 2-2, the Prevention of Significant Deterioration.

# D.6.4 Particulate Matter (PM) [326 IAC 6-3-2(c)]

(a) The PM overspray emissions from the surface coating, painting, dipping, or spraying operation under the insignificant activities shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$  where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

(b) Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the grinding, machining, sanding, soldering, welding facilities shall individually be determined using the equation in D.6.2.

# **Compliance Determination Requirement**

# D.6.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

The Permittee is not required to test any of the facilities in Section 6 by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the PM limit specified in Conditions D.6.1 and D.6.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

# **Record Keeping and Reporting Requirements**

- D.6.6 Record Keeping Requirement
  - (a) To document compliance with Conditions D.6.1 and D.6.3, the Permittee shall maintain records of the amount of raw materials (process weight), paint, solvent, weld sticks, abrasives, etc. Records shall include purchase orders, invoices. Records maintained shall be taken monthly and shall be complete.
  - (b) These records shall be maintained in accordance with Section C General Record Keeping Requirements of the issued Part 70 permit.

# **Quarterly Report**

Source Name:AM General CorporationSource Address:13200 McKinley Highway, Mishawaka, Indiana 46545Mailing Address:13200 McKinley Highway, Mishawaka, Indiana 46545PSD/Significant Major Modification:141-11673-00031Facility:Vehicle (HUMMER II) productionParameter:VOCLimits:86,000 vehicles per 12-consecutive month period, rolled on a monthly basis.<br/>Daily maximum production shall not exceed 364 vehicles.

During the first twelve (12) months of operation, the vehicle shall be limited such that the total vehicle produced divided by the accumulated months of operation shall not exceed 86,000 vehicles per year divided by twelve (12) months, which equals an average of 7,166 vehicles per month, rolled on a monthly basis.

Mo	onth	Year _	
Day	Vehicle Produced This Day	Day	Vehicle Produced This Day
1		17	
2		18	
3		19	
4		20	
5		21	
6		22	
7		23	
8		24	
9		25	
10		26	
11		27	
12		28	
13		29	
14		30	
15		31	
16			

Submitted by: \_\_\_\_\_Signature: \_\_\_\_\_

Title/Position: \_\_\_\_\_Date: : \_\_\_\_\_

# **Quarterly Report**

Source Name:	AM General Corporation
Source Address:	13200 McKinley Highway, Mishawaka, Indiana 46545
Mailing Address:	13200 McKinley Highway, Mishawaka, Indiana 46545
PSD/Significant Major N	Nodification: 141-11673-00031
Facility:	Vehicle (HUMMER II) production
Parameter:	VOC
Limits:	86,000 vehicles per 12-consecutive month period, rolled on a monthly basis.

During the first twelve (12) months of operation, the vehicle shall be limited such that the total vehicle produced divided by the accumulated months of operation shall not exceed 86,000 vehicles per year divided by twelve (12) months, which equals an average of 7,166 vehicles per month, rolled on a monthly basis.

The volatile organic material (VOC) usages, and natural gas usages from the HUMMER II plant shall be limited such that the summation of the VOC emissions from all facilities at this plant shall not exceed 260 tons per 12-month period, rolled on a monthly basis.

During the first twelve (12) months of operation, the volatile organic material (VOC) usages, and natural gas usages shall be limited such that the summation of the VOC emissions from all facilities at this HUMMER II plant divided by the accumulated months of operation shall not exceed 260 tons per year divided by twelve (12) months, which equals an average of 21.7 tons per month, rolled on a monthly basis.

	Column 1		Column 2		Column 1 + 2	
Month	This Month Vehicle Production	This Month VOC Emissions in Tons	Previous 11 Months Vehicle Production	Previous 11 Months VOC Emissions in Tons	12 Month Total Vehicle Production	12 Month Total VOC Emissions in Tons

YEAR \_

Note: This Report shall be submitted with a detailed VOC emissions calculations (spreadsheet) showing all the VOC usages and natural gas usages.

Submitted by: \_\_\_\_\_\_Signature: \_\_\_\_\_

Title/Position: \_\_\_\_\_\_Date: : \_\_\_\_\_

#### **Quarterly Report**

Source Name: Source Address: Mailing Address: PSD/Significant Major Modification: Facility: Parameter: Limits:

Voor

AM General Corporation 13200 McKinley Highway, Mishawaka, Indiana 46545 13200 McKinley Highway, Mishawaka, Indiana 46545 141-11673-00031 Vehicle (HUMMER II) production VOC The VOC limits shall be based on a daily-volume- weighted average of the coatings used, and actual transfer efficiencies.

Facility/Operation	VOC Limit (lb of VOC/gallon applied solids (lb/gacs))
ELPO/E-Coat	0.04
Primer Surfacer/Guidecoat	2.9
Topcoat	5.3

Month	ELPO/E-Coat VOC Emissions (Ib/gacs)	Primer Surfacer/Guidecoat (lb/gacs)	Topcoat (lb/gacs)	Month	ELPO/E-Coat VOC Emissions (Ib/gacs)	Primer Surfacer/Guidecoat (lb/gacs)	Topcoat (lb/gacs)
1				1			
2				2			
3				3			

Note: This Report shall be submitted with a detailed VOC emissions calculations (spreadsheet) showing all the coatings usages in each facility.

Submitted by:	_Signature:

Title/Position: \_\_\_\_\_Date: : \_\_\_\_\_

## **Quarterly Report**

Source Name:AM General CorporationSource Address:13200 McKinley Highway, Mishawaka, Indiana 46545Mailing Address:13200 McKinley Highway, Mishawaka, Indiana 46545PSD/Significant MajorModification: 141-11673-00031Facility:Vehicle (HUMMER II) productionParameter:VOCLimits:The VOC input usage from the Spot and Final Repair operation shall be limited<br/>to less than 15 pounds per day (lbs/day). This limit shall be based on daily-<br/>volume- weighted average.

Month		Year		
	Day	VOC Input Usage (lb/day)	Day	VOC Input Usage (lb/day)
	1		17	
	2		18	
	3		19	
	4		20	
	5		21	
	6		22	
	7		23	
	8		24	
	9		25	
	10		26	
	11		27	
	12		28	
	13		29	
	14		30	
	15		31	
	16			

Submitted by: _	Signature:	
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Title/Position: \_\_\_\_\_Date: : \_\_\_\_\_

# PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name:AM General CorporationSource Address:13200 McKinley Highway, Mishawaka, Indiana 46545Mailing Address:13200 McKinley Highway, Mishawaka, Indiana 46545PSD/Significant Major Modification:141-11673-00031

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

- 9 Test Result (specify)
- 9 Report (specify)
- 9 Notification (specify)
- 9 Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date: