ADEQ
OPERATING
AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 0617-AOP-R3
Renewal #1
IS ISSUED TO:
Aerojet - General Corporation
East Walton Road, Highland Industrial Park
East Camden, AR 71701
Calhoun County
AFIN: 07-00035

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

December 3, 2001 AND December 2, 2006

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Michael Bonds
Chief, Air Division

Date Modified

Aerojet - General Corporation
Permit #: 0617-AOP-R3
AFIN: 07-00035

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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM10	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

SECTION I: FACILITY INFORMATION

PERMITTEE:	Aerojet - General Corporation
AFIN:	07-00035
PERMIT NUMBER:	0617-AOP-R3
FACILITY ADDRESS:	East Walton Road, Highland Industrial Park East Camden, AR 71701
MAILING ADDRESS:	Post Office Box 1036 Camden, AR 71711-1036
COUNTY:	Calhoun
CONTACT POSITION:	Charles Johnson, Senior Environmental Engineer
TELEPHONE NUMBER:	(870) 574-3265
REVIEWING ENGINEER:	Michael H. Watt
UTM North South (Y):	Zone 15: 3,720 km
UTM East West (X):	Zone 15: 528 km

SECTION II: INTRODUCTION

Summary of Permit Activity

Aerojet – General Corporation, currently operates a manufacturing facility located in the Highland Industrial Park near East Camden, Arkansas. Aerojet manufactures solid rocket motors, missile systems, aircraft ordnance, rocket warheads, and similar products for the United States Department of Defense. Aerojet also produces the propellants for automobile air bag systems. The facility also manufactures the rocket propellants, explosives, pyrotechnics, and air bag propellants used in the aforementioned products. These energetic materials are utilized in the on-site production operations and are commercially distributed as finished products. Research and Development (R&D) activities for the products are also performed.

This permit involves several minor modifications for this facility. They are the following:

1. Production of a new propellant, ARCOMP 408, at the facility. This product is an ignition material for automobile air bag inflators. As part of the ARCOMP 408 program, three additional production buildings (#70, #71, and #74) will be installed at the East Camden facility. These units will be considered part of the New Air Bag Manufacturing Operations (SN-82). Production of ARCOMP 408 will not change any of the currently permitted emission rates.

2. An increase in the throughput of the Waste Air Bag Propellants burned in the Thermal Treatment Facility (SN-04). Throughput will be increased by 25,000 lb/year. This change will increase PM and PM_{10} by 6.04 tons per year, NO_X by 0.01 tons per year, and Hydrogen Chloride by 0.01 tons per year.

3. Correct the number of Boilers listed in the group Process Boilers (SN-25). During a recent internal compliance audit, Aerojet determined that the inventory of gas-fired process equipment used to prepare the original Operating Permit application was not accurate. A total of 7, rather than 4, boilers should have been included. The correct heat input capacity of the equipment is 10.06 MMBTU/hr instead of 4.20.

4. Install a new Grit Blast Machine as part of SN-67. In addition, the existing Liner Spray Machine (SN-28) will be replaced with an equivalent unit.

Process Description

Army Tactical Missile System (ATACMS) - Manufacture of Insulated Adapter Plug

The metal plug is received and degreased at Building 2-SH-14 or 2-SH-15 (SN-20). Adhesive primer and adhesive are then applied to the plug (SN-20). Next, liner material is prepared (SN-22) and screened onto the top of the plugs. After curing, the adapter plug is labeled and packaged (SN-44). The item then goes to Building M-2 for final assembly.

ATACMS - Production of Exit Cone

The exit cone shell is hand-wiped with solvent at Building 2-SH-14 or 2-SH-15 (SN-20). In a separate operation, the exit cone inset is molded (SN-48) and its outer diameter is machined. The inset is then cleaned with solvent (SN-20). The exit cone shell and exit cone insert are subsequently glued together (SN-20). After the glue cures, the exterior of the exit cone assembly is painted at Building 48 (SN-24). The component is then labeled and packaged (SN-44).

ATACMS - Manufacture of Aft Head

The ATACMS aft head assembly is made as follows: An aft end head is received at Building 2-SH-14 and then degreased in the motor case cleaner (SN-19). Next, adhesive primer (SN-39) and adhesive (SN-40) are applied to the metal case. In a separate operation, cut uncured rubber is molded into an aft head insulation at Building 2-SH-4 (SN-50). The part is coated then with an adhesive (SN-40). The insulation is subsequently installed in the aft end head. The component is then autoclaved.

In a separate operation, phenolic powder is molded into a throat insulation insert at Buildings 2-SH-3, 2-SH-14 or M-85 (SN-48). The part is then machined.

Upon receipt at Building 2-SH-14 or 2-SH-15, the throat component is hand-wiped with solvent (SN-20). The part is then x-rayed to check for defects. The throat is then cleaned again (SN-20). The throat insulation is cleaned in a similar manner (SN-20). The insulation is then glued into the throat assembly. The component is then cleaned again (SN-20) and installed in the aft head.

The aft igniter mount is molded from phenolic powder (SN-48) and then machined. The component is subsequently hand-wiped with solvent. The forward igniter mount is molded, machined and cleaned in a similar manner. The igniter mounts are then inspected for defects. The items are subsequently glued together inside the aft head throat. After curing, the assembled component is pressure-tested, labeled (SN-44) and prepared for final motor assembly.

ATACMS - Production of Motor Assembly

The metal motor case is received from the vendor. The unit is then degreased in the motor case cleaner at 2-SH-14 (SN-19) or the aqueous degreaser at Building 2-SH-2. Afterwards, the case may be finished cleaned by hand-wiping with solvent (SN-20). Next, adhesive primer (SN-39) and adhesive (SN-40) are applied to the case at Building 2-SH-14. In a separate operation, uncured rubber is molded (SN-50) into a forward insulator. The insulator is subsequently abraded, solvent cleaned (SN-20) and baked in an oven, and adhesive (SN-20) is applied to the outside diameter of the rubber. An aft flap and an aft case insulation are manufactured, cleaned and cured in a similar manner. The two parts are then coated with an adhesive (SN-20) and autoclaved together.

The rubber insulator components are subsequently coated with an adhesive (SN-20), inserted into the motor case, and autoclaved into place. A barrier coat primer (SN-41) and a barrier coat (SN-41) are then applied to the insulated portion of the case. The interior of the motor case is brush coated (SN-20) with a carbon-filled urethane rubber liner (SN-53). After curing, the lined case is prepared for propellant casting (i.e., "tool up"). Propellant from the mixing area is then "cast" (i.e., loaded) into the motor case. Final tool up is then completed, and the motor is cured under nitrogen pressure. After de-tooling and trimming, the cast propellant ("grain assembly") is x-rayed for quality control purposes. The aft head assembly and the forward insulated adaptor plug are then installed on the motor case. The product is subsequently touch-up painted and labeled. The rocket motor case is then packaged for shipment.

ATACMS - Manufacture of Igniter

The Arm Fire Device (AFD) and igniter tube are received from vendors. Both items are then hand-wiped with solvent (SN-44). Next, the two parts are subsequently assembled (using thread sealant). The aft igniter cup is then glued into place and cured. The assembly is subsequently loaded with an energetic material (magnesium/Teflon). The forward igniter cup is then glued into place. After vacuum testing and x-ray, the igniter assembly is labeled (SN-44) and packaged for shipping.

"MK-104" Rocket Motor - Production Operations at Building 2-SH-14

The metal motor case is received from vendors. The unit is then degreased in the motor case cleaner at 2-SH-14 (SN-19) or the aqueous degreaser at Building 2-SH-2. The case is subsequently grit blasted (SN-67), cleaned again (SN-19 or aqueous degreaser) and prepared for the installation of insulation. Next, an adhesive primer is applied (SN-39) at Building 2-SH-14. The case is then cured in an oven. An adhesive (SN-40) is subsequently applied and cured.

The cylindrical case insulator is made as follows: Uncured rubber is laid upon a mandrel and then autoclaved. The case insulator then is abraded, coated with an adhesive (SN-20), and oven cured. The insulator is subsequently installed in the motor case and autoclaved. (Three other components, the aft ring insulator, inhibitor insulator, and flap rubber insulator, are also fabricated by autoclaving uncured rubber laid upon a metal mandrel.)

The dome insulator is made as follows: Uncured rubber is press molded (SN-50), "layered up" with more rubber, and autoclaved. The component is then abraded, coated with an adhesive (SN-20), and oven cured.

The dome insulator, aft ring insulator, and the flap rubber insulator are subsequently installed in the insulated metal motor case. The assembly is then autoclaved. After curing, the case assembly is grit blasted, cleaned by hand-wiping with solvent (SN-20), and dried in an oven.

The insulated MK-104 rocket motor case is then shipped to Building 2-SH-15 for further processing.

MK-104 Rocket Motor - Production Operations at Building 2-SH-15

The insulated MK-104 case is received from Building 2-SH-14. The unit is then covered with an adhesive (SN-20) and oven cured.

The insulated motor case is then lined in the following manner: A liner material is prepared in the mixing area (SN-22). The forward dome of the motor case is then brush painted with the liner. The cylindrical portion of the case is subsequently sling-lined (SN-42). The unit is then cured in an oven.

The inhibitor unit is also received from Building 2-SH-14. The item is then spark tested. The inhibitor is subsequently sling-lined (SN-42) and oven cured.

MK-104 Rocket Motor - Manufacture of Aft Closure

The aft closure shell is received from the vendor. The unit is then degreased using the motor case cleaner at Building 2-SH-14 (SN-19) or by hand-wiping with solvent (SN-44). The aft closure shell is then grit blasted (SN-67). In a separate operation, a slug is made by wrapping carbon/phenolic tape onto a mandrel. This item is then cured in an oven. The slug is then machined. The aft closure shell and slug are subsequently hand-wiped with a solvent (SN-44). Next, the two components are glued together. The shell assembly is then machined to prepare it for installation of the throat mold insert, inlet throat mold and tungsten insert. (The latter item is also received from a vendor.)

The throat mold insert is made as follows: Graphite/phenolic tape is cut into patterns and then billet molded in a press machine (SN-48). The component is then machined.

The inlet throat mold is made as follows: Graphite/phenolic tape is cut using die patterns. The "pre-forms" are then billet molded in a press machine (SN-49). The part is then machined.

The insulation closure wrap is made by wrapping graphite/phenolic bias tape into a slug and autoclaving it. The component is then machined.

The tungsten insert, throat mold insert, inlet throat mold and closure wrap insulation are then cleaned by hand-wiping with solvent (SN-44). The components are then glued inside the aft closure shell. The assembly is subsequently machined, x-rayed for defects, and inspected.

MK-104 Rocket Motor - Production of Exit Cone

The insert insulation mold is made from 42-inch wide carbon/phenolic cloth. This material is die cut into patterns and then molded (SN-48). The molded part is then machined. (During fabrication, samples of the insulation mold and other parts of the nozzle are collected at Building 2-SH-13 for physical testing at the Chemistry Lab (Building 17).)

The aft exit ring wrap is made by casting a machined "ATJS" graphite part with carbon/phenolic tape, epoxy and phenolic varnish (SN-44). The component is then over-wrapped with graphite and cured in an autoclave. The exit ring wrap is subsequently machined.

The retention ring mold is also made with 42-wide graphite/phenolic cloth. This material is die cut into patterns and then molded (SN-48).

The exit liner wrap is made using graphite/phenolic bias tape. It is wrapped onto a mandrel and then cured in an autoclave. The component is then machined.

The insert insulation, aft exit ring, retention ring, and exit liner are prepared for assembly by hand-wiping with solvent (SN-44). The components are then glued together and cured in an oven. Afterwards, the assembly is machined. A phenolic varnish is subsequently brush painted onto the components (SN-44). Next, the assembly is over-wrapped with silica tape. It is then cured in an autoclave. The assembly is then machined again. The steel exit cone shell and the assembly are subsequently cleaned by hand-wiping with solvent (SN-44). The assembly is then installed inside the shell. The exit cone is then cured in an oven. Next, the interior of the exit cone assembly is machined. The tungsten insert is then installed within the exit cone assembly. The finished component is then oven cured. Finally, the exit cone assembly is x-rayed for defects and inspected.

JAVELIN Rocket Motor - Preparation of Motor Case

The case for the JAVELIN dual pulse rocket motor is manufactured in many buildings. First, the metal motor case is received from the vendor. The unit is then hand-wipe cleaned (SN-20) at Building 2-SH-14 or 2-SH-15. The case is then grit blasted (SN-67). Afterwards, the unit is cleaned again by hand-wiping with solvent (SN-20).

The launch motor insulators are fabricated from phenolic molding compounds (SN-48) at Building 2-SH-14. The parts are then cleaned with solvent (SN-20).
The JAVELIN case, launch motor insulator, and launch motor case insulator are then bonded together. Next, the case nozzle assembly is "line drilled" at Building 2-SH-3. The launch motor case is then shipped to Building M-85. The unit is over-wrapped with epoxy-filled carbon tape at this location. In a separate operation, the launch motor case dome is grit blasted (SN-67).

The component is then hand-wiped with solvent (SN-20). Foam parts are then installed within the case dome. In a separate operation, the launch motor grain assembly is machined at M-85. After installing foam part spacers, the grain assembly is subsequently installed within the motor case.

The rupture disk insulation ring is molded from phenolic powder (SN-48) at Buildings 2-SH-3 or 2-SH-14. The component is then insulated. Afterwards, the launch motor assembly is fabricated by inserting the rupture disk over the machined propellant grain in the end of the motor case. An igniter assembly is then inserted.

Nozzle bodies are also molded from phenolic powder (SN-48) at Buildings 2-SH-3 or 2-SH-15. The nozzle bodies are then machined at Building 2-SH-3. Afterwards, the nozzle assemblies are temporarily installed within the motor case. The launch motor case assembly is then checked for leaks.

JAVELIN Rocket Motor - Production of Launch Motor

At Building C-60, uncured rubber is cut to shape. A "formed insulation" is then molded (SN-12 or SN-44). The part is then coated with adhesive (SN-12). In a separate operation, the forward dome of the motor case is coated with adhesive primer and an adhesive in series (SN-44 or SN-12). The insulation is installed into the forward dome and cured. The assembly is subsequently x-rayed for defects. The insulated launch motor case then goes to final assembly. At this time, the case is hand-wipe cleaned with solvent (SN-20). After leak checking, the flight motor ignitor assembly and flight motor are installed. The launch motor is then labeled (SN-44). The initiators are subsequently installed. Final inspection is then performed.

JAVELIN Propellant Mixing

Lacquer premix, oxidizer, fuel, and a plasticizer are combined in the propellant mixer at Building A-11 during an engineered mix cycle (SN-62). The production casting materials are then sent to Building C-60 for loading (i.e., casting) within the flight motor. The "two-by-four" motors are later assembled at Buildings A-2 and/or M-85. Certain motors are performance tested at the rocket test area (SN-03). Sample motors and "mechanical loaf" samples are cast at Building A-11. The samples are then cured at Building C-62. Mechanical samples are collected at Buildings A-2 and B-17. These items are then tested at Building B-17.

JAVELIN Rocket Motor - Manufacture of Flight Motor

The flight motor case is received from vendors. The component is then hand-wipe cleaned with solvent (SN-20) at Building 2-SH-14. The case is then grit blasted in the glove box (SN-67) and cleaned again (SN-20). An adhesive primer (SN-20) and an adhesive (SN-2) are then applied in series.

Uncured rubber is cut and molded (SN-50) to form the aft case insulator. The component is then abraded and hand-wiped clean with solvent (SN-20). The aft case insulator is then coated with adhesive (SN-20) and dried. The forward case insulator is fabricated in the same manner.

The forward and aft insulators are placed subsequently into the flight motor case. The component is then autoclaved. The liner is subsequently prepared in the mix room (SN-22) at Building 2-SH-15. The liner material is then manually applied (SN-20) to the insulated case at Building 2-SH-14 or 2-SH-15. The component is then oven cured.

JAVELIN Rocket Motor- Assembly of Launch Motor

The machined case is grit blasted (SN-67). The component is then hand-wipe cleaned (SN-20). Next, the launch motor igniter insulator is installed. The assembly is then machined. In a separate operation, the launch motor case insulator is over-wrapped with tape. The component is then machined. The case insulator is later glued (SN-2) to the igniter insulator assembly.

The case/nozzle assembly is “line drilled” and then grit blasted (SN-67). The exterior of the motor case is then hand-wipe cleaned with solvent (SN-20). Next, the outside of the motor case is over-wrapped with tape. The launch motor case dome is then grit blasted (SN-67) and cleaned with solvent (SN-20). Foam parts are then installed.

The launch motor grains are received and then machined. The propellant grains are then combined with other components to form the launch motor grain assembly.

The rupture disk insulation ring is molded (SN-48) and insulated to form the rupture disk assembly.

The nozzle bodies are molded (SN-48) and machined. These components are then temporarily installed within the nozzle assembly for leak checking. If acceptable, the launch motor case is permanently assembled. The component is then x-rayed and inspected.

PAC-3 Rocket Motor

The insulated case is received from the vendor at Building 2-SH-14. The component is then hand-wiped with solvent (SN-20). The case is then baked in an oven. Next, a barrier coating is manually applied to the insulated motor case. In a separate operation, a liner material is prepared in the mix room (SN-22) at Building 2-SH-15. The motor case is then lined using a sling-liner machine. (The liner may also be manually applied.) The motor case is then cured in an oven. Afterwards, the lined case is sent to Building M-2 for further processing.

The exit cone assembly is manufactured at Buildings 2-SH-14 and 2-SH-3.

The dual grain assembly, igniter, and exit cone assembly are subsequently combined to form the rocket motor assembly. After leak checking, the motor is labeled (SN-44) and packaged.

Multiple Launch Rocket System (MLRS) and Extended Range MLRS

The rocket motor case is received from the vendor at Building 2-SH-2. An oil coating is then drained from the component. The motor case is then cleaned using the aqueous degreaser at Building 2-SH-2. The front end plug is then installed, and the aft insulation is glued into place. Next, the insulation is painted with a barrier coating (SN-20). The entire assembly is then cured in an oven. Afterwards, the insulated motor case is shipped to Building M-8 (or M-2).

A liner material is prepared in the mixer (SN-07) at Building M-2. The liner is then applied to the insulated motor case using a sling liner machine (SN-07). The lined case is then cured in an oven. (As an alternative, the liner spray machine (SN-28) at Building M-2 may be used.) The motor case is then "tooled up" for casting.

Various molded rubber components are made (SN-50) at Building 2-SH-4. The parts are then cleaned in the vapor degreaser (SN-36) at this location. The components are then sent to Building 2-SH-2 for insulation assembly.

"SARC 1000," 1001, 1002 and Other Electrical Pyrotechnic Initiating Products

Various pyrotechnic initiating products are made in the following manner: Electrical wire is cut to length and molded into a plug. A bridge wire is then installed between the terminals. The bridge wire assembly is then degreased in the ultrasonic cleaner at Building M-85 (SN-13). The parts are then loaded with an energetic material ("squib composition") and crimped closed. The products are then labeled and packaged.

Thermal Treatment Area

Aerojet's manufacturing operations generate hazardous waste propellant and propellant-contaminated materials. The wastes are accumulated at "hot trash cages" throughout the facility. The reactive wastes are routinely transferred to the thermal treatment area (SN-04). The waste is placed into one of four Open Burn Units (OBUs) and then ignited via remote control. The ash/residue generated during the thermal treatment operations is periodically removed from the OBU area for off-site disposal.

Rocket Test

Aerojet's rocket test area (SN-03) is equipped for the performance testing for several kinds of energetic products. These items include solid rocket motors, rocket motor igniters, initiation squibs, air bag propellant grains, air bag assemblies, air bag igniters and explosives. Rocket testing is conducted at Bay 15, Bay 18, Bay 45, Building 16 and Building 19. In addition Aerojet operates a high explosive test facility (SN-3) in the 16-AT area of the Highland Industrial Park.

The testing activities are performed in the following manner: The test assembly is fitted with instrumentation and then temperature conditioned. Once conditioning is complete, the test assembly is secured to a test stand or placed in a test spot. The component is then fired or otherwise initiated. After the test assembly has cooled, the component is sent to engineering evaluation and disassembly. The inspection activities may occur at multiple locations.

Air bag squibs, air bag grains, air bag igniters, and air bag inflators are test fired for production and R&D purposes in the air bag testing area. It is located at Building M-85. The parts are assembled, temperature conditioned, secured to the test fixture, and then fired. The hardware may then be disassembled and evaluated, depending on the nature of the test.

Rocket Motor Case Reclamation

The metal cases from certain rocket motors are reclaimed using the lathe at Building 50. It is used to machine the propellant out of the case.

The machined rocket motor case still contains a small amount of residual propellant. The case is then re-assembled and then sent to the rocket test area (SN-03). The unit is then fired at low pressure. This low-pressure firing provides Aerojet with information about "burn rate aging." The data helps customers predict when re-graining of motors is needed without having to destroy the motor cases by firing them at regular high pressure.

Batch Check Motor

Aerojet manufactures "batch check motors" for quality control purposes. The hardware for these units is continuously recycled.

The fired batch check motor is disassembled at Buildings A-2, A-3, M-8, M-2, 50 or 60. The spent graphite insert is discarded and the other parts are evaluated for wear. The end plate and nozzle insert holder may be washed in the vibration cleaner at M-82 as needed.

Development Motors and Parts

Aerojet makes development motors and parts as a routine business function. The opportunity to make these components generally occurs on short notice.

Development motors are manufactured as follows: The metal motor case is received from the vendor. The component is then degreased. It may be cleaned in the vapor degreaser (SN-19) at Building 2-SH-14, the aqueous degreaser at Building 2-SH-2 or by hand-wiping with solvent (SN-20). Sometimes the case is then grit blasted and degreased a second time.

Ordinarily, insulation must be added to the motor case. (Sometimes an insulated case will be received from a manufacturer). When insulation must be added, the metal case is coated with an adhesive primer (SN-20). The insulators are then coated with adhesive and installed within the case.

The component is then cured in an autoclave. Afterwards, a barrier coating (SN-20) is applied to the insulated sections of the motor case. The component is then lined with a carbon- filled urethane liner (SN-07 or SN-28).

After curing, the lined case is "tooled up" for propellant casting. The component is then loaded with energetic material and cured under pressure. Afterwards, the cast motor is de-tooled and x-rayed. The igniter and exit cone parts are subsequently installed. (These items may either be fabricated on-site or purchased from vendors.) The development motor is then leak checked and prepared for shipment or for test firing (SN-03).

Lacquer Preparation

"Lacquer" (i.e., nitrate esters) is received from vendors. The energetic materials are usually diluted with acetone or methylene chloride. The lacquer is then mixed with stabilizers and other formulation components. The mixture is then sparged with nitrogen gas (SN-11) until all the dilutent has evaporated. The prepared lacquer is then used as the intermediate raw material for some propellant formulations.

Energetic Oxidizer Drying

Various energetic oxidizers are prepared for use in the rotary dryer (SN-63) at Building C-57. The materials may be wetted with water or solvent. After drying, the energetic materials are processed in the mixing operations. If necessary, the materials are sent to the grinder unit (SN-73) at Building C-58 for particle size reduction prior to mixing.

Research and Development

Aerojet engages in research and development (R&D) activities for various product lines and manufacturing processes. These activities are intended to improve product performance and process efficiency. At present, most R&D activities are related to the handling, processing, and production of various powdered energetic materials.

Extrusion of Propellant at Buildings E-39 and M-2

Extruder machines are operated at Buildings E-39 and M-2. These units are used to process various liquid plasticizers and propellant mixes into solid forms called "grains." The extruded grains are then sent to Buildings M-85 and/or D-29 for use in the assembly of air bag generators. At present, one extruder is operated at Building E-39, whereas two machines are used at Building M-2. In the near future, Aerojet intends to install an additional extruder at Building E-39. The aggregate emissions from the extruder units (four machines) are designated as SN-51.

Powder Mixing/Generator Production at Building M-125

Various energetic materials and formulation components are combined in an aqueous slurry in a mixer. The mixture is then concentrated by applying steam heat. The energetic material is then dried in the steam-heated dryer. It is equipped with a cyclone (SN-59). The material is then screened and pressed into pills. The press machine is equipped with a baghouse (SN-59).

The energetic material is combined with other components to form a generator assembly. A booster charge is subsequently added. The assembly is then labeled (SN-44) and packaged.

Medium Warhead Production

Pre-manufactured metal warhead cases are purchased from a vendor. The case is then hand-wipe cleaned with solvent (SN-44). The inside surface of the warhead cases is subsequently coated with a thin film of a Teflon-based release-agent (SN-80). Next, a propellant mixture is cast (i.e., loaded) into the prepared cases at Building C-50. The unit is then cured in an oven.

Sidewinder Missile

The metal motor case is received from the vendor. The unit is then cleaned in the aqueous degreaser at Building 2-SH-2. The degreased case is then grit blasted (SN-67). Afterwards, the case is hand-wipe cleaned with solvent (SN-38).

Next, an adhesive primer is applied (SN-39) to the interior surface of the motor case. An adhesive is then applied (SN-40). After air curing, a liner material is applied to the inside of the case. The component is then cured in an autoclave. Next, a barrier coat (SN-41) and another coat of adhesive are applied (SN-42).

The motor case is then cast with propellant and cured. Afterwards, the component is X-rayed and assembled.

The motor is then transferred to a paint booth (SN-43). A primer and topcoat are applied in series to the exterior surface of the motor case.

Rocket Motor Case Washout Facility

Aerojet manufactures various solid rocket motors for the U.S. Department of Defense. A certain percentage of these products cannot be fired or are otherwise unusable for a variety of reasons. Aerojet has implemented a reclamation program that allows beneficial reuse of the metal rocket motor cases.

The solid propellant in the rocket motor cases is extracted using a high-pressure spray of water. The pump for the “hydro-lance” machine is powered by a diesel-fired internal combustion engine (SN-81). (The rocket motor case reclamation process itself is an insignificant source of air emissions.)

PAC-2 Production Program - Motor Case Preparation

The metal motor case is received from the vendor. The component is then degreased using the vapor degreaser (SN-19) at Building 2-SH-14. The motor case is then grit blasted (SN-67).

Afterwards, the case is degreased again. The component is then transported to Building M-2. An adhesive primer, adhesive, and barrier coating (SN-74) are subsequently applied to the motor case using a spray machine.

Rubber insulators are fabricated by "laying up" rubber sheeting around a metal forming tool. The components are then hand-wiped with solvent.

PAC-2 Production Program - Lining of Prepared Motor Case

Once prepared, the interior of the PAC-2 rocket motor case is lined with a carbon-filled polyurethane coating. This compound is prepared for use in the mix room (SN-22) at Building 2-SH-15. The coating is then transported to Building M-2 for application within the motor case.

The liner material is first manually applied to the dome areas of the motor case. The remaining sections of the case are then coated using a "sling liner" machine (SN-75).

PAC-2 Production Program - Casting/Curing and Assembly of Finished Rocket Motor

An integral component of Aerojet's manufacturing activities is the formulation of solid rocket propellants which perform to exacting specifications. In general, propellant production involves the combining of various dry energetic materials (premix, oxidizer, and fuel), plus liquid polymers and plasticizers/curing agents, within a mechanical mixer. The ingredients are then consolidated into a uniform propellant formulation. Mixer units are operated at multiple locations within the Aerojet complex. All of the dry and liquid ingredients are handled in a controlled manner. The liquid polymers and curing agents are not volatile. No significant air emissions are generated during the mixing operations.

Once formulated, the rocket fuel is "cast" (i.e., loaded) within the prepared rocket motor case. During this operation, the lined case is filled with the propellant/polymer/plasticizer mixture while under vacuum. The fuel mixture is then allowed to cure within the motor case. A number of propellant casting and curing stations are operated within the Aerojet complex. The casting/curing activities are an insignificant source of air emissions.

The PAC-2 rocket motor case is cast with propellant at Building M-2. The unit is then X-rayed to check for defects. The finished motor is then labeled (SN-44) and packaged.

Advanced Tomahawk Program

Production of the Advanced Tomahawk rocket motor is very similar to the PAC-2 program described above.

Supersonic Sea-Skimming Target (SSST) Rocket Motor

Production of the Sea-Skimming Target (SSST) rocket motor is also very similar to the PAC-2 program described above.

ARCOMP 408 Ignition Material for Automobile Air Bag Inflators

ARCOMP 408 is comprised of three major ingredients: a high-energy explosive called RDX (cyclo-trimethylene-trinitramine), an oxidizer (strontium nitrate), and a water-soluble, non-energetic polymer (polyvinyl alcohol (PVA)). The RDX explosive is wetted with isopropyl alcohol. The solvent acts as a stabilizer for safety purposes. The alcohol is removed by drying the RDX in the existing rotary Vacuum Dryer (SN-63). Afterwards, the explosive is milled to the proper particle size in the Grinder Unit (SN-73). The RDX is then stored in a secure magazine pending use.

Next, an aqueous solution of strontium nitrate and PVA is prepared. The two solid materials are dissolved in a container of hot water. The RDX is combined with the strontium nitrate and PVA solution within the 150-gallon mixer. The Mixing Operation (SN-62) will coat the RDX particles with the oxidizer and polymer. Then, a hot air stream will be drawn across the mixer bowl to dry the propellant mixture. The bulk of the water is removed over a one or two day period. For safety reasons, a 10% moisture content is maintained in the raw propellant. The ARCOMP 408 propellant will be subjected to drying, compaction, milling, and screening. These operations produce a uniform ignition granule.

Finally, different lots of the ARCOMP408 propellant are blended for quality control purposes. The material is packaged in small containers and stored in secure magazine pending shipment.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
40 CFR 63 Subpart GG - National Emission Standards for Aerospace Manufacturing and Rework Facilities
40 CFR 63 Subpart T - National Emission Standards for Halogenated Solvent Cleaning

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	23,158.00	247.70
		PM_{10}	23,158.0	247.7
		SO_2	1.0	3.2
		VOC	2,338.9	194.9
		CO	20,843.6	94.0
		NO_X	347.1	65.9
		Lead	493.04	4.01
HAPs		Butyl Cellosolve*	49.71	12.25
		Chlorine	35.25	1.39
		Chromium Comp	0.18	0.05
		1,3 Dioxolane*	34.60	7.98
		Ethyl Acrylate*	25.20	5.13
		Ethyl Benzene*	54.61	7.64
		Formaldehyde*	5.06	0.87
		Glycol Ethers*	165.35	32.41
		Hydrogen Chloride	14,693.62	124.88
		Hydrogen Fluoride	8.07	0.02
		Methanol*	34.11	4.05
		Methylene Chloride	351.04	75.39
		Methyl Ethyl Ketone*	347.84	47.38
		Methyl Isobutyl Ketone*	215.26	32.91
		Phenol*	16.45	2.45
		Tetrachloroethylene	17.62	1.93
		Toluene*	324.61	40.89
		1,1,1 Trichloroethane	164.84	27.14
		Trichloroethylene*	45.17	4.52
		Xylene*	307.28	33.97
Air Contaminants		Acetone**	338.77	56.39
		Ammonia**	0.02	0.02
01	Source Deleted			

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
02	Natural Gas-Fired Boilers (8 Units)	PM	0.20	0.60
		PM_{10}	0.2	0.6
		SO_2	0.1	0.1
		VOC	0.1	0.4
		CO	1.4	6.1
		NO_X	1.7	7.2
03	Rocket Test Area	PM	19,113.60	57.20
		PM_{10}	19,113.6	57.2
		VOC	1,128.0	3.3
		CO	19,528.8	57.0
		NO_X	180.5	0.6
		Lead	439.92	1.27
		Chlorine	5.64	0.02
		Hydrogen Chloride	12,928.39	37.33
		Hydrogen Fluoride	0.57	0.01
04	Thermal Treatment Area	PM	3,864.00	152.60
		PM_{10}	3,864.0	152.6
		VOC	160.0	7.4
		CO	1,264.0	1.3
		NO_X	152.8	7.1
		Lead	52.00	2.40
		Chlorine	29.60	1.36
		Hydrogen Chloride	1,735.20	79.98
		Hydrogen Fluoride	7.50	0.01
05	Motor Case Cleaner A360	Removed From Service		
06	Nozzle Ring Cleaning Machine	Removed From Service		
07	Liner Mixer & Spray Machine	VOC	16.5	1.6
		1,3 Dioxolane*	3.30	0.32
		Methylene Chloride	16.50	1.58
08	Motor Case Cleaner A426	Removed From Service		
09	Source Deleted			
10	Source Deleted			
11	Lacquer Preparation	VOC	40.1	5.1
		Acetone	80.07	5.03
		Methylene Chloride	40.07	5.03

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
12	Spray Paint Booth	VOC	32.3	3.5
		Lead	0.01	0.01
		Acetone**	5.60	0.15
		Chromium Comp.	0.02	0.01
		Ethyl Acrylate*	2.10	0.06
		Ethyl Benzene*	4.28	0.67
		Formaldehyde*	0.26	0.04
		Glycol Ethers*	8.79	0.54
		Methanol*	2.30	0.50
		Methyl Ethyl Ketone*	20.87	2.08
		Methyl Isobutyl Ketone*	15.88	1.86
		Tetrachloroethylene	1.73	0.38
		Toluene*	21.50	1.56
		1,1,1 Trichloroethane	6.33	1.38
		Trichloroethylene*	4.03	0.88
		Xylene*	18.18	2.36
13	Ultrasonic Cleaner	VOC	0.6	2.6
		1,3 Dioxolane*	0.12	0.51
14	Source Deleted			
15	Source Deleted			
16	Source Deleted			
17	Source Deleted			
18	Source Deleted			
19	Motor Case Cleaner	VOC	13.2	10.0
		1,3 Dioxolane*	2.64	2.00
20	Solvent Wipe Rooms	VOC	41.3	3.1
		Ethyl Benzene*	8.63	0.63
		Formaldehyde*	0.35	0.03
		Glycol Ethers*	4.79	0.37
		Methanol*	6.90	0.50
		Methyl Ethyl Ketone*	23.97	1.85
		Methyl Isobutyl Ketone*	22.43	1.63
		Tetrachloroethylene	5.18	0.38
		Toluene*	8.63	0.63
		1,1,1 Trichloroethane	18.98	1.38
		Xylene*	12.08	0.88
			29.33	2.13

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
21	Source Deleted			
22	Mix Room	VOC	11.0	4.5
		Butyl Cellosolve*	0.09	0.04
		1,3 Dioxolane*	2.20	0.90
		Methylene Chloride	11.00	4.50
23	Source Deleted			
24	Spray Paint Booth	VOC	71.0	9.3
		Lead	0.01	0.01
		Acetone**	22.40	1.65
		Chromium Comp.	0.08	0.01
		Ethyl Acrylate*	8.40	0.62
		Ethyl Benzene*	5.60	0.42
		Formaldehyde*	0.56	0.05
		Glycol Ethers*	28.19	2.88
		Methyl Ethyl Ketone*	33.60	2.48
		Methyl Isobutyl Ketone*	33.60	2.48
		Toluene*	47.60	3.52
		1,1,1 Trichloroethane	5.35	1.50
		Xylene*	33.60	2.48
25	Natural Gas-Fired Boilers (7Units)	PM	0.10	0.40
		PM_{10}	0.1	0.4
		SO_2	0.1	0.1
		VOC	0.1	0.3
		CO	0.9	3.7
		NO_X	1.0	4.4
26	Source Deleted			
27	Source Deleted			
28	Liner Spray Machine	VOC	16.5	1.6
		1,3 Dioxolane*	3.30	0.32
		Methylene Chloride	16.50	1.58
29	Source Deleted			

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
30	High Explosive Test Facility	PM	134.30	13.30
		PM_{10}	134.0	13.3
		VOC	2.7	0.7
		CO	45.4	12.1
		NO_X	0.5	0.2
		Lead	1.02	0.26
		Chlorine	0.01	0.01
		Hydrogen Chloride	30.03	7.57
31	Source Deleted			
32	Source Deleted			
33	Comfort Heating Boiler	Source Exempt		
34	Comfort Heating Boiler	Source Exempt		
35	Source Deleted			
36	Vapor Degreaser	VOC	2.1	9.0
		1,3 Dioxolane*	0.41	1.80
		Methylene Chloride	2.07	9.00
37	Motor Case Cleaning	VOC	29.2	2.6
		1,3 Dioxolane*	5.83	0.51
38	Motor Case Cleaning	VOC	29.2	2.6
		1,3 Dioxolane*	5.83	0.51
39	Adhesive Primer Operations	VOC	33.7	1.0
		Lead	0.01	0.01
		Ethyl Benzene*	3.45	0.11
		Formaldehyde*	0.14	0.01
		Glycol Ethers*	1.38	0.04
		Methanol*	2.76	0.08
		Methyl Ethyl Ketone*	12.28	0.37
		Methyl Isobutyl Ketone*	8.97	0.27
		Tetrachloroethylene	2.07	0.07
		Toluene*	17.89	0.51
		1,1,1 Trichloroethane	7.59	0.23
		Trichloroethylene*	4.83	0.15
		Xylene*	11.73	0.36

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
40	Adhesive Operations	VOC	23.8	1.0
		Lead	0.01	0.01
		Ethyl Benzene*	1.44	0.09
		Formaldehyde*	0.06	0.01
		Glycol Ethers*	0.58	0.04
		Methanol*	1.15	0.07
		Methyl Ethyl Ketone*	2.88	0.18
		Methyl Isobutyl Ketone*	3.74	0.23
		Tetrachloroethylene	0.87	0.06
		Toluene*	19.49	0.74
		1,1,1 Trichloroethane	3.17	0.19
		Trichloroethylene*	2.02	0.13
		Xylene*	4.89	0.30
41	Adhesive Operations – Barrier Coating	VOC	28.1	1.3
		Lead	0.01	0.01
		Ethyl Benzene*	4.32	0.13
		Formaldehyde*	0.18	0.01
		Glycol Ethers*	1.73	0.06
		Methanol*	3.45	0.11
		Methyl Ethyl Ketone*	8.63	0.26
		Methyl Isobutyl Ketone*	11.22	0.34
		Tetrachloroethylene	2.59	0.08
		Toluene*	15.15	0.89
		1,1,1 Trichloroethane	9.49	0.29
		Trichloroethylene*	6.04	0.19
		Xylene*	14.67	0.44
42	Liner Application	VOC	12.9	2.4
		Butyl Cellosolve*	0.11	0.02
43	Spray Paint Booth	VOC	47.2	16.3
		Lead	0.01	0.01
		Acetone**	11.20	5.05
		Chromium Comp.	0.04	0.02
		Ethyl Acrylate*	4.20	1.90
		Ethyl Benzene*	2.80	1.27
		Formaldehyde*	0.28	0.13
		Glycol Ethers*	16.44	6.41
		Methyl Ethyl Ketone*	16.80	7.58
		Methyl Isobutyl Ketone*	16.80	7.58
		Toluene*	23.80	10.74
		Xylene*	16.80	7.58

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
44	Floor Operations	VOC	132.0	34.8
		Acetone**	36.05	8.96
		Ethyl Acrylate*	4.20	2.05
		Ethyl Benzene*	9.90	2.38
		Formaldehyde*	2.41	0.45
		Glycol Ethers*	49.13	12.15
		Methanol*	10.65	1.51
		Methylene Chloride	14.40	11.21
		Methyl Ethyl Ketone*	52.30	13.19
		Methyl Isobutyl Ketone*	45.20	12.19
		Phenol*	16.33	2.31
		Toluene*	48.65	15.10
		1,1,1 Trichloroethane	94.95	18.67
		Xylene*	34.55	10.69
45	Motor Case Soak-Out Facility	VOC	6.0	0.8
		1,3 Dioxolane*	1.20	0.15
		Toluene*	6.00	0.75
46	Misc. Parts Soak-Out Facility	Removed From Service		
47	Foam-Blowing Operations	VOC	5.5	3.9
		1,3 Dioxolane*	1.10	0.77
		Methylene Chloride	5.50	3.83
48	Phenolic Molding Operations	VOC	0.1	0.1
		Ammonia**	0.01	0.01
		Formaldehyde*	0.01	0.01
		Phenol*	0.06	0.07
49	Hockey Puck Manufacturing	VOC	0.1	0.1
		Ammonia**	0.01	0.01
		Formaldehyde*	0.01	0.01
		Phenol*	0.06	0.07
50	Rubber Molding Operations	VOC	11.0	1.8
		Acetone**	11.00	1.80
		Butyl Cellosolve*	0.09	0.01
		Methylene Chloride	11.00	1.80
51	Extruder Operations	VOC	8.0	1.5
52	Sling Liner Machines	VOC	16.5	0.5
		Butyl Cellosolve*	0.13	0.001
		Methylene Chloride	16.50	0.45

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
53	Barrier Coating	VOC Butyl Cellosolve* Methyl Ethyl Ketone* Methyl Isobutyl Ketone* Toluene* Xylene*	11.4 0.05 0.69 0.34 7.22 0.57	0.9 0.01 0.14 0.07 0.07 0.11
54	Squib Powder Manufacturing	VOC Acetone**	1.9 1.65	0.1 0.03
55	MLRS Igniter Assembly	VOC Methyl Isobutyl Ketone* Toluene* Xylene*	8.5 1.28 2.98 2.98	0.2 0.02 0.05 0.05
56	MK 104 Sample Preparation	PM PM_{10}	1.00 1.0	4.40 4.4
57	Air Bag R&D Laboratory	VOC	1.0	1.0
58	Pill Manufacturing	VOC Acetone** Methylene Chloride	22.0 22.00 22.00	18.0 18.00 18.00
59	Air Bag Propellant Manufacturing	PM PM_{10} VOC Acetone** Methylene Chloride Methyl Ethyl Ketone*	1.00 1.0 55.0 55.00 55.00 55.00	4.40 4.4 6.3 6.30 6.30 6.30
60	Ingredient Preparation Room	Insignificant Activity		
61	Screening Operations	Source Deleted		
62	Mixing Operations	VOC Acetone** Methylene Chloride	11.0 11.00 11.00	0.9 0.90 0.90
63	Nitramines and Explosives Dryer	VOC	18.0	0.5
64	Vacuum Ovens	VOC Acetone** Methylene Chloride Methyl Ethyl Ketone*	11.0 11.00 11.00 11.00	0.9 0.90 0.90 0.90

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
65	Negative Pressure Tables	VOC Acetone** Ethyl Acrylate* Ethyl Benzene* Formaldehyde* Glycol Ethers* Methylene Chloride Methyl Ethyl Ketone* Methyl Isobutyl Ketone* Toluene* Xylene*	25.0 5.60 2.10 1.40 0.14 6.39 11.00 8.40 8.40 11.90 8.40	4.1 0.20 0.08 0.05 0.01 0.26 3.60 0.30 0.30 0.43 0.30
66	Lathes	Insignificant Activity		
67	Grit Blast Machines	PM PM_{10}	41.50 41.5	6.20 6.2
68	Magnaflux Machine	Insignificant Activity		
69	Natural Gas Combustion Equipment	PM PM_{10} SO_2 VOC CO NO_X	0.20 0.2 0.1 0.1 1.1 1.3	0.60 0.6 0.3 0.4 4.7 5.6
70	Polymer Tank Farm	Insignificant Activity		
71	Gasoline Storage Tank	VOC	0.2	0.9
72	Diesel Fuel Storage Tanks	VOC	0.1	0.1
73	Nitramines and Explosive Grinder	PM PM_{10}	0.10 0.1	0.50 0.5

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
74	Solvent Wipe Rooms	VOC	59.3	7.2
		Lead	0.03	0.01
		Ethyl Benzene*	8.63	1.59
		Formaldehyde*	0.35	0.07
		Glycol Ethers*	3.45	0.64
		Methanol*	6.90	1.28
		Methyl Ethyl Ketone*	23.97	3.68
		Methyl Isobutyl Ketone*	22.43	4.14
		Tetrachloroethylene	5.18	0.96
		Toluene*	26.68	2.61
		1,1,1 Trichloroethane	18.98	3.50
		Trichloroethylene*	12.08	2.23
		Xylene*	29.33	5.41
75	Sling Liner Machine	VOC	16.5	0.5
		Butyl Cellosolve*	0.11	0.01
		Methylene Chloride	15.60	0.41
76	Adhesive Primer Operations	VOC	27.0	0.4
		1,3 Dioxolane*	2.89	0.04
		Methyl Ethyl Ketone*	5.38	0.08
		Toluene*	14.44	0.20
77	Adhesive Operation	VOC	21.5	0.5
		1,3 Dioxolane*	3.61	0.07
		Toluene*	18.05	0.33
78	Adhesive Operation – Barrier Coating	VOC	21.0	0.6
		1,3 Dioxolane*	2.17	0.08
		Ethyl Benzene*	1.36	0.02
		Formaldehyde*	0.03	0.01
		Methyl Ethyl Ketone*	0.27	0.01
		Methyl Isobutyl Ketone*	8.17	0.12
		Toluene*	10.83	0.38
		Trichloroethylene*	4.09	0.06
		Xylene*	5.45	0.08
79	Natural Gas Combustion Equipment (5 Units)	Source Never Constructed		
80	Medium Warhead Production	VOC	6.6	2.0

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
81	Diesel-Powered Pump Rocket Motor Case Washout Facility	PM	0.70	2.90
		PM_{10}	0.7	2.9
		SO_2	0.7	2.7
		VOC	0.8	3.3
		CO	2.0	8.8
		NO_X	9.3	40.8
82	New Air Bag Propellant Manufacturing Operations	PM	1.00	4.40
		PM_{10}	1.0	4.4
		VOC	55.0	6.3
		Acetone**	55.00	6.30
		Methylene Chloride	55.00	6.30
		Methyl Ethyl Ketone*	55.00	6.30
83	Spray Paint Booth	VOC	47.2	6.7
		Lead	0.01	0.01
		Acetone**	11.20	1.12
		Chromium Comp.	0.04	0.01
		Ethyl Acrylate*	4.20	0.42
		Ethyl Benzene*	2.80	0.28
		Formaldehyde*	0.28	0.03
		Glycol Ethers*	12.60	1.26
		Methyl Ethyl Ketone*	16.80	1.68
		Methyl Isobutyl Ketone*	16.80	1.68
		Toluene*	23.80	2.38
		Xylene*	16.80	1.68

* HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

** Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

SECTION III: PERMIT HISTORY

Permits 538-A and 617-A were issued to Atlantic Research in 1979 and 1980 for the installation of a facility in Highland Industrial Park to manufacture rocket propellants and the assembly of rocket motors.

Permit 617-AR-1 was issued on September 23, 1983. This permit allowed for installation of additional facilities to re-manufacture rocket motors from the U.S. Army Red River Depot in Texarkana.

Permit 617-AR-2 was issued on April 25, 1989. It allowed for production of solid propellant rocket motors and new facilities for painting rocket motor cases.

Permit 617-AR-3 was issued on April 18, 1990. This permit allowed for construction of a new facility to be used to conduct acceptance tests for military and commercial high explosives.

In 1992, ARC submitted an application for modification of its existing SIP permit. At that time, a number of significant process changes, including additional emission sources, were proposed for the East Camden facility. In June, 1992, a draft air permit, 617-AR-4, was issued. ARC submitted comments on the draft in July 1992. A final permit was never issued.

In May 1996, a minor modification of 617-AR-3 was approved. It authorized production of the Sidewinder Missile at the East Camden facility. New sources SN-37 through SN-45 were added to the permit.

In October 1997, another minor modification of 617-AR-3 was approved. It authorized production of the AMRAAM warhead (SN-80) and the installation of a new grit blast machine (SN-67) at Building 2-SH-14.

In May 1998, a third minor modification of 617-AR-3 was approved. It authorized installation of a diesel-powered pump (SN-81). This equipment was part of a new facility for the reclamation of rocket motor cases.

In September 1998, a fourth minor modification was approved. It authorized construction of a new facility for the manufacture of air bag propellants (SN-82).

In February 1999, a de minimis change to 617-AR-3 was approved. It authorized production of the PAC-2 Missile. New sources SN-74, SN-75, and SN-79 were added to the permit and SN-67 was modified.

In March 1999, a second de minimis change was approved. It authorized production of the Advanced Tomahawk Missile at the facility. New source SN-83 was added to the permit and Sources SN-39 through SN-42 were modified.

On December 3, 2001, air permit 617-AOP-R0 was issued to ARC. This permit allowed for installation of the new Advanced Tomahawk production program, for modifications to the PAC-2 manufacturing operations, and for expansion of the air bag propellant and component manufacturing operations. This was also the first Title V operating permit issued to this facility.

On October 10, 2002, air permit 617-AOP-R1 was issued to Atlantic Research Corporation. This minor modification application allowed for production of the Supersonic Sea-Skimming Target Rocket (SSST) Motor and to add an insignificant activity. A proposed new vent for an existing cutting/grinding operation was also added to the list of insignificant activities. Emissions increases were 1.3 tons per year of carbon monoxide and 0.02 tons per year of hydrogen fluoride.

On May 13, 2003, Atlantic Research Corporation was granted authorization to relocate the Thermal Treatment Facility (SN-04) to a new site within the East Camden facility. There was no change in throughput or emissions.

On July 7, 2003, air permit 0617-AOP-R2 was issued to Atlantic Research Corporation. This minor modification application is to allow for a replacement of a 1.7 MMBTU/hr boiler in SN-02 with a new 3.352 MMBTU/hr boiler.

On August 21, 2003, air permit 0617-AOP-R2 was administratively amended to add a new building to SN-82. There was no change in emissions.

On September 9, 2003, Atlantic Research Corporation was granted authorization to replace two 1.7 MMBTU/hr boilers at Building M-2 with a 3.352 MMBTU/hr unit (SN-02). There was no change in overall fuel capacity or emissions.

On October 4, 2003, air permit 0617-AOP-R2 was transferred from Atlantic Research Corporation to Aerojet-General Corporation.

On July 15, 2004, air permit 0617-AOP-R2 was administratively amended to add two insignificant activities. These activities were the Six-Bladed Saw, Camfer, and Drill Machine and the Composite Case Grinding Machine. There was no change in emissions.

SECTION IV: SPECIFIC CONDITIONS

SN-02
Natural Gas-Fired Boilers (8 Units)

Source Description

Aerojet operates a total of eight natural gas-fired boiler units in Building M-2 and Building M-8. These boilers are used to produce the steam and/or hot water for the operations in these buildings. Building M-2 uses three 1.7 MMBTU/hr units and one 3.352 MMBTU/hr unit. Building M-8 uses two 2.0 MMBTU/hr units and two 2.1 MMBTU/hr units. All of these units are less than 10 MMBTU/hr each and are therefore not subject to New Source Performance Standard Subpart Dc.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations and burning only natural gas. [§19.501 et seq. of Regulation #19, effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.2	0.6
SO_2	0.1	0.1
VOC	0.1	0.4
CO	1.4	6.1
NO_x	1.7	7.2

2. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations and by burning only natural gas. [§18.801 of Regulation #18, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.20	0.60

3. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. Compliance will be demonstrated by only burning natural gas.

SN	Limit	Regulatory Citation
02	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

SN-03
Rocket Test Area

Source Description

In the Rocket Test Area, Aerojet test fires a certain number of rocket motors, air bag initiators, and other propellant devices as part of its Quality Assurance/Quality Control (QA/AC) Program. The testing sites include Bay 15, Bay 18, Bay 45, Building 16, Building 19, and the production and development Test Bays 1 and 2 at Building M-85. The amount of energetic material tested ranges from less than one pound to 50,000 pounds per event.

Specific Conditions

4. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #6, #8, #10, #12, #14, and #16 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	19,113.6	57.2
VOC	1,128.0	3.3
CO	19,528.8	57.0
NO_x	180.5	0.6
Lead	439.92	1.27

5. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #6, #8, #10, #12, #14, and #16 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	19,113.60	57.20
Chlorine	5.64	0.02
Hydrogen Chloride	12,928.39	37.33
Hydrogen Fluoride	0.57	0.01

6. The permittee shall not burn in excess of 56,400 pounds of rocket propellant in SN-03 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

7. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #6. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

8. The permittee shall not burn in excess of 325,000 pounds of rocket propellant in SN-03 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

9. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #8. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

10. The permittee shall not burn in excess of 100.0 pounds of air bag propellant in SN-03 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

11. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #10. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

12. The permittee shall not burn in excess of 10,000 pounds of air bag propellant in SN-03 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

13. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #12. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

14. The permittee shall not burn in excess of 625 pounds of Arcadene #428 rocket propellant in SN-03 during any one-hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

15. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #14. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

16. The permittee shall not burn in excess of 6,250 pounds of Arcadene #428 rocket propellant in SN-03 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

17. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #16. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-04
Thermal Treatment Area

Source Description

The Thermal Treatment Area is where Aerojet destroys various scrap propellants and other waste energetic materials. Reactive wastes generated at Aerojet are first assembled in a number of marked accumulation points near the point of generation. The wastes are then collected and transported to the Thermal Treatment Area. The wastes are placed in one of four pits and destroyed by open burning. The Thermal Treatment Area is a permitted hazardous waste treatment facility.

Specific Conditions

18. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #20, #22, #24, #26, #28, and #30 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	3,864.0	152.6
VOC	160.0	7.4
CO	1,264.0	1.3
NO_x	152.8	7.1
Lead	52.00	2.40

19. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #20, #22, #24, #26, #28, and #30 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	3,864.00	152.60
Chlorine	29.60	1.36
Hydrogen Chloride	1,735.20	79.98
Hydrogen Fluoride	7.50	0.01

20. The permittee shall not burn in excess of 8,000 pounds of waste rocket propellant in SN-04 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

21. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #20. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

22. The permittee shall not burn in excess of 737,100 pounds of waste rocket propellant in SN-04 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

23. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #22. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

24. The permittee shall not burn in excess of 8,000 pounds of waste air bag propellant in SN-04 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

25. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #24. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

26. The permittee shall not burn in excess of 235,000 pounds of waste air bag propellant in SN-04 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

27. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #26. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

28. The permittee shall not burn in excess of 5,000 pounds of waste Arcadene #428 rocket propellant in SN-04 during any consecutive one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

29. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #28. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

30. The permittee shall not burn in excess of 10,000 pounds of waste Arcadene #428 rocket propellant in SN-04 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

31. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #30. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-07
Liner Mixer & Spray Machine

Source Description

The Liner Mixer & Spray Machine is used to prepare and apply a liner material to the insides of the rocker motor cases. This equipment is located in Building M-8. The motor cases may be either insulated or bare metal. The liner material is mixed in a closed mixer and then mechanically applied to the interior of the degreased motor case. The batch lining operation is performed one component at a time. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

32. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	16.5	1.6

33. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of [Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	3.30	0.32
Methylene Chloride	16.50	1.58

SN-11
Lacquer Preparation

Source Description

Various liquid explosives are called "lacquer" by Aerojet. Lacquer preparation is done in Building C-56. Preparation of liquid explosive compounds involves the use of organic solvents for stabilizing agents. These solvents include: acetone, methylene chloride, ethyl alcohol, and isopropyl alcohol. Lacquer received from outside venders is premixed with any of those solvents before transportation. These solvents are removed from the lacquer before use by nitrogen gas stripping. Lacquer preparation also includes adding solvents to liquid explosives prior to their use, shipment, and/or long-term storage. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #36, Plantwide Condition #7, and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	40.1	5.1

35. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #36, Plantwide Condition #7, and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	80.07	5.03
Methylene Chloride	40.07	5.03

36. The permittee shall not use in excess of 40,000 pounds of lacquer premix in SN-11 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

37. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #36. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-12
Spray Paint Booth

Source Description

This spray paint booth is located at Building C-60, and only a limited amount of surface coating is performed. Exterior surfaces of exit cones for several types of assembled rocket systems are manually painted with a brush within the booth. This booth also provides supplemental ventilation for insulation bonding, casting, and other activities in this building. In addition to painting, methyl ethyl ketone is used to clean various components prior to further processing. The solvent is applied with wiping cloths. Alternative solvents will also be used. Plantwide Condition #7 lists available solvents and VOC/HAP compositions and Plantwide Condition #11 lists available paint VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

38. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, #11, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	32.3	3.5
Lead	0.01	0.01

39. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, #11, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	5.60	0.15
Chromium Compounds	0.02	0.01
Ethyl Acrylate	2.10	0.06
Ethyl Benzene	4.28	0.67
Formaldehyde	0.26	0.04
Glycol Ethers	8.79	0.54

Pollutant	lb/hr	tpy
Methanol	2.30	0.50
Methyl Ethyl Ketone	20.87	2.08
Methyl Isobutyl Ketone	15.88	1.86
Tetrachloroethylene	1.73	0.38
Toluene	21.50	1.56
1,1,1 Trichloroethane	6.33	1.38
Trichloroethylene	4.03	0.88
Xylene	18.18	2.36

SN-13
Ultrasonic Cleaner

Source Description

The Ultrasonic Cleaner is used to clean/degrease a variety of small parts. The cleaner consists of a one-liter beaker set in an ultrasonic waterbath. This open-top, batch vapor degreaser has a surface area of 1.95 square feet. It is located in Building M-85. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source is not subject to 40 CFR 63, Subpart T because it does not use one of the listed solvents.

Specific Conditions

40. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.6	2.6

41. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 and Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	0.12	0.51

SN-19
Motor Case Cleaner

Source Description

This Motor Case Cleaner is used to clean/degrease rocket motor cases prior to further processing. This source is located in Building 2-SH-14 and has a capacity of 1,200 gallons of solvent. It is an open-top, batch degreaser with a working area of 44.0 square feet. Various solvents will be used in the degreaser. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source is not subject to 40 CFR 63, Subpart T because a halogenated solvent is not used in this equipment.

Specific Conditions

42. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	13.2	10.0

43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	2.64	2.00

SN-20
Solvent Wipe Rooms

Source Description

Two wipe rooms are operated in Building 2-SH-14, and one wipe room is operated in Building 2-SH-15. These rooms are used for motor case degreasing prior to application of the case liner. Other parts cleaning activities are also done. The solvents are manually applied using wiping cloths, and the components are allowed to air-dry. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions. This source is not subject to 40 CFR 63, Subpart T because it is a hand-wipe cleaning activity.

Specific Conditions

44. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	41.3	3.1

45. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ethyl Benzene	8.63	0.63
Formaldehyde	0.35	0.03
Glycol Ethers	4.79	0.37
Methanol	6.90	0.50
Methyl Ethyl Ketone	23.97	1.85
Methyl Isobutyl Ketone	22.43	1.63
Tetrachloroethylene	5.18	0.38
Toluene	8.63	0.63

Pollutant	lb/hr	tpy
1,1,1 Trichloroethane	18.98	1.38
Trichloroethylene	12.08	0.88
Xylene	29.33	2.13

SN-22
Mix Room

Source Description

This mix room, located in Building 2-SH-15, is used to mix ingredients during the preparation of motor case liner materials. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

46. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	11.0	4.5

47. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Butyl Cellosolve	0.09	0.04
1,3 Dioxolane	2.20	0.90
Methylene Chloride	11.00	4.50

SN-24
Spray Paint Booth

Source Description

This paint booth is located in Building 48. It is used to paint various rocket components. Parts cleaning may also be performed in this spray booth. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #11 lists available paint VOC/HAP compositions.

Specific Conditions

48. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	71.0	9.3
Lead	0.01	0.01

49. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	22.40	1.65
Chromium Compounds	0.08	0.01
Ethyl Acrylate	8.40	0.62
Ethyl Bezene	5.60	0.42
Formaldehyde	0.56	0.05
Glycol Ethers	28.19	2.88
Methyl Ethyl Ketone	33.60	2.48
Methyl Isobutyl Ketone	33.60	2.48
Toluene	47.60	3.52

Pollutant	lb/hr	tpy
1,1,1 Trichloroethane	5.35	1.50
Xylene	33.60	2.48

SN-25
Natural Gas-Fired Boilers (7 Units)

Source Description

There are seven natural gas-fired boilers in this group, one in Building 47, two in Building 48, two in Building M-85, one in Building 66, and one in Building M-125. These units produce steam and/or hot water for the production operations at these buildings. The boiler in Building 47 has a capacity of 2.35 MMBTU/hr. Building 48 contains boilers with capacities of 0.75 MMBTU/hr and 1.55 MMBTU/hr. The two in Building M-85 are rated at 2.00 MMBTU/hr each. The one in Building 66 has a capacity of 1.15 MMBTU/hr. The Boiler in Building M-125 is rated at 0.26 MMBTU/hr. All of these units are less than 10 MMBTU/hr each and are therefore not subject to New Source Performance Standard Subpart Dc.

Specific Conditions

50. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.4
SO_2	0.1	0.1
VOC	0.1	0.3
CO	0.9	3.7
NO_x	1.0	4.4

51. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.10	0.40

52. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. Compliance will be demonstrated by only burning natural gas.

SN	Limit	Regulatory Citation
25	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

SN-28
Liner Spray Machine

Source Description

The Liner Spray Machine is used to apply a liner material to the insides of the rocker motor cases. This equipment is located in Building M-2. The motor cases may be either insulated or bare metal. The liner material is mechanically applied to the interior of the degreased motor case. The spray pot for the liner machine has a capacity of 6.0 gallons of solvent and will be cleaned a maximum of once per hour. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source has been replaced by like equipment in 2005.

Specific Conditions

53. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	16.5	1.6

54. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	3.30	0.32
Methylene Chloride	16.50	1.58

SN-30
High Explosive Test Facility

Source Description

Aerojet conducts performance-testing of energetic materials at the High Explosive Test Facility as part of its QA/QC Program. This facility is located in the 16-AT Area of the Highland Industrial Park approximately nine miles from the main Aerojet complex. The explosives are detonated with initiation by impact of a bullet, by falling, or by a cap-initiated high-explosive donor charge. Testing is also initiated by controlled bonfire and under proof-of-fire conditions. Test items range from finished air bag systems to military ordnance to R&D test samples.

Specific Conditions

55. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #57, #59, #61, and #63 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	134.3	13.3
VOC	2.7	0.7
CO	45.4	12.1
NO_x	0.5	0.2
Lead	1.02	0.26

56. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #57, #59, #61, and #63 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	134.30	13.30
Chlorine	0.01	0.01
Hydrogen Chloride	30.03	7.57

57. The permittee shall not use in excess of 300 pounds of high explosives in SN-30 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

58. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #57. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel as required in General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

59. The permittee shall not use in excess of 65,400 pounds of high explosives in SN-30 during any consecutive 12 month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

60. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #59. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel as required in General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

61. The permittee shall not use in excess of 131 pounds of air bag propellants in SN-30 during any one hour period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

62. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #61. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel as required in General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

63. The permittee shall not use in excess of 10,000 pounds of air bag propellants in SN-30 during any consecutive 12 month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

64. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #63. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel as required in General Provision #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-36
Vapor Degreaser

Source Description

This batch vapor degreaser in Building 2-SH-4 is used to remove residual oil and grease from various rocket motor parts. This machine has a capacity of 25 gallons of solvent and a working surface area of 6.9 square feet. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

65. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	2.1	9.0

66. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	0.41	1.80
Methylene Chloride	2.07	9.00

67. This solvent cleaning operation is subject to the provisions of 40 CFR Part 63, Subpart T - National Emission Standards for Halogenated Solvent Cleaning. A copy of 40 CFR Part 63, Subpart T has been included in Appendix B of this permit. The requirements of this subpart are outlined in Plantwide Conditions #24 through #36. [40 CFR. §63.460(a)]

SN-37
Motor Case Cleaning

Source Description

This operation, located in Building 2-SH-2 or Building 2-SH-14, consists of removing residual preservative oil from rocket motor cases. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source is not subject to 40 CFR 63, Subpart T because these provisions do not regulate the use of halogenated solvents in hand-wipe cleaning activities.

Specific Conditions

68. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	29.2	2.6

69. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	5.83	0.51

SN-38
Motor Case Cleaning

Source Description

This operation, located in Building 2-SH-2 or Building 2-SH-14, consists of removing dust from rocket motor cases after they have been grit blasted. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source is not subject to 40 CFR 63 Subpart T because these provisions do not regulate the use of halogenated solvents in hand-wipe cleaning activities.

Specific Conditions

70. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	29.2	2.6

71. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	5.83	0.51

SN-39
Adhesive Primer Operations

Source Description

Adhesive Primer operations are located in Building 2-SH-14. Interior surfaces of clean, dry rocket motor cases are coated with an adhesive primer. Thinning of the primer is done using methyl ethyl ketone. The primer is applied using spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

72. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	33.7	1.0
Lead	0.01	0.01

73. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ethyl Benzene	3.45	0.11
Formaldehyde	0.14	0.01
Glycol Ethers	1.38	0.04
Methanol	2.76	0.08
Methyl Ethyl Ketone	12.28	0.37
Methyl Isobutyl Ketone	8.97	0.27
Tetrachloroethylene	2.07	0.07
Toluene	17.89	0.51
1,1,1 Trichloroethane	7.59	0.23

Pollutant	lb/hr	tpy
Trichloroethylene	4.83	0.15
Xylene	11.73	0.36

SN-40
Adhesive Operations

Source Description

Following the application of the adhesive primer, adhesive is applied to the interior surfaces of the rocket motor cases. Adhesive Operations (SN-40) is located in Building 2-SH-14. The adhesive is applied by spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

74. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	23.8	1.0
Lead	0.01	0.01

75. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ethyl Benzene	1.44	0.09
Formaldehyde	0.06	0.01
Glycol Ethers	0.58	0.04
Methanol	1.15	0.07
Methyl Ethyl Ketone	2.88	0.18
Methyl Isobutyl Ketone	3.74	0.23
Tetrachloroethylene	0.87	0.06
Toluene	19.49	0.74
1,1,1 Trichloroethane	3.17	0.19

Pollutant	lb/hr	tpy
Trichloroethylene	2.02	0.13
Xylene	4.89	0.30

SN-41
Adhesive Operations – Barrier Coating

Source Description

Following the adhesive application, an adhesive barrier coating is applied to the interior surfaces of the rocket motor cases. This operation is performed in Building 2-SH-14. The barrier coating is applied by spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

76. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	28.1	1.3
Lead	0.01	0.01

77. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ethyl Benzene	4.32	0.13
Formaldehyde	0.18	0.01
Glycol Ethers	1.73	0.06
Methanol	3.45	0.11
Methyl Ethyl Ketone	8.63	0.26
Methyl Isobutyl Ketone	11.22	0.34
Tetrachloroethylene	2.59	0.08
Toluene	15.15	0.89
1,1,1 Trichloroethane	9.49	0.29

Pollutant	lb/hr	tpy
Trichloroethylene	6.14	0.19
Xylene	14.67	0.44

SN-42
Liner Application

Source Description

In Building 2-SH-15, a liner material is mechanically applied to the adhesive surface of rocket motor casings. Terpene-based solvents are the primary cleaning compounds used to flush the equipment. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

78. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	12.9	2.4

79. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Butyl Cellosolve	0.11	0.02

SN-43
Spray Paint Booth

Source Description

This paint booth is located in Building D-33. This booth is used to surface coat various rocket components. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #11 lists available paint VOC/HAP compositions.

Specific Conditions

80. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	47.2	16.3
Lead	0.01	0.01

81. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	11.20	5.05
Chromium Compounds	0.04	0.02
Ethyl Acrylate	4.20	1.90
Ethyl Benzene	2.80	1.27
Formaldehyde	0.28	0.13
Glycol Ethers	16.44	6.41
Methyl Ethyl Ketone	16.80	7.58
Methyl Isobutyl Ketone	16.80	7.58
Toluene	23.80	10.74
Xylene	16.80	7.58

SN-44
Floor Operations

Source Description

This source consists of various touch-up painting, bonding, labeling, and cleaning activities located throughout the facility. All of these activities are done by hand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #11 lists available paint VOC/HAP compositions. Plantwide Condition #15 lists available VOC/HAP compositions for miscellaneous materials. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

82. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, #11, #13, #15, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	132.0	34.8

83. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, #11, #13, #15, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	36.05	8.96
Ethyl Acrylate	4.20	2.05
Ethyl Benzene	9.90	2.38
Formaldehyde	2.41	0.45
Glycol Ethers	49.13	12.15
Methanol	10.65	1.51
Methylene Chloride	14.40	11.21
Methyl Ethyl Ketone	52.30	13.19
Methyl Isobutyl Ketone	45.20	13.19

Pollutant	lb/hr	tpy
Phenol	16.33	2.31
Toluene	48.65	15.10
1,1,1 Trichloroethane	94.95	18.67
Xylene	34.55	10.69

SN-45
Motor Case Soak-Out Facility

Source Description

Some rocket motors are rejected due to manufacturing imperfections. Solvents are used in building 2-SH-22 to remove the liner materials in the cases. These cases can then be reprocessed. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. This source is not subject to 40 CFR 63, Subpart T because it does not use one of the listed solvents.

Specific Conditions

84. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	6.0	0.8

85. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	1.20	0.15
Toluene	6.00	0.75

SN-47
Foam-Blowing Operations

Source Description

Various polyurethane foam components are made in Building 2-SH-4. The foam is produced using a two part formulation combined in a 50-50 ratio. The foam is then forced into metal molds where it is cured. The mixer is purged with various solvents when the parts are changed. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

86. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #88, Plantwide Condition #7, and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	5.5	3.9

87. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #88, Plantwide Condition #7, and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	1.10	0.77
Methylene Chloride	5.50	3.83

88. The permittee shall not exceed 40,000 pounds of polyurethane resin parts A & B in SN-47 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

89. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #88. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-48
Phenolic Molding Operations

Source Description

Phenolic Molding Operations are located in Buildings 2-SH-3, 2-SH-14, and M-85. These operations are used to make exit cone inlets, throat insulations, forward and aft ignitor mounts, retention rings, launch motor insulators, rupture disks, nozzle bodies, and various other molded parts at this facility. The resin materials are received in powder form. During parts production the powder is first placed in metal molds, which are inserted in press machines. Electric heat and pressure are then applied to melt the phenolic resin.

Specific Conditions

90. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #92 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

91. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #92 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ammonia	0.01	0.01
Formaldehyde	0.01	0.01
Phenol	0.06	0.07

92. The permittee shall not process more than 500,000 pounds of phenolic resin in SN-48 and SN-49 combined during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E,]

93. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #92. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-49
Hockey Puck Manufacturing

Source Description

Certain rocket components manufactured by Aerojet are phenolic billets. These parts, commonly called "hockey pucks," are produced using a press machine at Building 2-SH-3. Phenolic resin molding compounds are also used in this operation. The powdered resin material is conveyed into a bin, and then loaded into a consolidation billet press. Heat and pressure are applied to form the "hockey pucks."

Specific Conditions

94. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #92 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

95. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #92 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ammonia	0.01	0.01
Formaldehyde	0.01	0.01
Phenol	0.06	0.07

SN-50
Rubber Molding Operations

Source Description

Three presses are operated at Building 2-SH-4 for the manufacture of rubber insulators. A carbon-filled urethane rubber is used as the raw material. The rubber compounds are mixed and then injected into the molding presses. Various solvents are used to clean the presses and mixing equipment. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

96. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	11.0	1.8

97. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	11.00	1.80
Butyl Cellosolve	0.09	0.01
Methylene Chloride	11.00	1.80

SN-51
Extruder Operations

Source Description

Extruder machines are operated at Building E-39 and Building M-2 to process various liquid plasticizers and propellant mixes into pellets and other solid forms.

Specific Conditions

98. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #99. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	8.0	1.5

99. The permittee shall not use in excess of 2,920 pounds of Dioctyl Adipate in SN-51 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

100. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #99. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E,]

SN-52
Sling Liner Machines

Source Description

Two sling liner machines are operated at Building 2-SH-15 to apply a liner to the inside of rocket motor cases. The liner is a solvent-free, carbon-filled polyurethane rubber. The rubber solution is pumped through a rotating head which slings the liner onto the interior of the motor case. The lined components are then placed in a curing oven. Once cured, the rocket motor cases are subjected to additional processing. The machines are cleaned using various solvents. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

101. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	16.5	0.5

102. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Butyl Cellosolve	0.13	0.01
Methylene Chloride	16.50	0.45

SN-53
Barrier Coating

Source Description

Various rocket motor cases are lined with an epoxy-bonded insulation. Once, insulated, a barrier coat is applied over the insulation at Building 2-SH-2. The surface coating is applied by hand using a brush. The motor cases are then oven cured. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

103. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	11.4	0.9

104. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Butyl Cellosolve	0.05	0.01
Methyl Ethyl Ketone	0.69	0.14
Methyl Isobutyl Ketone	0.34	0.07
Toluene	7.22	0.07
Xylene	0.57	0.11

SN-54
Squib Powder Manufacturing

Source Description

Squibs are small explosive devices. The energetic material for these units is manufactured in the Hood Room at Building M-85. A slurry of ground potassium perchlorate, titanium powder, and a solvent is hand-mixed in a pan. The slurry is then air-dried underneath the hood. After the composition has dried, it is packaged for use in the squib loading area. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

105. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.9	0.1

106. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	1.65	0.03

SN-55
MLRS Igniter Assembly

Source Description

Igniter assemblies for the MLRS rocket system are manufactured at Building M-85. Once prepared, the igniter units are sealed with "Egyptian" lacquer, a shellac-like material. The sealing operation is performed under a vent hood.

Specific Conditions

107. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #109 and #111 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	8.5	0.2

108. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions #109 and #111 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Methyl Isobutyl Ketone	1.28	0.02
Toluene	2.98	0.05
Xylene	2.98	0.05

109. The permittee shall not use in excess of 30 gallons of Egyptian lacquer in SN-55 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

110. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #109. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

111. The permittee shall not exceed the VOC and HAP content listed in the following table at source SN-55. The maximum density of the surface coating product is 8.50 pounds per gallon. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Component	Weight Percent
VOC	100%
Methyl Isobutyl Ketone	15.0%
Toluene	35.0%
Xylene (mixed isomers)	35.0%

112. The permittee shall maintain records and MSDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #111. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E,]

SN-56
MK 104 Sample Preparation

Source Description

Material samples from the nozzle assembly for the MK 104 missile are collected as part of the manufacturing process. These samples are obtained at Building 2-SH-3 and/or Building 2-SH-13 for physical testing in the Chemistry Lab in Building 17. Sample collection consists of cutting and grinding the nozzle assembly in order to obtain the desired materials. The grinding operations, which generate particulate emissions, are performed under a vent hood.

Specific Conditions

113. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.0	4.4

114. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.00	4.40

SN-57
Air Bag R&D Laboratory

Source Description

Aerojet manufactures small pellets which are commonly referred to as "Auto-Ignition Pills" (AIPs). The pills act as safety devices by preventing explosion of the air bag units in the event of a fire. Research and Development of new formulations for AIPs, "gas-generating" pills, and other similar products are conducted in Building M-85 and M-2. These activities are performed on an intermittent basis depending on production requirements.

Specific Conditions

115. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	1.0	1.0

SN-58
Pill Manufacturing

Source Description

The production of Auto-Ignition Pills (AIPs) and other products used in the manufacture of air bag systems may be performed in Buildings M-85, D-29, A-11, and/or M-2. In these operations, dry ingredients are combined in a solvent-based slurry and mixed in a ball mill. The slurry is then dried. Once dry, the AIP powder formulations are packaged and transferred to the pill press. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

116. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	22.0	18.0

117. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	22.00	18.00
Methylene Chloride	22.00	18.00

SN-59
Air Bag Propellant Manufacturing

Source Description

Various proprietary propellant formulations for air bag systems are manufactured at Buildings M-2, M-125, and Building 17. Dry ingredients for air bag propellants are screened, combined in a slurry, and mixed in a granulator. The slurry is then dried using a vibrating fluidized-bed dryer. Once dry, the propellant formulations are packaged and transferred to various departments for further processing. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

118. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.0	4.4
VOC	55.0	6.3

119. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.00	4.40
Acetone	55.00	6.30
Methylene Chloride	55.00	6.30
Methyl Ethyl Ketone	55.00	6.30

120. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. Compliance will be demonstrated by only burning natural gas.

SN	Limit	Regulatory Citation
59	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

121. The permittee shall conduct weekly observations of the opacity from source SN-59 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.

SN-62
Mixing Operations

Source Description

Aerojet manufactures energetic materials which will perform in specifically engineered ways. These materials are formulated in the mixing operations. The mixing process involves adding various dry ingredients to a particular mixer unit in an orderly, controlled manner and then consolidating these ingredients into a uniform formulation. Mixer units are operated at Buildings A-2, A-3, A-11, B-22, B-23, B-24, B-25, C-51, and M-125. The mixer capacities range from one-gallon to 420-gallons. On occasion, various ingredients are mixed in solvents as a safety precaution. During these mixing operations, a vacuum is employed to remove the solvent compounds. The mix ingredients may also be packaged in a variety of solvents. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

122. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	11.0	0.9

123. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	11.00	0.90
Methylene Chloride	11.00	0.90

SN-63
Nitramines and Explosives Dryer

Source Description

Various nitramines and explosive compounds are used in Aerojet's production operations. When received from the vendor, these materials are wetted with isopropyl alcohol which acts as a stabilizer. A rotary vacuum dryer is operated at Building C-58 in order to dry the energetic materials prior to their use. The explosive compounds are received in plastic bags and are manually opened. The materials are placed in the dryer and the building is secured. The dryer is then heated using a hot-water jacket, while a vacuum pump simultaneously exhausts the dryer chamber. During operation, the dryer chamber is periodically rotated to ensure thorough drying of its contents. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

124. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	18.0	0.5

SN-64
Vacuum Ovens

Source Description

Vacuum ovens are operated at Buildings 2-SH-4 and A-3. The units are utilized to dry various production materials prior to use. The compounds, which are wetted with either water or solvent, are placed in pans and then inserted into a particular oven. A vacuum is then applied to the oven in order to extract the water or solvent from the process material. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

125. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	11.0	0.9

126. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	11.00	0.90
Methylene Chloride	11.00	0.90
Methyl Ethyl Ketone	11.00	0.90

SN-65
Negative Pressure Tables

Source Description

Exit cones for certain rocket units receive a protective primer wash prior to further processing. The primer is applied by hand using a brush. Negative pressure tables are used when applying the primer wash in Building 2-SH-3. These units function as vent hoods for heavier-than-air volatile materials. A fan draws the fumes through a port in the bottom of the table. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #13 lists available paint VOC/HAP compositions.

Specific Conditions

127. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	25.0	4.1

128. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	5.60	0.20
Ethyl Acrylate	2.10	0.08
Ethyl Benzene	1.40	0.05
Formaldehyde	0.14	0.01
Glycol Ethers	6.39	0.26
Methylene Chloride	11.00	3.60
Methyl Ethyl Ketone	8.40	0.30
Methyl Isobutyl Ketone	8.40	0.30
Toluene	11.90	0.43
Xylene	8.40	0.30

SN-67
Grit Blast Machines

Source Description

The grit blast machines are used to prepare the interior and/or exterior surfaces of rocket motor cases and other components for the subsequent application of various surface coatings. The machines use sand, coal slag, and/or steel grit as the abrasive materials. Two units are located in Building 2-SH-2, two are located in Building 2-SH-3, one is located in Building 2-SH-4, five are located in Building 2-SH-14, one is located in Building M-85, one is located in Building M-82, and one is located in Building M-2. An emissions bubble is in effect for the grit blast machines. The permittee is allowed to relocate this equipment throughout the facility provided that the permittee complies with all applicable requirements of §26.802 of Regulation #26.

Specific Conditions

129. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #133 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	41.5	6.2

130. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #133 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	41.50	6.20

131. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method.

SN	Limit	Regulatory Citation
67	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

132. The permittee shall conduct weekly observations of the opacity from each building at source SN-67 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.

133. The permittee shall not exceed 300,000 pounds of blasting media in SN-67 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

134. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #133. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

SN-69
Natural Gas Combustion Equipment

Source Description

Aerojet operates natural gas-fired combustion units in Buildings M-142, M-125, 2-SH-15, and 2-SH-2. The boilers are used to produce the steam and/or hot water for the production operations in these buildings. In addition, two small natural gas-fired engines power an "ammonia chiller system" at Building 2-SH-2. Building M-142 uses one 0.15 MMBTU/hr unit. Building M-125 uses two 2.10 MMBTU/hr units and one 2.0 MMBTU/hr unit. Building 2-SH-15 uses three 1.34 MMBTU/hr units. Building 2-SH-2 uses one 2.00 MMBTU/hr unit and two 0.13 MMBTU/hr units (chiller system). All of these units are less than 10 MMBTU/hr each and are therefore not subject to New Source Performance Standard Subpart Dc.

Specific Conditions

135. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.2	0.6
SO_2	0.1	0.3
VOC	0.1	0.4
CO	1.1	4.7
NO_x	1.3	5.6

136. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by burning only natural gas and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.20	0.60

137. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. Compliance will be demonstrated by only burning natural gas.

SN	Limit	Regulatory Citation
69	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

SN-71
Gasoline Storage Tank

Source Description

Aerojet operates one above ground tank for gasoline storage. The vessel is located near Building 1. The storage tank has a capacity of 2,000 gallons.

Specific Conditions

138. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #139 and equipment limitations. [§19.501 et seq. of Regulation #19and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.2	0.9

139. The permittee shall not exceed 50,000 gallons of gasoline in SN-71 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

140. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #139. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

141. The permittee shall keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept on site and be provided to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR §60.116b(b)]

SN-72
Diesel Fuel Storage Tanks

Source Description

Aerojet operates three above-ground tanks for the storage of diesel fuel. The vessels are located near Building 1. The tanks have a capacity of 500 gallons each.

Specific Conditions

142. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #143 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	0.1	0.1

143. The permittee shall not exceed 40,000 gallons of diesel fuel in SN-72 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

144. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #143. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

145. The permittee shall keep records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels. Records shall be kept on site and be provided to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR §60.116b(b)]

SN-73
Nitramines and Explosives Grinder

Source Description

Various nitramines and explosive compounds are conveyed to Building C-57 for particle-size reduction. A grinder unit is operated for this purpose. Once prepared, the ground energetic materials are utilized for the production of propellants and/or explosives.

Specific Conditions

146. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.5

147. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.10	0.50

148. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. Compliance with this condition will be demonstrated by the permittee's established standard operating procedures for processing energetic materials."

SN	Limit	Regulatory Citation
73	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

SN-74
Solvent Wipe Rooms

Source Description

Aerojet operates solvent wipe rooms at Building 2-SH-13 and Building M-2. Each facility consists of a series of enclosed rooms/bays equipped with vent hoods. The wipe rooms are used for the hand-wipe degreasing of the rocket motor cases before and after installation of the case rubber. Several solvents are used as the cleaning agents and are manually applied using spray bottles and/or wiping cloths. This source is not subject to 40 CFR 63, Subpart T because it is a hand-wipe cleaning activity.

In addition, the wipe rooms are utilized during the application of primer and adhesive to the motor cases. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

149. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	59.3	7.2
Lead	0.03	0.01

150. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Ethyl Benzene	8.63	1.59
Formaldehyde	0.35	0.07
Glycol Ethers	3.45	0.64
Methanol	6.90	1.28
Methyl Ethyl Ketone	23.97	3.68
Methyl Isobutyl Ketone	22.43	4.14

Pollutant	lb/hr	tpy
Tetrachloro-ethylene	5.18	0.96
Toluene	26.68	2.61
1,1,1 Trichloroethane	18.98	3.50
Trichloroethylene	12.08	2.23
Xylene	29.33	5.41

SN-75
Sling Liner Machine

Source Description

The interior or the PAC-2 rocket motor case is lined with specially-formulated carbon-filled polyurethane coatings in Building M-2. Two successive coats of material ("pot liner" and "full coating liner") are applied. The coating is fed through a traveling wand to a rotating applicator head. The spinning head slings the liner onto the inside of the motor case. During liner application, the wand is slowly drawn through the case to provide a uniform coating. The lined rocket motor cases are then cured in an oven. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

151. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	16.5	0.5

152. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Butyl Cellosolve	0.11	0.01
Methylene Chloride	16.50	0.41

SN-76
Adhesive Primer Operations

Source Description

Adhesive Primer Operations are located in Buildings 2-SH-13 and/or M-2. Interior surfaces of clean, dry rocket motor cases are coated with an adhesive primer. Thinning of the primer is done using methyl ethyl ketone. The primer is applied using spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

153. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	27.0	0.4

154. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	2.89	0.04
Methyl Ethyl Ketone	5.38	0.08
Toluene	14.44	0.20

SN-77
Adhesive Operation

Source Description

Following the application of the adhesive primer, adhesive is applied to the interior surfaces of the rocket motor cases. Adhesive Operations (SN-77) is located in Buildings 2-SH-13 and/or M-2. The adhesive is applied by spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

155. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	21.5	0.5

156. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	3.61	0.07
Toluene	18.05	0.33

SN-78
Adhesive Operation – Barrier Coating

Source Description

Following the adhesive application, a two-part adhesive barrier coating is applied to the interior surfaces of the rocket motor cases. This operation is performed in Buildings 2-SH-13 and/or M-2. The barrier coating is applied by spray nozzles mounted on an automated, traveling wand. Plantwide Condition #7 lists available solvents and VOC/HAP compositions. Plantwide Condition #19 lists available adhesive VOC/HAP compositions.

Specific Conditions

157. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	21.0	0.6

158. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #17, and #19 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
1,3 Dioxolane	2.17	0.08
Ethyl Benzene	1.36	0.02
Formaldehyde	0.03	0.01
Methyl Ethyl Ketone	0.27	0.01
Methyl Isobutyl Ketone	8.17	0.12
Toluene	10.83	0.38
Trichloroethylene	4.09	0.06
Xylene	5.45	0.08

SN-80
Medium Warhead Production

Source Description

The inside surface of the warhead cases are coated with a thin film of a Teflon-based release-agent. A propellant mixture is then cast (i.e., loaded) into the prepared cases in Building C-50. The units are subsequently cured in a steam or hot water-heated oven in Building C-61.

Specific Conditions

159. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	6.6	2.0

SN-81
Diesel-Powered Pump Rocket Motor Case Washout Facility

Source Description

Solid propellant is removed from off-specification/ unusable rocket motor cases so that the metal cases can be reused. The propellant is extracted using a high-pressure spray of water. The pump for the "hydrolance" machine is powered by a diesel-fired internal combustion engine. This pump has a maximum power rating of 300 hp and consumes 15 gallons of fuel per hour.

Specific Conditions

160. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #164 and equipment limitations. [§19.501 et seq. Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.7	2.9
SO_2	0.7	2.7
VOC	0.8	3.3
CO	2.0	8.8
NO_x	9.3	40.8

161. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition #164 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.70	2.90

162. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method.

SN	Limit	Regulatory Citation
81	20%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

163. The permittee shall conduct daily observations of the opacity from source SN-81 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.

164. The permittee shall not use in excess of 131,400 gallons of diesel fuel in SN-81 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

165. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #164. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

166. The permittee shall keep records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Records shall be kept on site and be provided to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR §60.116b(b)]

SN-82
New Air Bag Propellant Manufacturing Operations

Source Description

Various proprietary propellant formulations for air bag systems are manufactured at Buildings A-3, A-4, A-5, A-6, A-8, A-9, A-14, 70, 71, and 74. Dry ingredients for air bag propellants are screened, combined with solvents in a slurry, and mixed in a granulator. The slurry is then dried using a vibrating fluidized-bed dryer. Once dry, the propellant formulations are packaged and transferred to various departments for further processing. Plantwide Condition #7 lists available solvents and VOC/HAP compositions.

Specific Conditions

167. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.0	4.4
VOC	55.0	6.3

168. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Condition #7 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.00	4.40
Acetone	55.00	6.30
Methylene Chloride	55.00	6.30
Methyl Ethyl Ketone	55.00	6.30

169. Visible emissions may not exceed the limits specified in the following table of this permit as measured by EPA Reference Method. Compliance will be demonstrated by only burning natural gas.

SN	Limit	Regulatory Citation
82	5%	18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

170. The permittee shall conduct weekly observations of the opacity from source SN-82 and keep a record of these observations. If the permittee detects visible emissions, the permittee must immediately take action to identify and correct the cause of the visible emissions. After implementing the corrective action, the permittee must document that the source complies with the visible emissions requirements. The permittee shall maintain records of the cause of any visible emissions and the corrective action taken. The permittee must keep these records onsite and make them available to Department personnel upon request.

SN-83
Spray Paint Booth

Source Description

This enclosed booth, located in Building M-2, is used to apply a primer, top coat, and specialty markings to the rocket motor cases. The coatings are applied using an air-assisted high-volume low-pressure (HVLP) paint gun. The booth is equipped with high-density dust filters for the control of paint over-spray. Plantwide Condition #7 lists available solvents and VOC/HAP compositions, and Plantwide Condition #11 lists available paint VOC/HAP compositions.

Specific Conditions

171. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
VOC	47.2	6.7
Lead	0.01	0.01

172. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Plantwide Conditions #7, #9, and #11 and equipment limitations. [§18.801 of Regulation #18 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
Acetone	11.20	1.12
Chromium Compounds	0.04	0.01
Ethyl Acrylate	4.20	0.42
Ethyl Benzene	2.80	0.28
Formaldehyde	0.28	0.03
Glycol Ethers	12.60	1.26
Methyl Ethyl Ketone	16.80	1.68
Methyl Isobutyl Ketone	16.80	1.68
Toluene	23.80	2.38

Pollutant	lb/hr	tpy
Xylene	16.80	1.68

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Aerojet - General Corporation will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [§19.704 of Regulation #19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [§19.410(B) Regulation #19 and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [§19.702 of Regulation #19 and/or §18.1002 of Regulation #18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [§19.702 of Regulation #19 and/or §18.1002 of Regulation #18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

    a. Sampling ports adequate for applicable test methods;
    b. Safe sampling platforms;
    c. Safe access to sampling platforms; and
    d. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [§19.303 of Regulation #19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation #26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

7. The permittee shall not use in excess of the solvent throughput rates or exceed the VOC and HAP content limits listed in the following table at sources SN-07, SN-11, SN-12, SN-13, SN-19, SN-20, SN-22, SN-24, SN-28, SN-36 through SN-45, SN-47, SN-50, SN-52, SN-53, SN-54, SN-58, SN-59, SN-62 through SN-65, SN-74 through SN-78, SN-80, SN-82, and SN-83. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Solvent	Total lb/year	VOC Content
Acetone	72,000	Non-VOC
CompSol	261,800	80% Bromochloromethane 20% 1,3 Dioxolane
Ethanol	20,000	100% VOC
Freon TF	121,000	Non-VOC
Heptane	5,000	100% VOC
Isopropyl Alcohol	72,600	100% VOC
Methylene Chloride	183,100	Non-VOC
Methyl Ethyl Ketone	30,700	100% VOC
Mono-Ethanolamine	11,460	1% Di-Ethanolamine
N-Propyl Bromide	261,800	Non-VOC
PF-55	246,800	90% Non-reactive (NR) VOC 10% VOC
Terpene-based Solvents	61,200	99.2% NR VOC 0.8% Glycol Ether
Toluene	32,800	100% VOC
1,1,1 Trichloroethane	41,300	Non-VOC

8. The permittee shall maintain records and MSDS sheets which demonstrate compliance with the throughput and formulation limits set in Plantwide Condition #7. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

9. The permittee shall not use in excess of 46,366 pounds of surface coating materials (primers, paints, catalysts, thinners, and related compounds) in SN-12, SN-24, SN-43, SN-44, SN-65, or SN-83 combined during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

10. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Specific Condition #9. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

11. The surface coating compounds processed at sources SN-12, SN-24, SN-43, SN-44, SN-65, and SN-83, shall not exceed the VOC and HAP content listed in the following table. The maximum density of the paint is 14.00 pounds per gallon. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	Weight Percent
VOC	100%
Acetone*	40.0%
Chromium Compounds	11.0%
Ethyl Acrylate	15.0%
Ethyl Benzene	10.0%
Formaldehyde	1.0%
Glycol Ethers	45.0%
Lead Compounds	0.8%
Methyl Ethyl Ketone	60.0%
Methyl Isobutyl Ketone	60.0%
Toluene	85.0%
Xylene	60.0%

* Not a VOC

12. The permittee shall maintain records and MSDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #11. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

13. The permittee shall not use in excess of 20,022 pounds of miscellaneous materials (inks, spray paints, mold release agents, contact adhesives, sealants, and related compounds) in SN-44 during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

14. The permittee shall maintain records which demonstrate compliance with the throughput limit set in Plantwide Condition #13. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

15. The miscellaneous materials processed at SN-44 shall not exceed the VOC and HAP content limits listed in the following table. The maximum density of the miscellaneous materials is 14.20 pounds per gallon. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	Weight Percent
VOC	100%
Acetone*	35.0%
Ethyl Benzene	10.0%
Formaldehyde	3.0%
Glycol Ethers	45.0%
Methanol	15.0%
Methyl Ethyl Ketone	50.0%
Methyl Isobutyl Ketone	40.0%
Methylene Chloride*	40.0%
Phenol	23.0%
Toluene	35.0%
1,1,1 Trichloroethane	95.0%
Xylene	25.0%

16. The permittee shall maintain records and MSDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #15. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

17. The permittee shall not use in excess of 26,531 pounds of adhesives, adhesive primers, adhesive catalysts, barrier coatings, and related compounds in SN-12, SN-20, SN-39, SN-40, SN-41, SN-44, SN-53, SN-74, SN-76, SN-77 and/or SN-78 combined during any consecutive twelve month period. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

18. The permittee shall maintain records which demonstrate compliance with the throughput limits set in Plantwide Condition #17. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

19. The adhesives, adhesive primers, adhesive catalysts, barrier coatings, and related compounds processed at sources SN-39, SN-40, SN-41, SN-44, SN-53, SN-74, SN-76, SN-77 and SN-78 shall not exceed the VOC and HAP content limits listed in the following table. The maximum density of the adhesive products is 11.50 pounds per gallon. [§19.501 et seq. of Regulation #19 and 40 CFR Part 52 Subpart E]

Component	Weight Percent
VOC	100%
Ethyl Benzene	25.0%
Formaldehyde	1.0%
Glycol Ethers	10.0%
Lead Compounds	5.0%
Methanol	20.0%
Methyl Ethyl Ketone	50.0%
Methyl Isobutyl Ketone	65.0%
Tetrachloroethylene	15.0%
Toluene	50.0%
1,1,1 Trichloroethane*	55.0%
Trichloroethylene	55.0%

Component	Weight Percent
Xylene	85.0%

* Not a VOC

20. The permittee shall maintain records and MSDS sheets which demonstrate compliance with the formulation limits set in Plantwide Condition #19. These records may be used by the Department for enforcement purposes. Records shall be updated on a monthly basis, shall be kept on site, and shall be provided to the Department in accordance with General Condition #7. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E]

21. The permittee shall be allowed to trade emissions within the permitted facility without requiring a permit modification. The permittee shall provide written notice to the Department a minimum of seven (7) days prior to any such emissions trade. This notice shall provide the following information: [§26.803 and §26.804 of Regulation #26]

    1. The date when the proposed change(s) will occur,
    2. A description of the change(s),
    3. The pollutants currently emitted which are subject to the emissions trade,
    4. Any associated change(s) in facility emissions, and
    5. The permit requirements with which the source will comply.

    The notice shall also refer to the emissions trading provisions of the State Implementation Plan (SIP) with which the source will comply, and that provide for the emissions trade. Absent any notification to the contrary, after seven days, the facility may proceed with the emissions trade without receiving prior written approval from the Air Division.

22. The concentrations of HAPS and/or other regulated air contaminants in the chemicals processed on-site shall not exceed the weight-percent values specified in Plantwide Conditions #7, #11, #15, and #19. The substitution of alternative brands or formulations of cleaning solvents, surface coating materials, adhesives and/or other process chemicals, which contain different components in amounts equal to or less than the air contaminant and HAP contents described therein, is acceptable, provided that The American Conference of Governmental Industrial Hygienist (ACGIH) Threshold Limit Values (TLVs), as listed on the current MSDS or in the ACGIH handbook titled "Threshold Limits Values (TLVs) and Biological Exposure Indices (BEIs)" of the new components must be equal to or higher than the TLVs of the compounds for which the substitutions are being made. These substitutions can be performed on a one-to-one basis or on a multiple substitution basis. The substitution values shall be documented in accordance with Plantwide Condition #25 below. These records shall be maintained on-site and shall be made available to Department personnel upon request. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

23. The permittee shall maintain records which demonstrate compliance with the requirements for chemical substitutions specified in Plantwide Condition #22 above. These documents shall list the name of each HAP and/or other air contaminant contained in the material formulation, the weight-percent of each compound, and its TLV. The records shall be updated once per year and any time when a different process chemical is utilized. The documents shall be maintained on-site and shall be made available to Department personnel upon request. [§19.705 of Regulation #19 and 40 CFR Part 52 Subpart E,]

40 CFR 63 Subpart T (Halogenated Solvents) Requirements

24. Any batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, or chloroform, or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight as a cleaning or drying agent is subject to the requirements of this Subpart.[§19.304 of Regulation #19 and 40 CFR §63.460(a)]

25. The permittee shall maintain a log of solvent additions and deletions for SN-36. [§19.304 of Regulation #19 and 40 CFR §63.464(a)(1)(i)]

26. The permittee shall ensure that the emissions from SN-36 are equal to or less than 30.7 pounds per square foot per month on a rolling three-month basis. [§19.304 of Regulation #19 and 40 CFR §63.464(a)(1)(ii)]

27. The permittee shall demonstrate compliance with Plant-wide Condition #26 on a monthly basis as described in 40 CFR §63.465(b) and (c). [§19.304 of Regulation #19 and 40 CFR §63.464(b)]

28. If the applicable 3-month rolling average emission limit is not met, then an exceedance has occurred. All exceedances shall be reported as required in §63.468(h). [§19.304 of Regulation #19 and 40 CFR §63.464(c)]

29. The permittee shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month immediately prior to calculating monthly emissions as specified in §63.465(c). The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations. [§19.304 of Regulation #19 and 40 CFR §63.465(b)]

30. The permittee shall on the first operating day of every month determine solvent emissions at SN-36. [§19.304 of Regulation #19 and 40 CFR §63.465(c)(1)]

31. The permittee shall on the first operating day of every month determine the monthly solvent emissions, Ei, for the previous monthly reporting period using Equation #2 in Subpart T, and the records of all solvent additions and deletions for the reporting period. [§19.304 of Regulation #19 and 40 CFR §63.465(c)(1)]

32. The permittee shall determine the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, SSRi, for the previous monthly reporting period using the method specified in §63.465(c)(2)(i) or §63.465(c)(2)(ii). [§19.304 of Regulation #19 and 40 CFR §63.465(c)(2)]

33. The permittee shall on the first operating day of every month determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using Equation #4 in Subpart T. [§19.304 of Regulation #19 and 40 CFR §63.465(c)(3)]

34. The permittee shall maintain records of the following items either in electronic or written format for a period of 5 years: [§19.304 of Regulation #19 and 40 CFR §63.467(c)]

    1. The dates and amounts of solvent that are added to the solvent cleaning machine.

    2. The solvent composition of wastes removed from the cleaning machine as determined using the procedure described in §63.465(c)(2).

    3. Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

35. The permittee shall submit a solvent emission report every year. This solvent emission report shall contain the following information: [§19.304 of Regulation #19 and 40 CFR §63.468(g)]

    1. The size and type of each unit subject to this subpart.

    2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.

    3. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in §63.465(c).

36. The permittee shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, and exceedance occurs. Once an exceedance has occurred, the permittee shall follow a quarterly reporting format until a request to reduce reporting frequency under §63.468(i) is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the following information: [§19.304 of Regulation #19 and 40 CFR §63.468(h),]

    1. Information on the actions taken to comply with §63.464(a)(1). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

    2. If an exceedance has occurred, the reason for the exceedance and description of the actions taken.

    3. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired or adjusted, such information shall be stated in the report.

40 CFR 63 Subpart GG (Aerospace) Requirements

37. All wastes that are determined to be hazardous wastes under the Resource Conservation and Recovery Act of 1976 (RCRA) as implemented by 40 CFR parts 260 and 261, and that are subject to RCRA requirements as implemented in 40 CFR parts 262 through 268, are exempt from the requirements of this subpart. [§19.304 of Regulation #19 and 40 CFR §63.741(e)]

38. Any specialty coatings used by the facility are exempt from the requirements of this subpart. These specialty coatings must meet the definition set forth in 40 CFR §63.742. A listing of all specialty coatings used at this facility and the justification why it is exempt must be kept on site and made available to Department personnel upon request. [§19.304 of Regulation #19 and 40 CFR §63.741(f)]

39. Any adhesives, adhesive primers, and sealants used by the facility are exempt from the requirements of this subpart. Subpart GG does not regulate research and development, quality control, and laboratory testing activities. The requirements of this subpart do not apply to primers, topcoats, cleaning solvents, and other process chemicals that contain HAP and VOC concentrations at less than 0.1 percent for carcinogens and 1.0 percent for non-carcinogens. [§19.304 of Regulation #19 and 40 CFR §63.741(f)]

40. The requirements for primers and topcoats specified in §63.745 and §63.747 do not apply to the use of low-volume coatings in these categories for which the annual total of each separate formulation used at the facility does not exceed 50 gallons, and that the combined annual total of all such primers and topcoats used at the facility does not exceed 200 gallons. Primers and topcoats exempted under §63.741(f), §63.745(f)(3), and §63.745(g)(4) are not included in the 50 gallon and 200 gallon limits. [§19.304 of Regulation #19 and 40 CFR §63.741(g)]

41. The permittee shall comply with the requirements of Plant-wide Conditions #42, #43, and #44 unless the cleaning solvent used is identified in Table 1 of Subpart GG or contains HAP and VOC concentrations below the de minimis levels specified in §63.741(f). [§19.304 of Regulation #19 and 40 CFR §63.744(a)]

42. The permittee shall place solvent-laden cloth, paper, or any other absorbent applicators used for cleaning aerospace vehicles or components in bags or other closed containers immediately after use. The permittee shall ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. The permittee shall use bags and containers of such design as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement. [§19.304 of Regulation #19 and 40 CFR §63.744(a)(1)]

43. The permittee shall store fresh and spent cleaning solvents used in aerospace cleaning operations in closed containers. [§19.304 of Regulation #19 and 40 CFR §63.744(a)(2)]

44. The permittee shall conduct the handling and transfer of cleaning solvents used in aerospace cleaning operations to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. [§19.304 of Regulation #19 and 40 CFR §63.744(a)(3)]

45. The following cleaning operations are exempt from the requirements of §63.744(b): cleaning and surface activation prior to adhesive bonding. [§19.304 of Regulation #19 and 40 CFR §63.744(e)]

46. Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coating or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalents, specified in the following methods. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC concentrations below the de minimis levels specified in §63.741(f) are exempt from the requirements of this condition. [§19.304 of Regulation #19 and 40 CFR §63.744(c)]

    1. Non-atomized Cleaning: The permittee shall clean the spray gun by placing solvent in the pressure pot and forcing the solvent through the gun with the atomizing cap in place. The practice must be performed without the use of atomizing air pressure. The solvent must be directed into a waste container. The container must be kept closed when not in use. [§19.304 of Regulation #19 and 40 CFR §63.744(c)(2)]

    2. Disassembled Gun Cleaning: The permittee shall clean the spray gun by disassembling the unit and cleaning it by hand in a vat. As an alternative, the spray gun may be cleaned by soaking the components in a vat. The solvent container must be kept closed except during use (when cleaning by hand) or when inserting or removing the spray gun parts (if cleaning is accomplished by soaking). The vat must be kept closed when soaking the components. [§19.304 of Regulation #19 and 40 CFR §63.744(c)(3)]

    3. Atomized Cleaning: The permittee shall clean the spray gun by placing solvent in the pressure pot and forcing the solvent through the unit using air pressure. The resulting atomized spray must be directed into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions. [§19.304 of Regulation #19 and 40 CFR §63.744(c)(4)]

47. Each owner or operator of a flush cleaning operation subject to this subpart (excluding those in which Table 1 or semi-aqueous cleaning solvents are used) shall empty the used cleaning solvent each time aerospace parts or assemblies, or components of a coating unit (with the exception of spray guns) are flush cleaned into an enclosed container or collection system that is kept closed or into a system with an equivalent emission control. The container or collection system shall be kept closed except when in use. [§19.304 of Regulation #19 and 40 CFR §63.744(d)]

48. The permittee of each facility subject to this subpart that produces a waste that contains HAP shall conduct the handling and transfer of the waste to, or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. [§19.304 of Regulation #19 and 40 CFR §63.748, except as provided in §63.741(e)]

49. Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility. [§19.304 of Regulation #19 and 40 CFR §63.752(b)(1),]

50. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations, the permittee shall record: [§19.304 of Regulation #19 and 40 CFR §63.752(b)(2)]

    i. The name of each cleaning solvent used;

    ii. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and

    iii. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

51. For each cleaning solvent used for the exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b), the permittee shall record: [§19.304 of Regulation #19 and 40 CFR §63.752(b)(4)]

    i. The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and

    ii. A list of the processes set forth in §63.744(e) to which the cleaning operation exemption applies.

52. The permittee of a cleaning operation subject to this subpart shall submit semiannual reports occurring every 6 months from the date of the notification of compliance status that identify the following: [§19.304 of Regulation #19 and 40 CFR §63.753(b)(1)]

    i. Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;

    ii. A list of any new cleaning solvents used for hand-wipe cleaning in the previous six months, and, as appropriate, their composite vapor pressure or a notification that they comply with the composition requirements specified in §63.744(b)(1);

    iii. Any instance where a noncompliant spray gun cleaning method is used; and

iv. If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

Acid Rain (Title IV)

53. The Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. [§26.701 of Regulation #26 and 40 CFR 70.6(a)(4)]

Title VI Provisions

54. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

    a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
    c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

55. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]

    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
    b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

56. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

57. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

58. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

Permit Shield

59. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated December 10, 2004.

Applicable Regulations

Source No.	Regulation	Description
Facility	18	Air Code
Facility	19	SIP
Facility	26	Title V
Facility	40 CFR 60 Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Facility	40 CFR 63 Subpart A	General Provisions of the NESHAPs for Source Categories
SN-36	40 CFR 63 Subpart T	National Emission Standards for Halogenated Solvent Cleaning
Facility	40 CFR 63 Subpart GG	National Emission Standards for Aerospace Manufacturing and Rework Facilities

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated December 10, 2004

Inapplicable Regulations

Source No.	Regulation	Description
Facility	40 CFR 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
Facility	40 CFR 60 Subpart K	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978

Source No.	Regulation	Description
Facility	40 CFR 60 Subpart Ka	Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after May 18, 1978, and Prior to July 23, 1984
Facility	40 CFR 61 Subpart D	National Emission Standard for Beryllium Rocket Motor Firing
Facility	40 CFR 61 Subpart M	National Emission Standard for Asbestos
Facility	40 CFR 52.21	Prevention of Significant Deterioration (PSD)
Facility	40 CFR 68	Chemical Accident Prevention Provisions
Facility	40 CFR 64	Compliance Assurance Monitoring

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated December 10, 2004

Description	Category
DOA Storage Tank (3,500 gallons, negligible vapor pressure)	Group A, Number 3
SN-60 Ingredient Preparation Room	Group A, Number 13
SN-66 Lathes at Building 2-SH-3	Group A, Number 13
SN-68 Magnaflux Machine at Building M-2	Group B, Number 36
SN-70 Polymer Tank Farm	Group A, Number 13
Wall Vent for Parts Fabrication Room Production Trailer at Building 2-SH-4	Group A, Number 13
Six-Bladed Saw and Chamfer and Drill Machine at Building M-8	Group A, Number 13
Composite Case Grinding Machine at Building M-8	Group A, Number 13

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective September 26, 2002]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

    Arkansas Department of Environmental Quality
    Air Division
    ATTN: Compliance Inspector Supervisor
    Post Office Box 8913
    Little Rock, AR 72219

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

    a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report my be made by telephone and shall include:

        i. The facility name and location
        ii. The process unit or emission source deviating from the permit limit,
        iii. The permit limit, including the identification of pollutants, from which deviation occurs,
        iv. The date and time the deviation started,
        v. The duration of the deviation,
        vi. The average emissions during the deviation,
        vii. The probable cause of such deviations,
        viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
        ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and

d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit;
e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,
d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]