



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: September 7, 2005
RE: Kruz, Inc. / 149-21614-00015
FROM: Paul Dubenetzky
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, Room 1049, 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 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

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September 7, 2005

Mr. Kent Kruzick
Kruz, Inc.
1201 West Culver Road
Knox, Indiana 46534

Re: 149-21614-00015
Notice-only change to
Registration 149-12765-00015

Dear Mr. Kruzick:

Kruz, Inc. was issued a Registration on November 30, 2000 for a metal waste transfer trailer fabrication and surface coating facility. A letter notifying the Office of Air Quality of the change of ownership, the additional welders/plasma flame cutters, and change of surface coating formulation was received on August 5, 2005. Pursuant to the provisions of 326 IAC 2-5.5-6 the Registration is hereby revised as follows:

The change qualifies as a notice-only change pursuant to 326 IAC 2-5.5-6(d) because the new welders/plasma flame cutters are listed exempt activities as specified in 326 IAC 2-1.1-3. The following changes have been made to the permit (~~strikeout~~ to show deletions and **bold** to show additions):

- (1) One (1) paint spray booth, identified as EU-1, utilizing an airless and HVLP spray application system, coating a maximum of 0.2 waste transfer trailers per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as S-1;
- (2) Twenty seven ~~(27)~~ **nine (29)** metal inert gas (MIG) welding stations, each with a maximum wire consumption rate of ~~2.5~~ **2.0** pounds per hour;
- (3) **Seven (7) plasma flame cutting stations, with a combined maximum cut rate of 56 inches per minute;**
- ~~(3)~~**(4)** Twelve (12) natural gas-fired space heaters, identified as H1 through H12, two (2) rated at 0.4 million (MM) British thermal units per hour (Btu/hr) each, and ten (10) rated at 0.25 MMBtu/hr each; and
- ~~(4)~~**(5)** Unpaved roads.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary ~~Exemptions~~ **Alternative Opacity Limitations**), opacity shall meet the following:
 - (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 15 minutes (60 readings) in a 6-hour period 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.~~
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.

(2) ~~Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from the welding operation shall be limited to 0.42 pounds per hour for a maximum process rate of 67.5 pounds per hour.~~

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. The welding operations have a process weight rate of less than 100 pounds per hour and therefore have particulate allowable emissions of 0.551 pounds per hour.

(3) **326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-2, the particulate from the plasma cutters shall be limited to 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour based on the following:

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

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

~~(3) The particulate matter (PM) from the one (1) paint spray booth (EU-1) shall be limited by the following:~~

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

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

~~The dry filters shall be in operation at all times the one (1) paint spray booth (EU-1) is in operation, in order to comply with this limit.~~

(4) **Particulate from the one (1) paint spray booth (EU-1) shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.**

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:

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

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

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 change 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.

~~(4)~~(5) An authorized individual shall provide an annual notice to the Office of Air ~~Management~~
Quality that the source is in operation and in compliance with this registration pursuant to
326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air ~~Management~~**Quality**
100 North Senate Avenue
~~P.O. Box 6015~~
Indianapolis, IN 46204**6-6015**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Additionally, the first page header of the Registration has been updated to reflect the new
Governor of Indiana and the new Commissioner of IDEM.

All other conditions of the Registration shall remain unchanged and in effect. Please attach a copy
of this letter and the following revised Registration to the front of the original Registration.

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 Linda Quigley, at (973) 575-2555, ext. 3284 or dial
(800) 451-6027, and ask for extension 3-6878.

Sincerely,

Origin signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments

LQ/EVP

cc: File – Starke County
U.S. EPA, Region V
Starke County Health Department
Air Compliance Section Inspector – David North
Compliance Data Section
Administrative and Development
Technical Support and Modeling



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September 7, 2005

Mr. Kent Kruzick
Kruz, Inc.
1201 West Culver Road
Knox, Indiana 46534

Re: Registered Construction and Operation Status,
149-12765-00015
Notice-only change 149-21614-00015

Dear Mr. Kruzick:

Kruz, Inc. was issued a Registration on November 30, 2000 for a metal waste transfer trailer fabrication and surface coating facility. A letter notifying the Office of Air Quality of the change of ownership, the additional welders/plasma flame cutters, and change of surface coating formulation was received on August 5, 2005. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following metal waste transfer trailer fabrication and surface coating facility, located at 1201 W. Culver Road, Knox, Indiana 46534, is classified as registered

- (1) One (1) paint spray booth, identified as EU-1, utilizing an airless and HVLP spray application system, coating a maximum of 0.2 waste transfer trailers per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as S-1;
- (2) Twenty nine (29) metal inert gas (MIG) welding stations, each with a maximum wire consumption rate of 2.0 pounds per hour;
- (3) Seven (7) plasma flame cutting stations, with a combined maximum cut rate of 56 inches per minute;
- (4) Twelve (12) natural gas-fired space heaters, identified as H1 through H12, two (2) rated at 0.4 million (MM) British thermal units per hour (Btu/hr) each, and ten (10) rated at 0.25 MMBtu/hr each; and
- (5) Unpaved roads.

The following conditions shall be applicable:

- (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:
 - (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.

- (2) Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. The welding operations have a process weight rate of less than 100 pounds per hour and therefore have particulate allowable emissions of 0.551 pounds per hour.

- (3) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-2, the particulate from the plasma cutters shall be limited to 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour based on the following:

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

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

- (4) Particulate from the one (1) paint spray booth (EU-1) shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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:

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

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

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 change 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.

- (5) An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air Quality
100 North Senate Avenue
Indianapolis, IN 46204

no later than March 1 of each year, with the annual notice being submitted in the format attached.

This registration supersedes any previous air approvals issued to this source. The source may operate according to 326 IAC 2-5.5.

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.

Sincerely,
Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

LQ/EVP

cc: File – Starke County
U.S. EPA, Region V
Starke County Health Department
Air Compliance Section Inspector – David North
Compliance Data Section
Administrative and Development
Technical Support and Modeling

**Indiana Department of Environmental Management
Office of Air Quality**

**Technical Support Document (TSD) for a
Notice Only Change to a Registration**

Source Background and Description

Source Name:	Kruz, Inc.
Source Location:	1201 West Culver Road, Knox, Indiana 46534
County:	Starke
SIC Code:	3569
Registration No.:	149-12765-00015
Registration Issuance Date:	November 30, 2000
Notice Only Change No.:	149-21614-00015
Permit Reviewer:	Linda Quigley/EVP

The Office of Air Quality (OAQ) has reviewed an application from Kruz, Inc. relating to the operation of a metal waste transfer trailer fabrication and surface coating facility.

History

Kruz, Inc. submitted an application on August 5, 2005 stating that it has taken ownership of Raven's Inc. This Notice Only Change will change the name of the facility to Kruz, Inc. In addition, Kruz, Inc. submitted information on new coating formulations and additional welders. The calculations in Appendix A demonstrate that this source is still a Registration level source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) paint spray booth, identified as EU-1, utilizing an airless and HVLP spray application system, coating a maximum of 0.2 waste transfer trailers per hour, using dry filters for particulate control, and exhausting to one (1) stack, identified as S-1;
- (b) Twenty-nine (29) metal inert gas (MIG) welding stations, each with a maximum wire consumption rate of 2.0 pounds per hour;
- (c) Seven (7) plasma flame cutting stations, with a combined maximum cut rate of 56 inches per minute;
- (d) Twelve (12) natural gas fired space heaters, identified as H1 through H12, two (2) rated at 0.4 million British thermal units per hour (MMBtu/hr) each, and ten (10) rated at 0.25 MMBtu/hr each; and
- (e) Unpaved Roads.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

R049-12765-00015 issued on November 30, 2005.

All conditions from previous approvals were incorporated into this permit.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Notice Only Change be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on August 5, 2005.

Emission Calculations

See Appendix A of this document for detailed emission calculations, pages one (1) through five (5).

Potential to Emit of the Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	18.53
PM-10	18.61
SO ₂	0.01
VOC	23.23
CO	1.21
NO _x	1.45

HAPs	Potential to Emit (tons/yr)
Xylene	5.18
Ethyl Benzene	2.07
Methyl Isobutyl Ketone	0.98
Glycol Ethers	0.00
Toluene	5.70
Methanol	0.49

HAPs	Potential to Emit (tons/yr)
MEK	0.49
Manganese	0.008
Chromium	0.003
Total	14.92

The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM, PM10 and VOC are each less than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-5.5. A Notice Only Change to a Registration will be issued.

County Attainment Status

The source is located in Starke County.

Pollutant	Status
PM-10	Attainment
PM-2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx are considered when evaluating the rule applicability relating to ozone. Starke County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (b) Starke County has been classified as unclassifiable or attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.
- (c) Starke County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	< 25
PM-10	< 25
SO ₂	< 25
VOC	< 25
CO	< 25
NO _x	< 25
Single HAP	< 10
Combination HAPs	< 25

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories.
- (b) These emissions were based on emission calculations from Registration 149-12765-00015 and this Notice Only Change 149-21614-00015.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, including the emissions from this permit NO149-21614-00015, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Federal Rule Applicability

There have been no changes to any Federal Rule Applicability as a result of this Notice Only Change.

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this permit.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 20 and 40 CFR Parts 61, 63) included in this permit. The requirements for 40 CFR 63, Subpart M (National Emission Standards for Miscellaneous Metal Parts and Products) were not included in this permit for the surface coating operation because the source is not considered a "major" source pursuant to 40 CFR 63, Subpart A.

State Rule Applicability – Entire Source

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The surface coating operation emits less than 10 tons per year of a single HAP or 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

Pursuant to 326 IAC 2-6-1, this source is not subject to this rule because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake or Porter counties, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

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 the permit:

- (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.

State Rule Applicability – Individual Facilities

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Particulate from the surface coating operation shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

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:

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

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

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 change 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.

326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. The welding operations have a process weight rate of less than 100 pounds per hour and therefore have particulate allowable emissions of 0.551 pounds per hour.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the particulate from the plasma cutters shall be limited by the following:

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

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

$$E = 4.10 (1.25)^{0.67} = 4.76 \text{ pounds per hour}$$

The potential to emit of particulate from the plasma cutters is 1.59 pounds per hour combined. Therefore, the plasma cutters comply with this limit without the need for add on control equipment.

326 IAC 8-2 (Surface Coating Emission Limitations)

Pursuant to 326 IAC 8-2-1 (Applicability), Surface Coating Emission Limitations do not apply to this source because it was constructed in 1988, has potential VOC emissions of less than twenty-five (25) tons per year, and is located in Starke County.

Proposed Changes

- (1) One (1) paint spray booth, identified as EU-1, utilizing an airless and HVLP spray application system, coating a maximum of 0.2 waste transfer trailers per hour, using dry filters for particulate matter control, and exhausting to one (1) stack, identified as S-1;
- (2) Twenty seven (27) **nine (29)** metal inert gas (MIG) welding stations, each with a maximum wire consumption rate of ~~2.5~~ **2.0** pounds per hour;
- (3) **Seven (7) plasma flame cutting stations, with a combined maximum cut rate of 56 inches per minute;**
- ~~(3)~~**(4)** Twelve (12) natural gas-fired space heaters, identified as H1 through H12, two (2) rated at 0.4 million (MM) British thermal units per hour (Btu/hr) each, and ten (10) rated at 0.25 MMBtu/hr each; and
- ~~(4)~~**(5)** Unpaved roads.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions **Alternative Opacity Limitations**), opacity shall meet the following:
 - (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 15 minutes (60 readings) in a 6-hour period 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.~~

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.

- (2) Pursuant to ~~326 IAC 6-3-2 (Process Operations)~~, the particulate matter (PM) from the welding operation shall be limited to ~~0.42 pounds per hour for a maximum process rate of 67.5 pounds per hour.~~

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. The welding operations have a process weight rate of less than 100 pounds per hour and therefore have particulate allowable emissions of 0.551 pounds per hour.

- (3) **326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-2, the particulate from the plasma cutters shall be limited to 4.76 pounds per hour when operating at a process weight rate of 1.25 tons per hour based on the following:

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

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

- ~~(3) The particulate matter (PM) from the one (1) paint spray booth (EU-1) shall be limited by the following:
Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:~~

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

~~The dry filters shall be in operation at all times the one (1) paint spray booth (EU-1) is in operation, in order to comply with this limit.~~

- (4) **Particulate from the one (1) paint spray booth (EU-1) shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.**

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:

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

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

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 change 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.

- (4)(5) An authorized individual shall provide an annual notice to the Office of Air ~~Management~~ **Quality** that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

Compliance Data Section
Office of Air ~~Management~~ **Quality**
100 North Senate Avenue
~~P.O. Box 6015~~
Indianapolis, IN 46204-6015

no later than March 1 of each year, with the annual notice being submitted in the format attached.

Conclusion

The operation of this metal waste transfer trailer fabrication and surface coating facility shall be subject to the conditions of the Notice Only Change 049-21614-00015.

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: Kruz, Inc.
Address City IN Zip: 1201 W. Culver Road, Knox, IN 46534
Notice Only Change: 149-21614
Plt ID: 149-00015
Reviewer: Linda Quigley/EVP

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Ethyl Benzene	Weight % Methyl Isobutyl Ketone	Weight % Glycol Ethers	Weight % Toluene	Weight % Methanol	Weight % Methyl Ethyl Ketone	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Methyl Isobutyl Ketone Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Toluene Emissions (ton/yr)	Methanol Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)
Primers																	
All Weather DTR (part A)	11.64	1.556	0.200	10.00%	5.00%	0.00%	0.00%	10.00%	0.00%	0.00%							
All Weather DTR (part B)	11.89	1.556	0.200	10.00%	5.00%	0.00%	0.00%	10.00%	0.00%	0.00%							
Primer Thinner	7.22	0.389	0.200	85.00%	15.00%	0.00%	0.00%	0.00%	0.00%	0.00%							
<i>as applied</i>	11.26	3.500	0.200	15.00%	6.00%	0.00%	0.00%	9.00%	0.00%	0.00%	5.18	2.07	0.00	0.00	3.11	0.00	0.00
Top Coat																	
Base 2.8 (Pitthane (part A)	8.4	3.232	0.200	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.8 Pitthane Ultra (part B)	9.65	0.646	0.200	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Coat Thinner	6.8	0.121	0.200	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cleaning Solvents																	
Solvent Blend	6.96	0.800	0.200	0.00%	0.00%	20.00%	0.00%	53.20%	10.00%	10.00%	0.00	0.00	0.98	0.00	2.59	0.49	0.49
Touch Up Spray Paint																	
Fast Dry 35 Enamel	9.62	0.002	0.200	20.00%	5.00%	10.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.18 2.07 0.98 0.00 5.70 0.49 0.49

Total HAPs (tons/yr) 14.91

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
 As applied ration = 1 gallon part A: 1 gallon part B: 1 quart thinner = 2.25 total

Appendix A: Welding and Thermal Cutting

Company Name: Kruz, Inc.
Address City IN Zip: 1201 W. Culver Road, Knox, IN 46534
Notice Only Change: 149-21614
Plt ID: 149-00015
Reviewer: Linda Quigley/EVP

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)		EMISSION FACTORS * (lb pollutant / lb electrode)				EMISSIONS (lb/hr)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
WELDING												
Metal Inert Gas (MIG)(ER5154)	29	2		0.0241	0.00003	0.0000	0.00001	1.398	0.00174	0.000	0.0006	0.002
FLAME CUTTING	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)				TOTAL HAPS (lb/hr)
				PM = PM10	Mn	Ni	Cr	PM = PM10	Mn	Ni	Cr	
Oxyacetylene	3	1	6	0.1622	0.0005	0.0001	0.0003	0.175	0.000	0.000	0.000	0.000
Plasma hand held	3	0.375	30	0.0039				0.008	0.000	0.000	0.000	0.000
Plasma table	1	1	20	0.0039				0.005	0.000	0.000	0.000	0.000
EMISSION TOTALS								PM = PM10	Mn	Ni	Cr	Total HAPS
Potential Emissions lbs/hr								1.59	0.002	0.000	0.001	0.00
Potential Emissions lbs/day								38.05	0.042	0.000	0.014	0.06
Potential Emissions tons/year								6.94	0.008	0.000	0.003	0.01

METHODOLGY

*Emission Factors are default values for carbon steel unless a specific electrode type is noted in the Process column. Consult AP-42 or other reference for different electrode types.

Welding emissions, lb/hr: (# of stations)(max. lbs of electrode used/hr/station)(emission factor, lb. pollutant/lb. of electrode used)

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)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/day x 1 ton/2,000 lbs.

Plasma cutting emission factors are from the American Welding Society study published in Sweden (March 1994).

Welding and other flame cutting emission factors are from an internal training session document.

See AP-42, Chapter 12.19 for additional emission factors for welding.

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

Company Name: Kruz, Inc.
Address City IN Zip: 1201 W. Culver Road, Knox, IN 46534
Notice Only Change: 149-21614
Plt ID: 149-00015
Reviewer: Linda Quigley/EVP

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
3.3	28.9

Emission Factor in lb/MMCF	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	1.9	7.6	0.6	100.0 **see below	5.5	84.0
Potential Emission in tons/yr	0.03	0.11	0.01	1.45	0.08	1.21

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

***Heat Input Capacity equals two (2) heaters rated at 0.4 MMBtu/hr each and ten (10) heaters rated at 0.25 MMBtu/hr each.

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

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 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See next page for HAPs emissions calculations.

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

HAPs Emissions

Company Name: Kruz, Inc.
Address City IN Zip: 1201 W. Culver Road, Knox, IN 46534
Notice Only Change: 149-21614
Pit ID: 149-00015
Reviewer: Linda Quigley/EVP

HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
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	3.035E-05	1.734E-05	1.084E-03	2.602E-02	4.914E-05

HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel
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	7.227E-06	1.590E-05	2.024E-05	5.493E-06	3.035E-05

Methodology is the same as previous page.

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