



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number:

012012-004

Project Number: 2011-08-067

Installation Number: 021-0078

Parent Company: Altec Industries, Inc.

Parent Company Address: 210 Inverness Center Drive, Birmingham, AL 35202

Installation Name: Altec Industries, Inc.

Installation Address: 2106 Riverside Road, St. Joseph, MO 64507

Location Information: Buchanan County, S13, T57N, R35W

Application for Authority to Construct was made for:

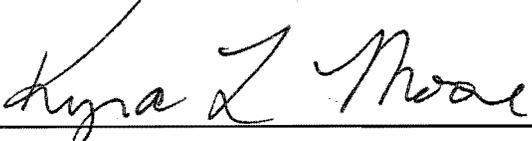
The installation of a new paint gun that will used in a spray booth (PB-44). This review was conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

Standard Conditions (on reverse) are applicable to this permit.

Standard Conditions (on reverse) and Special Conditions are applicable to this permit.

JAN 11 2012

EFFECTIVE DATE



DIRECTOR OR DESIGNEE
DEPARTMENT OF NATURAL RESOURCES

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Departments' Air Pollution Control Program of the anticipated date of startup of these air contaminant sources. The information must be made available within 30 days of actual startup. Also, you must notify the Department of Natural Resources Regional office responsible for the area within which you are located within 15 days after the actual startup of these air contaminant sources.

A copy of this permit and permit review shall be kept at the installation address and shall be made available to Department of Natural Resources' personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant sources(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit at (573) 751-4817. If you prefer to write, please address your correspondence to the Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102-0176, attention: Construction Permit Unit.

Page No.	3
Permit No.	
Project No.	2011-08-067

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

Altec Industries, Inc.
Buchanan County, S13, T57N, R35W

1. **Superseding Condition**
The conditions of this permit supersede the following special conditions found in the previously issued construction permit (Permit Number 072010-010) from the Air Pollution Control Program
 - A. Special Conditions 1.

2. **Emission Limitation**
 - A. Altec Industries, Incorporated shall emit less than ten (10.0) tons individually and twenty-five (25.0) tons combined of Hazardous Air Pollutants (HAPs) in any consecutive 12-month period from the entire installation.

 - B. The entire installation includes all equipment/ processes installed or permitted at Altec Industries, Incorporated as of the date of this permit.

 - C. Attachment A and Attachment B shall be used to demonstrate compliance with Special Condition 2.A. In lieu of these attachments, Altec Industries, Incorporated may keep equivalent electronic records. At a minimum, Altec Industries, Incorporated must record the same information electronically as is specified in the attachments. Equivalent electronic records will be verified at the next inspection.

3. **Control Device Requirements**
 - A. Altec Industries, Inc. shall control emissions from the spray gun using a paint booth (EP-14) equipped with panel filters as specified in the permit application. This paint booth and panel filters shall be maintained in accordance with the manufacturer's specifications. Replacement filters shall be kept on hand at all times.

Page No.	4
Permit No.	
Project No.	2011-08-067

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- B. Only one spray gun may be operated in the paint booth (EP-14) at a time.
 - C. Altec Industries, Inc. shall not modify or replace the spray gun such that the current application rate as given in the application is exceeded.
4. **Operational Requirements – Solvents and Cleaning Solutions**
Altec Industries, Inc. shall keep the solvents and cleaning solutions in sealed containers whenever the materials are not in use. Altec Industries, Inc. shall provide and maintain suitable, easily read, permanent markings on all solvent and cleaning solution containers used with this equipment.
5. **Record Keeping and Reporting Requirements**
- A. Altec Industries, Inc. shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include Material Safety Data Sheets (MSDS) for all materials used
 - B. Altec Industries, Inc. shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of the month during which any record required by this permit show an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2011-08-067
Installation ID Number: 021-0078
Permit Number:

Altec Industries, Inc.
2106 Riverside Road
St. Joseph, MO 64507

Complete: August 23, 2011

Parent Company:
Altec Industries, Inc.
210 Inverness Center Drive
Birmingham, AL 35202

Buchanan County, S13, T57N, R35W

REVIEW SUMMARY

- Altec Industries, Inc. has applied for authority to install a new paint spray booth (PB-44).
- Hazardous Air Pollutant (HAP) emissions are expected from the proposed equipment. HAPs of concern from this process are Ethylbenzene (CAS # 100-41-4), Toluene (CAS # 108-88-3), and Xylene (CAS # 1330-20-7).
- None of the New Source Performance Standards (NSPS) apply to the installation.
- None of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to this installation. None of the currently promulgated Maximum Achievable Control Technology (MACT) regulations apply to the proposed equipment.
- Particulate filters are being used to control the particulate matter (PM), particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}) emissions from the equipment in this permit.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, Construction Permits Required. Potential emissions of all criteria pollutants are below de minimis levels.
- This installation is located in Buchanan County, an attainment area for all criteria pollutants.
- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.

- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
- Emissions testing is not required for the equipment.
- An amendment to your Intermediate Operating Permit is required for this installation within 90 days of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

Altec Industries, Incorporated (Altec) manufactures and assembles equipment used on utility (electric, telephone, cable, etc.) vehicles. This facility is a minor source of criteria pollutants and an area source of hazardous air pollutants. Altec received an Intermediate Operating permit on April 15, 2011 which gave Altec 100 ton per year VOC limit and 10 ton per year individual HAP limit and 25.0 ton per year combined HAP limit. If the facility would become major for HAPs, they would be subject to 40 CFR 63 Subpart WWWW. In Altec's most recent construction permit (Permit # 072010-010) they took voluntary 10 ton per year individual HAP and 25.0 ton per year combined HAP limits in order to avoid being subject to 40 CFR 63 Subpart WWWW.

The following permits have been issued to Altec Industries, Inc. from the Air Pollution Control Program.

Table 1: Permit History

Permit Number	Description
1198-006	Installation of a flow solder operation, gel coat booth, batch curing oven and resin boom winding operation.
0299-001	Installation of a powder coating system, sanding dust collection booth and welding fume collection system.
0799-007	Installation of a new powder coat spray operation and a new boom-winding machine.
042000-003	Increase Styrene emission limit.
082000-015	Installation of a new spray booth.
092000-003	Installation of a powder coating operation, a curing oven, a shot blast booth, and a cooling tunnel.
12003-002	Installation of a fiberglass vacuum molding operation, a laser metal cutting operation and four (4) dust collecting units.
032005-011	Addition of two (2) new spray paint booths (emission points PB-30 and PB-31).
072010-010	Installation of a new plastic composite production operation for the manufacture of molded utility vehicle buckets.

PROJECT DESCRIPTION

Altec is installing a new paint gun that will be used in a spray paint booth (PB-44) to touch up metal assemblies for utility vehicles that have been powder coated. The paint booth will be controlled by particulate filters with the exhaust being vented through a stack that extends approximately six feet above the building roof. Altec will be using a high volume low pressure paint gun in the new paint booth with a maximum hourly design rate of 5.63 gallons per hour.

EMISSIONS/CONTROLS EVALUATION

Potential emissions for the spray booth were estimated using a mass balance approach. The volatile organic compounds (VOC), HAP, PM₁₀, and PM_{2.5} information for the paint being used by Altec was obtained from the HAP Compliance Worksheet and material safety data sheets supplied by the applicant. 100 percent of the VOC and non-PM₁₀ HAP content of the coating mixtures are assumed to be emitted into the atmosphere. The PM₁₀ and PM_{2.5} potential emissions were calculated using the solids content of the paint where PM_{2.5} was assumed to be 9.92 percent of total PM and PM₁₀ was assumed to be 40.70 percent of total PM based on the particle size distribution obtained from *The Annals of Occupational Hygiene*, "Size Distribution and Speciation of Chromium in Paint Spray Aerosol at an Aerospace Facility", R. A. Sabty-Daily et al. (Vol. 49, No. 1, pp. 47–59, 2005). Altec will be using a high volume low pressure paint gun so a transfer efficiency of 65 percent was used in the PM₁₀ and PM_{2.5} calculations. Altec uses two particulate filters to control PM₁₀ and PM_{2.5}. Altec provided manufacturer data for the particulate filters which listed control efficiencies for PM₁₀ and PM₅. A control efficiency of 99 percent was used when calculating PM₁₀ potential emissions and a control efficiency of 50 percent was used when calculating PM_{2.5} potential emissions. It was assumed that the spray paint booth will attain 100 percent capture efficiency.

Table 2: Emissions Summary (tons per year)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions (2010 EIQ)	Potential Emissions of the Application	New Installation Conditioned Potential
PM _{2.5}	10.0	N/D	0.33	3.24	N/D
PM ₁₀	15.0	3.91	0.59	0.27	N/A
SOx	40.0	4.53	0.03	N/A	N/A
NOx	40.0	10.58	1.90	N/A	N/A
VOC	40.0	<100.00	6.50	7.61	<100.0 ¹
CO	100.0	17.28	1.59	N/A	N/A
Ethylbenzene	10.0	<10.0	N/A	0.94	<10.0
Toluene	10.0	<10.0	N/A	0.00027	<10.0
Xylene	10.0	<10.0	N/A	3.96	<10.0
Total HAPs	10.0/25.0	<25.0	4.34	4.90	<10.0

N/A = Not Applicable; N/D = Not Determined

¹ Altec Industries, Inc. took a 100 ton per year VOC limit in their Intermediate Operating Permit.

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all criteria pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

Altec Industries, Inc. shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved. For a complete list of applicable requirements for your installation, please consult your operating permit.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
- *Operating Permits*, 10 CSR 10-6.065
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, I recommend this permit be granted with special conditions.

Gerad Fox
Environmental Engineer

Date

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated August 16, 2011, received August 23, 2011, designating Altec Industries, Inc. as the owner and operator of the installation.
- U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*, Fifth Edition.
- Kansas City Regional Office Site Survey, dated September 23, 2011

Mr. Bruce Stainbrook
Altec Industries, Inc.
2106 Riverside Road
St. Joseph, MO 64507

RE: New Source Review Permit - Project Number: 2011-08-067

Dear Mr. Stainbrook:

Enclosed with this letter is your permit to construct. Please study it carefully. Also, note the special conditions, if any, on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your amended operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

If you have any questions regarding this permit, please do not hesitate to contact Gerad Fox, at the Department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:gfl

Enclosures

c: Kansas City Regional Office
PAMS File: 2011-08-067

Permit Number: