INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

TO: Interested Parties / Applicant

DATE: August 9, 2013

RE: T & S Equipment Company / 151-33449-00053

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER-AM.dot 6/13/2013

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Carrie Shearer, EHS Manager
T & S Equipment Company
P.O. Box 496
Angola, IN 46703

August 9, 2013

Re: 151-33449-00053
First Administrative Amendment to
R151-29813-00053

Dear Ms. Shearer:

T & S Equipment Corporation was issued Registration No. R151-297813-00053 on February 16, 2011 for a stationary fabricated metal parts - machine, weld, paint and assembly operations located at 900 Growth Parkway, Angola, IN 46703. On July 22, 2013, the Office of Air Quality (OAQ) received a letter and an application from the source requesting the following changes to its existing permit:

1. Correction of the descriptive information for the plasma cutters to reflect the descriptive language that was submitted in the original permit application.

   Pursuant to 326 IAC 2-5.5-6(d)(2)(B), this change to the registration is considered an administrative amendment because the registration is amended to indicate a change in descriptive information concerning the source or emission units.

   Pursuant to 326 IAC 2-5.5-6, the registration is hereby amended as follows, with deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

...

(d) Cutting Operations consisting of:

(1) Two (2) Plasma cutters cutting 0.75 inch steel at a maximum rate of 14.00 inches per ~~hour~~ **minute**.

(2) Six (6) gas cutting torches cutting 0.75 inch of metal at a maximum rate of 11.7 inches per ~~hour~~ **minute**.

...

2. Addition of the following new units to the source:

   a) eight (8) MIG steel welders
   b) two (2) MIG aluminum welders
   c) one (1) small robotic steel welder
   d) one (1) large robotic steel welder

   Pursuant to 326 IAC 2-5.5-6(d)(10), this change to the registration is considered administrative amendment because the registration is amended to incorporate a modification that adds an emissions unit of the same type that is already permitted or replaces an existing unit and that will comply with the same applicable requirements and permit terms and conditions as the existing

emission unit, and the modification does not result in a potential to emit greater than the thresholds in 326 IAC 2-2 (PSD) or 326 IAC 2-3 (Emission Offset), or does not result in a potential to emit of the source equal to or greater than the thresholds in 326 IAC 2-5.1-3(a) (Permits).

The modification consists of the addition of the following emissions units:

(a) Eight (8) steel MIG welders with a maximum consumption of 3.5 lbs/hr of wire each.

(b) Two (2) aluminum MIG welders with a maximum consumption of 2.0 lbs/hr of wire each.

(c) One (1) small robotic steel welder with a maximum consumption of 2.0 lbs/hr 2.0 lbs/hr of wire.

(d) One (1) large robotic steel welder with a maximum consumption of 2.0 lbs/hr 2.0 lbs/hr of wire.

The PTE of the modification is as follows:

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e	Total HAPs	Worst Single HAP
Welding (12 new units)	4.09	4.09	4.09	-	-	-	-	-	0.58	0.07 (nickel)
Total PTE of Proposed Modification	**4.09**	**4.09**	**4.09**	**-**	**-**	**-**	**-**	**-**	**0.58**	**0.07 (nickel)**

(a) The uncontrolled/unlimited potential to emit of the entire source after the addition of this emission unit will continue to be within the threshold levels specified in 326 IAC 2-5.5-1(b)(1) (Registration). (See Appendix A for the calculations).

(b) No new state rules are applicable to this source due to the addition of the emission unit. Pursuant to 326 IAC 6-3-1(b)(9), the new welding units are exempt from the requirements of 326 IAC 6-3-2 because they consume less than 625 pounds of rod or wire per day.

(c) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this administrative amendment.

The requirements of the National Emission Standards for Hazardous Air Pollutants for Area Source Standards for Nine Metal Fabrication and Finishing Source Categories (40 CFR 63, Subpart XXXXXX (6X)), are not included for this proposed revision, because the facility is not one of the nine source categories listed in 40 CFR 63.11514(a).

PTE of the Entire Source Before Issuance of the Registration Administrative Amendment

The table below summarizes the potential to emit of the entire source after the issuance of this administrative amendment, reflecting all limits, of the emission units, using **bold** and ~~strikeouts~~ to show the changes:

Process/ Emission Unit	Potential To Emit of the Entire Source Before the Revision (tons/year)***									
	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Spray Booth (V1)	0.40	0.40	0.40	-	-	1.08	-	-	0.08	0.08 Dibutylphthalate
Closed Loop Powder Coating Operation	1.64	1.64	1.64	-	-	-	-	-	-	-
Welding/ Plasma cutting	~~7.21~~ **10.11**	~~7.21~~ **10.11**	~~7.21~~ **10.11**	-	-	-	-	-	~~0.10~~ **2.33**	~~0.10~~ **0.31** ~~Magnesium~~ **Nickel**
Natural Gas Combustion[1]	~~0.08~~ **0.16**	~~0.33~~ **0.66**	~~0.33~~ **0.66**	~~0.03~~ **0.05**	~~4.31~~ **8.64**	~~0.24~~ **0.48**	~~3.62~~ **7.26**	**10,436.00**	~~0.081~~ **0.16**	~~0.077~~ **0.16** Hexane
Total PTE of Entire Source	~~**9.33**~~ **12.32**	~~**9.58**~~ **12.81**	~~**9.58**~~ **12.81**	~~**0.02**~~ **0.05**	~~**3.33**~~ **8.64**	~~**1.26**~~ **1.55**	~~**2.80**~~ **7.26**	**10,436.00**	**<25**	**<10**
Registration Levels	<25	<25	<25	<25	<25	<25	<100	-	<25	<10

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.
*** This table was taken from Registration No.: 151-29813-00053 issued on February 16, 2011.
1. An inadvertent error in the natural gas combustion potential to emit from Registration 151-29813-00053, issued on February 16, 2011, was corrected.

The table below summarizes the potential to emit of the entire source after issuance of this administrative amendment, reflecting all limits, of the emission units. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted).

Process/ Emission Unit	Potential To Emit of the Entire Source Before the Revision (tons/year)***									
	PM	PM10*	PM2.5	SO_2	NOx	VOC	CO	GHGs as CO_2e**	Total HAPs	Worst Single HAP
Spray Booth (V1)	0.40	0.40	0.40	-	-	1.08	-	-	0.08	0.08 Dibutylphthalate
Closed Loop Powder Coating Operation	1.64	1.64	1.64	-	-	-	-	-	-	-
Welding/ Plasma cutting	10.11	10.11	10.11	-	-	-	-	-	2.33	0.31 Nickel
Combustion	0.16	0.66	0.66	0.05	8.64	0.48	7.26	10,436.00	0.16	0.16 Hexane
Total PTE of Entire Source	**12.32**	**12.81**	**12.81**	**0.05**	**8.64**	**1.55**	**7.26**	**10,436.00**	**<25**	**<10**
Registration Levels	< 25	< 25	< 25	< 25	< 25	< 25	< 100	< 100,000	< 25	< 10

* Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
**The 100,000 CO_2e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.

Pursuant to 326 IAC 2-5.5-6, the registration is hereby amended as follows, with deleted language as ~~strikeouts~~ and new language **bolded**:

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

...

(c) Miscellaneous welding and machining operations consisting of:

(5) Eight (8) steel MIG welders with a maximum consumption of 3.5 lbs/hr of wire each.

(6) Two (2) aluminum MIG welders with a maximum consumption of 2.0 lbs/hr of wire each.

(7) One (1) small robotic steel welder with a maximum consumption of 2.0 lbs/hr of wire.

(8) One (1) large robotic steel welder with a maximum consumption of 2.0 lbs/hr of wire.

...

Greenhouse Gases

Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gas (GHGs) emissions are subject to regulation at a source with a potential to emit (PTE) 100,000 tons per year or more of CO_2 equivalent emissions (CO_2e). Therefore, CO_2e emissions have been calculated for this source. Based on the calculations, the unlimited PTE GHGs from the entire source is less than 100,000 tons of CO_2e per year (see Appendix A for the calculations). This did not require any changes to the registration.

The source shall continue to operate according to 326 IAC 2-5.5 (Registrations). Please find enclosed the amended registration and Appendix A. A copy of the registration is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Deborah Cole, at (800) 451-6027, ext. 4-5377, or (317) 234-5377.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/dac

Attachments: Revised Registration and Revised Calculations

cc: File - Steuben County
Steuben County Health Department
Compliance and Enforcement Branch

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

REGISTRATION
OFFICE OF AIR QUALITY

T & S Equipment Corporation
900 Growth Parkway
Angola, IN 46703

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. R151-29813-00053	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 16, 2011

First Administrative Amendment No. R151-33449-00053	
Issued by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: August 9, 2013

SECTION A SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary fabricated metal parts - machine, weld, paint and assembly operations.

Source Address:	900 Growth Parkway, Angola, IN 46703
General Source Phone Number:	(260) 665-7586
SIC Code:	3499, 3999
County Location:	Steuben County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

(a) One (1) spray booth, identified as V1, using a HVLP spray gun, with a capacity of 20 metal units per hour (maximum of 98 lbs/hr), controlled by dry filters and exhausting to stack V1.

(b) One (1) closed loop powder coating operation, identified as powder coat, consisting of:

(1) One (1) five stage washer, equipped with a 3.5 MMBtu/hr natural gas-fired burner:

(A) Stage 1 alkaline cleaning using city water and Fremont 465 at 3% concentration heated to 140°F (contains no VOC or HAPs).

(B) Stage 2 and stage 3 rinse using city water.

(C) Stage 4 conversion coating using city water and Lean Coat 400 at 0.5% concentration (contains no VOC or HAPs).

(D) Stage 5 rinse using city water.

(2) One (1) natural gas-fired dry off oven with a maximum heat capacity of 2.5 MMBtu/hr.

(3) One environmental room with two (2) powder coating lines consisting of one Vortech Booth controlled by a cyclone and cartridge collection system and venting inside the building and two Diamond booths controlled by a cartridge collection system venting inside the building. The collection systems are considered integral to the process.

(4) One (1) natural gas-fired cure oven with a maximum heat capacity of 3.5 MMBtu/hr.

(5) One (1) natural gas-fired burn off oven, with a maximum heat capacity of 0.8 MMBtu/hr.

(c) Miscellaneous welding and machining operations consisting of:

(1) Twenty-five (27) steel MIG welders and two (2) dual welders with a maximum consumption of 3.5 lbs/hr of wire each; and

(2) Five (5) aluminum MIG welders with a maximum consumption of 2.0 lbs/hr of wire each.

(3) Two (2) stick welders.

(4) One (1) spot welder.

(5) Eight (8) steel MIG welders with a maximum consumption of 3.5 lbs/hr of wire each.

(6) Two (2) aluminum MIG welders with a maximum consumption of 2.0 lbs/hr of wire each.

(7) One (1) small robotic steel welder with a maximum consumption of 2.0 lbs/hr of wire.

(8) One (1) large robotic steel welder with a maximum consumption of 2.0 lbs/hr of wire.

(d) Cutting Operations consisting of:

(1) Two (2) Plasma cutters cutting 0.75 inch steel at a maximum rate of 14.00 inches per minute.

(2) Six (6) gas cutting torches cutting 0.75 inch of metal at a maximum rate of 11.7 inches per minute.

(e) Two (2) Radial Saw.

(f) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour:

(1) Three (3) natural gas-fired forced air furnaces, identified as F-1, F-2, and TS-1 with a maximum heat capacity of 2.2 MMBtu/hr, each;

(2) Four (4) natural gas-fired heaters, identified as TS-2, with a maximum heat input capacity of 0.040 MMBtu/hr, each;

(3) Two (2) natural gas-fired tribunes, identified as TS-3, with a maximum heat input capacity of 0.95 MMBtu/hr, each;

(4) One (1) natural gas-fired infra-red heating tube, with a maximum heat capacity of 0.20 MMBtu/hr;

(5) Two (2) natural gas-fired furnaces, with a maximum heat capacity of 0.3 MMBtu/hr, each;

(6) One (1) natural gas-fired furnace, with a maximum heat capacity of 0.25 MMBtu/hr;

(7) Three (3) natural gas-fired water heaters, with a maximum heat capacity of 0.04 MMBtu/hr, each; and

(g) Three (3) natural gas fueled forklifts.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

(a) Violation of any conditions of this registration.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.

(d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to Registration No. 151-29813-00053 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted.

(b) All previous registrations and permits are superseded by this registration.

B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

(a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.

(b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

(c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.7 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

B.8 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant notifies:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The Registrant shall implement the PMPs.

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Registrant to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.

(c) To the extent the Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

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

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

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

C.2 Fugitive Dust Emissions [326 IAC 6-4]

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

SECTION D.1 OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

(a) One (1) spray booth, identified as V1, using a HVLP spray gun, with a capacity of 20 metal units per hour (maximum of 98 lbs/hr), controlled by dry filters and exhausting to stack V1.

(b) One (1) closed loop powder coating operation, identified as powder coat, consisting of:

(1) One (1) five stage washer, equipped with a 3.5 MMBtu/hr natural gas-fired burner:

(A) Stage 1 alkaline cleaning using city water and Fremont 465 at 3% concentration heated to 140°F (contains no VOC or HAPs).

(B) Stage 2 and stage 3 rinse using city water.

(C) Stage 4 conversion coating using city water and Lean Coat 400 at 0.5% concentration (contains no VOC or HAPs).

(D) Stage 5 rinse using city water.

(2) One (1) natural gas-fired dry off oven with a maximum heat capacity of 2.5 MMBtu/hr.

(3) One environmental room with two (2) powder coating lines consisting of one Vortech Booth controlled by a cyclone and cartridge collection system and venting inside the building and two Diamond booths controlled by a cartridge collection system venting inside the building. The collection systems are considered integral to the process.

(4) One (1) natural gas-fired cure oven with a maximum heat capacity of 3.5 MMBtu/hr.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

D.1.1 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), the spray booth, identified as V1, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:

(a) The Permittee shall operate the control device in accordance with manufacturer's specifications.

(b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:

(1) Repair control device so no overspray is visibly detectable at the exhaust or accumulates on the ground.

(2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

(c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or changes in operations,

so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e) (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the closed loop powder coating operation shall not exceed 0.87 pounds per hour when operating at a process weight rate of 200 pounds per hour.

The above pounds per hour limitations were calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10\ P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

Within ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, a Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.4 Particulate Control

In order to comply with Condition D.1.2, the cyclone and cartridge collection system for particulate control shall be in operation and control emissions from closed loop powder coating operation at all times the closed loop powder coating operation is in operation.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

D.1.5 Record Keeping Requirements

To document the compliance status with Condition D.1.1, the Permittee shall maintain records of any actions taken if overspray is visibly detected**.**

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

REGISTRATION
ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	T & S Equipment Corporation
Address:	900 Growth Parkway
City:	Angola, IN 46703
Phone Number:	(260) 665-7586
Registration No.:	R151-29813-00053

I hereby certify that T & S Equipment Corporation is :
☐ still in operation.
☐ no longer in operation.

I hereby certify that T & S Equipment Corporation is :
☐ in compliance with the requirements of Registration No. 151-29813-00053.
☐ not in compliance with the requirements of Registration No. 151-29813-00053

Authorized Individual (typed):
Title:
Signature:
Phone Number:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

Appendix A: Emissions Calculations
Summary Sheet

Company Name: T & S Equipment Company
Address City IN Zip: 900 Growth Parkway, Angola IN 46703
Permit Number: R151-29813-00053
Administrative Amendment: 151-33449-00053
Reviewer: Deborah Cole

Unlimited Potential Emissions											
	Pollutant										
	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHG	Total HAPs	Single HAP	
Emission Units											
Spray Booth (V1)	0.40	0.40	0.40	-	-	1.08	-	-	0.08	0.08	Dibutylphthalate
Closed Loop Powder Coating Operation	1.64	1.64	1.64	-	-	-	-	-	-	-	-
Welding/Plasma	10.11	10.11	10.11	-	-	-	-		2.33	0.31	Nickel
Combustion	0.16	0.66	0.66	0.05	8.64	0.48	7.26	10,436.00	0.16	0.16	Hexane
TOTAL	**12.32**	**12.81**	**12.81**	**0.05**	**8.64**	**1.55**	**7.26**	**10,436.00**	**<25**	**<10**	

Total emissions based on rated capacity at 8,760 hours per year.

Appendix A: Emissions Calculations
VOC and Particulate
From Spray Booth (V1)

Company Name: T & S Equipment Company
Address City IN Zip: 900 Growth Parkway, Angola IN 46703
Permit Number: R151-29813-00053
Administrative Amendment: 151-33449-00053
Reviewer: Deborah Cole

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
TRE-KOTE Acrylic	9.1	60.00%	49.2%	10.8%	52.4%	36.08%	0.01250	20.000	2.06	0.98	0.25	5.90	1.08	0.40	2.72	90%
State Potential Emissions			**Add worst case coating to all solvents**								**0.25**	**5.90**	**1.08**	**0.40**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

TRE-KOTE Acrylic is only coating used. No clean-up solvent in application

Appendix A: Emission Calculations

HAP Emission Calculations

Company Name: **T & S Equipment Company**
Address City IN Zip: **900 Growth Parkway, Angola IN 46703**
Permit Number: **R151-29813-00053**
Administrative Amendment: **151-33449-00053**
Reviewer: **Deborah Cole**

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Dibutylphthalate	Dibutylphthalate (ton/yr)
Dibutylphthalate	9.07	0.01250	20.000	0.83%	0.08

Total State Potential Emissions **0.08**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations
Particulate
From Closed Loop Powder Coating Operation

Company Name: **T & S Equipment Company**
Address City IN Zip: **900 Growth Parkway, Angola IN 46703**
Permit Number: **R151-29813-00053**
Administrative Amendment: **151-33449-00053**
Reviewer: **Deborah Cole**

Material	Pounds per hour	Particulate Potential (pounds per hour)	Particulate Potential (ton/yr)	Transfer Efficiency
Powder Coating	25.00	0.38	1.64	70%

METHODOLOGY Cartridge Filters Control Efficiency: 95.00%

PM/PM10/PM2.5 Potential pounds per hour = (pounds per hour coating) * (1- transfer efficiency) * (1-control efficiency)
PM/PM10/PM2.5 Potential tons per year = (pounds per hour coating) * (1- transfer efficiency) * (1-control efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Total = Worst Coating + Sum of all solvents used

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: **T & S Equipment Company**
Address City IN Zip: **900 Growth Parkway, Angola IN 46703**
Permit Number: **R151-29813-00053**
Administrative Amendment: **151-33449-00053**
Reviewer: **Deborah Cole**

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(carbon steel)	8	3.5		0.004	0.0002	0.0025	0.0015	0.112	0.006	0.070	0.042	0.118
Metal Inert Gas (MIG)(aluminum)	2	2		0.0723				0.289	0.000	0.000	0.000	0.000
Sm Robotic Weld (carbon steel)	1	2		0.004	0.0002	0.0025	0.0015	0.008	0.000	0.005	0.003	0.008
Lg Robotic Weld (carbon steel)	1	2		0.004	0.0002	0.0025	0.0015	0.008	0.000	0.005		0.005
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
FLAME CUTTING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	6	0.75	11.7	0.1622	0.0005	0.0001	0.0003	0.512	0.002	0.000	0.001	0.003
Plasma**	2	0.75	14	0.0039				0.005	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								0.93				0.134
Potential Emissions lbs/day								22.43				3.22
Potential Emissions tons/year								4.09				0.588

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the emission
Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick
Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick)
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Appendix A: Emissions Calculations
Welding and Thermal Cutting

Company Name: T & S Equipment Company
Address City IN Zip: 900 Growth Parkway, Angola IN 46703
Permit Number: R151-29813-00053
Administrative Amendment: 151-33449-00053
Reviewer: Deborah Cole

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS* (lb pollutant/lb electrode)				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
WELDING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Metal Inert Gas (MIG)(carbon steel)	35	3.5		0.004	0.0002	0.0025	0.0015	0.490	0.025	0.306	0.18375	0.515
)	7	2		0.0723				1.012	0.000	0.000	0	0.000
Sm Robotic Weld (carbon steel)	1	2		0.0723	0.0002	0.0025	0.0015	0.145	0.000	0.005	0.003	0.008
Lg Robotic Weld (carbon steel)	1	2		0.0723	0.0002	0.0025	0.0015	0.145	0.000	0.005		0.005
	Number of Stations	Max. Metal Thickness Cut (in.)	Max. Metal Cutting Rate (in./minute)	EMISSION FACTORS (lb pollutant/1,000 inches cut, 1" thick)**				EMISSIONS (lbs/hr)				HAPS (lbs/hr)
FLAME CUTTING				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	6	0.75	11.7	0.1622	0.0005	0.0001	0.0003	0.512	0.002	0.000	0.001	0.003
Plasma**	2	0.75	14	0.0039				0.005	0.000	0.000	0.000	0.000
EMISSION TOTALS												
Potential Emissions lbs/hr								2.31				0.531
Potential Emissions lbs/day								55.41				12.75
Potential Emissions tons/year								10.11				2.326

METHODOLOGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column.
**Emission Factor for plasma cutting from American Welding Society (AWS). Trials reported for wet cutting of 8 mm thick mild steel with 3.5 m/min cutting speed (at 0.2 g/min emitted). Therefore, the
Using AWS average values: (0.25 g/min)/(3.6 m/min) x (0.0022 lb/g)/(39.37 in./m) x (1,000 in.) = 0.0039 lb/1,000 in. cut, 8 mm thick
Plasma cutting emissions, lb/hr: (# of stations)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 8 mm thick)
Cutting emissions, lb/hr: (# of stations)(max. metal thickness, in.)(max. cutting rate, in./min.)(60 min./hr.)(emission factor, lb. pollutant/1,000 in. cut, 1" thick
Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)
Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day
Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,00(

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: **T & S Equipment Company**
Address City IN Zip: **900 Growth Parkway, Angola IN 46703**
Permit Number: **R151-29813-00053**
Administrative Amendment: **151-33449-00053**
Reviewer: **Deborah Cole**

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf 1020	Potential Throughput MMCF/yr
6.6	56.68	Heaters, F1, F2, and TS-1 each at 2.2 MMBtu/hr
0.16	1.37	Four Heaters, TS-2, @0.04MMBtu/hr, each
0.2	1.72	One heater @ 200,000 Btu/hr
0.6	5.15	Two heaters @ 300,000 Btu/hr, each
0.25	2.15	One heater @ 250,000 Btu/hr
0.12	1.03	Three Water Heaters @40,000 Btu/hr, each
1.9	16.32	Two Turbines, TS-3, @ 0.95 MMBtu/hr, each
3.5	30.06	Cure Oven @3.5 MMBtu/hr
2.5	21.47	Dry-off Oven @ 2.5 MMBtu/hr
3.5	30.06	Wash Stage 1 @ 3.5 MMBtu/hr
0.8	6.87	Burn-off Oven @ 0.8 MMBtu/hr
20.1	**172.88**	

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.16	0.66	0.66	0.05	8.64	0.48	7.26

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.815E-04	1.037E-04	6.483E-03	1.556E-01	2.939E-04	**1.627E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	4.322E-05	9.508E-05	1.210E-04	3.285E-05	1.815E-04	**4.737E-04**
					Total HAPs	**1.631E-01**
					Worst HAP	**1.556E-01**

Methodology is the same as above.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Greenhouse Gas Calculations

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/MMcf	120,000.00	2.30	2.20
Potential Emission in tons/yr	10,372.87	0.20	0.19
Summed Potential Emissions in tons/yr	10,373.26		
CO2e Total in tons/yr	10,436.00		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.
Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Carrie Shearer
EHS Manager
T & S Equipment Company
PO Box 496
Angola, Indiana 46703

DATE: August 9, 2013

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Registration – Administrative Amendment
151-33449-00053

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Barry Trine, VP / T & S Equipment Company
Teri Schenk / Environmental Solutions
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Mail Code 61-53

IDEM Staff	AWELLS 8/9/2013 T & S Equipment Company 151-33449-00053 Final		
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Carrie Shearer T & S Equipment Company PO Box 496 Angola IN 46703 (Source CAATS) confirmed delivery									
2		Barry Trine VP T & S Equipment Company PO Box 496 Angola IN 46703 *(RO CAATS)*									
3		Steuben County Board of Commissioners 317 S Wayne Suite 2H Angola IN 46703 *(Local Official)*									
4		Steuben County Health Department 317 S. Wayne St, Community Center Suite 3-A Angola IN 46703-1938 *(Health Department)*									
5		Mr. Steve Christman NISWMD 2320 W 800 S, P.O. Box 370 Ashley IN 46705 *(Affected Party)*									
6		Mr. Diane Hanson 490 E 300 N Angola IN 46703 *(Affected Party)*									
7		Orland Town Council P.O. Box 445 Orland IN 46776 *(Local Official)*									
8		Teri Schenk Environmental Solutions, LLC PO Box 349 Elkhart IN 46515 *(Consultant)*									
9											
10											
11											
12											
13											
14											
15											

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