Iowa Department of Natural Resources Air Quality Construction Permit

Permit Holder

Firm: Alter Metal Recycling

Contact:

Ryan Carpenter Reg. Env. Manager **Responsible Party:**

Sarah Schlichtholz Dir. Environmental Affairs

(314) 346-6795

2603 9th Avenue Council Bluffs, IA 51501

Permitted Equipment

Emission Unit(s):	Fugitive Dust Emissions from Truck Traffic (EU-Hauling)
Control Equipment:	Paved Road Sweeping w/ Water Suppression
Emission Point:	EP-1
Equipment Location:	2603 9 th Avenue Council Bluffs, IA 51501
Plant Number:	78-01-043

Issuance of this permit shall not relieve the owner or operator of the responsibility to comply fully with applicable provisions of the State Implementation Plan (SIP), and any other requirements of local, state, and federal law.

Permit No.	Proj. No.	Description	Date	Stack Testing
14-A-521	14-126	Original Permit	09/02/14	No

Under the Direction of the Director of the Department of Natural Resources

1. Departmental Review

This permit is issued based on information submitted by the applicant. Any misinformation, false statements or misrepresentations by the applicant or by the applicant's representative(s) shall cause this permit to be void. In addition, the applicant may be subject to criminal penalties according to Iowa Code Section 455B.146A.

This permit is issued under the authority of 567 Iowa Administrative Code (IAC) 22.3. The proposed equipment has been evaluated for conformance with Iowa Code Chapter 455B; 567 IAC Chapters 20 - 35; and 40 Code of Federal Regulations (CFR) Parts 51, 52, 60, 61, and 63 and has the potential to comply.

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. The Department assumes no liability, directly or indirectly, for any loss due to damage to persons or property caused by, resulting from, or arising out of the design, installation, maintenance or operation of the proposed equipment.

2. Owner and Operator Responsibility

This permit is for the construction and operation of specific emission unit(s), control equipment, and emission point as described in this permit and in the application for this permit. The permit holder, owner, and operator of the facility shall assure that the installation of the equipment listed in this permit conforms to the design in the application (i.e. type, maximum rated capacity, etc.). No person shall construct, install, reconstruct or alter this emission unit(s), control equipment, or emission point without the required amended permit.

Any owner or operator of the specified emission unit(s), control equipment, or emission point, including any person who becomes an owner or operator subsequent to the date on which this permit is issued, is responsible for assuring that the installation, operation, and maintenance of the equipment listed in this permit is in compliance with the provisions of this permit and all other applicable requirements.

The owner or operator of any emission unit or control equipment shall maintain and operate the equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by paragraph 567 IAC 24.2(1) "Maintenance and Repair".

3. Transferability

As limited by 567 IAC 22.3(3)"f", this permit is not transferable from one location to another or from one piece of equipment to another, unless the equipment is portable. When portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified in writing at least seven (7) days prior to transferring to the new location unless the equipment will be located in an area which is classified as nonattainment for the National Ambient Air Quality Standards (NAAQS) or is a maintenance area for the NAAQS in which case notification shall be given fourteen (14) days prior to the relocation of equipment⁽¹⁾ (See Permit Condition 8.A.2). The owner or operator will be notified at least ten (10) days prior to the scheduled relocation if the relocation will cause a violation of the NAAQS. In such case, a supplemental permit shall be required prior to the initiation of construction of additional control equipment or modifications to equipment needed to meet the standards.

⁽¹⁾ A list of nonattainment areas and maintenance areas for the NAAQS can be obtained from the Department.

4. Construction

A. General Requirements

It is the owner's responsibility to ensure that construction conforms to the final plans and specifications as submitted, and that adequate operation and maintenance is provided to ensure that no condition of air pollution is created.

4. Construction (Continued)

In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. If a proposed project is not timely completed, the owner or operator shall seek a permit amendment in order to revert back to the most recent previous version of the permit. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

This permit or amendment shall become void if any one of the following conditions occurs:

- (1) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not initiated within eighteen (18) months after the permit issuance date; or
- (2) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within thirty-six (36) months after the permit issuance date; or
- (3) the construction or implementation of the proposed project, as it affects the emission point permitted herein, is not completed within a time period specified elsewhere in this permit.
- B. Changes to Plans and Specifications

The owner or operator shall amend this permit or amendment prior to startup of the equipment if:

- (1) Any changes are made to the final plans and specifications submitted for the proposed project; or
- (2) This permit becomes void.

Changes to the final plans and specification shall include changes to plans and specifications for permitted equipment and control equipment and the specified operation thereof.

C. Amended Permits

The owner or operator may continue to act under the provisions of the previous permit for the affected emission unit(s) and emission point, together with any previous amendment to the permit, until one of the following conditions occurs:

- (1) The proposed project authorized by this amendment is completed as it affects the emission unit(s) and emission point permitted herein; or
- (2) This current amendment becomes void.

5. Credible Evidence

As stated in 567 IAC 21.5 and also in 40 CFR Part §60.11(g), where applicable, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions specified in this permit or any provisions of 567 IAC Chapters 20 through 35.

6. Excess Emissions

Per 567 IAC 24.1(1), excess emissions during a period of startup, shutdown, or cleaning of control equipment are not a violation of the emission standard if it is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions except when another regulation applicable to the unit or process provides otherwise. Cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per one (1) hour period.

An incident of excess emissions other than the above is a violation and may be subject to criminal penalties according to Iowa Code 455B.146A. If excess emissions are occurring, either the control equipment causing the excess shall be repaired in an expeditious manner, or the process generating the emissions shall be shutdown within a reasonable period of time, as specified in 567 IAC 24.1.

An incident of excess emissions shall be orally reported by telephone, electronic mail or in person to the appropriate field office within eight (8) hours of, or at the start of, the first working day following the onset of the incident (See Permit Condition 8.B.1). A written report of an incident of excess emissions shall be submitted as a follow-up to all required initial reports within seven (7) days of the onset of the upset condition (See Permit Condition 8.B.2).

7. Permit Violations

Knowingly committing a violation of this permit may carry a criminal penalty of up to \$10,000 per day fine and two (2) years in jail according to Iowa Code Section 455B.146A.

8. Notification, Reporting, and Recordkeeping

- A. The owner or operator shall furnish the Department the following written notifications:
 - (1) Per 567 IAC 22.3(3)"b":
 - (a) The date construction, installation, or alteration is initiated postmarked within thirty (30) days following initiation of construction, installation, or alteration;
 - (b) The actual date of startup, postmarked within fifteen (15) days following the start of operation;
 - (2) Per 567 IAC 22.3(3)"f", when portable equipment for which a permit has been issued is to be transferred from one location to another, the Department shall be notified:
 - (a) at least fourteen (14) days before equipment relocation if the equipment will be located in a nonattainment area for the National Ambient Air Quality Standards (NAAQS) or a maintenance area for the NAAQS;
 - (b) at least seven (7) days before equipment relocation.
 - (3) Per 567 IAC 22.3(8), a new owner shall notify the Department of the transfer of equipment ownership within thirty (30) days of the occurrence. The notification shall be mailed to:

Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324

and include the following information:

- The date of ownership change,
- The name, address, and telephone number of the responsible official, the contact person, and the owner of the equipment both before and after the ownership change; and
- The construction permit number(s) of the equipment changing ownership.
- (4) Unless specified per a federal regulation, notification of each compliance test required by Permit Condition 12 shall be done not less than thirty (30) days before the required test or performance evaluation of a continuous emission monitor [567 IAC 25.1(7)]. The notification shall include:
 - the time,
 - the place,
 - the name of the person who will conduct the tests,
 - and other information as required by the Department;

If the owner or operator does not provide timely notice to the Department, the Department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with the applicable rules or permit conditions. Upon written request, the Department may allow a notification period of less than thirty (30) days.

- B. The owner or operator shall furnish the Department with the following reports:
 - (1) Per 567 IAC 24.1(2), an incident of excess emissions as defined in 567 IAC 20.2 shall be reported within eight (8) hours or at the start of the first working day following the onset of the incident. The report may be made by electronic mail, in person or by telephone.
 - (2) Per 567 IAC 24.1(3), a written report of an incident of excess emissions as defined in 567 IAC 20.2 shall be submitted as a follow-up to all required initial reports to the Department within seven (7) days of the onset of the upset condition.
 - (3) Operation of this emission unit(s) or control equipment outside of those operating parameters specified in Permit Condition 14 in accordance to the schedule set forth in 567 IAC 24.1.
 - (4) Per 567 IAC 25.1(6), the owner or operator of any facility required to install a continuous monitoring system or systems shall provide quarterly reports to the Director, no later than thirty (30) calendar days following the end of the calendar quarter, on forms provided by the Director.

- (5) Per 567 IAC 25.1(7), a written compliance demonstration report for each compliance testing event, whether successful or not, postmarked not later than six (6) weeks after the completion of the test period unless other regulations provide for other notification requirements. In that case, the more stringent reporting requirement shall be met;
- C. All data, records, reports, documentation, construction plans, and calculations required under this permit shall be available at the plant during normal business hours for inspection and copying by federal, state, or local air pollution regulatory agencies and their authorized representatives, for a minimum of two (2) years from the date of recording unless otherwise required by another applicable law (i.e. NSPS, NESHAP, etc.)
- D. The owner or operator shall send correspondence regarding this permit to the following address:

Construction Permit Supervisor Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9549 Fax: (515) 725-9501

E. The owner or operator shall send correspondence concerning stack testing to:

Stack Testing Coordinator Air Quality Bureau Iowa Department of Natural Resources 7900 Hickman Road, Suite 1 Windsor Heights, IA 50324 Telephone: (515) 725-9545 Fax: (515) 725-9502

F. The owner or operator shall send reports and notifications to:

Compliance Unit SupervisorIDNR Field Office 4Air Quality Bureau1401 Sunnyside LaneIowa Department of Natural ResourcesAtlantic, IA 500227900 Hickman Road, Suite 1Telephone: (712) 243-1934Windsor Heights, IA 50324Fax: (712) 243-6251Telephone: (515) 725-9550Fax: (515) 725-9502

9. Appeal Rights

All conditions within an original permit may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. Amended conditions within a permit amendment may be appealed, subject to the appeal rights set forth in 561 IAC Chapter 7. In permit amendments, all provisions of the original permit remain in full force and effect unless they are specifically changed by the permit amendment. The previous, unchanged permit provisions are included in the amendment for your convenience only and are unappealable.

Per 561 IAC 7.4(1), the owner or operator shall file any written notice of appeal within thirty (30) days of receipt of the issued permit. The written notice of appeal shall be filed with the Director of the Department with a copy to the Legal Services Bureau Chief at the following addresses:

Director	Bureau Chief
Iowa Department of Natural Resources	Legal Services Bureau
502 East 9 th Street	Iowa Department of Natural Resources
Des Moines, IA 50319	502 East 9 th Street
	Des Moines, IA 50319

10. Emission Limits

Pollutant	lb/hr ⁽¹⁾	tons/yr ⁽²⁾	Additional Limits	Reference (567 IAC)
Particulate Matter (PM) – Federal	NA	NA	NA	NA
Particulate Matter (PM) – State	NA	NA	NA	NA
PM ₁₀	NA	NA	NA	NA
PM _{2.5}	NA	NA	NA	NA
Opacity	NA	NA	(3)	23.3(2)"c"
Sulfur Dioxide (SO ₂)	NA	NA	NA	NA
Nitrogen Oxides (NO _x)	NA	NA	NA	NA
Volatile Organic Compounds (VOC)	NA	NA	NA	NA
Carbon Monoxide (CO)	NA	NA	NA	NA
Lead (Pb)	NA	NA	(4)	NAAQS, RACT
Carbon Dioxide equivalents (CO ₂ e)	NA	NA	NA	NA
Single HAP	NA	NA	NA	NA
Total HAP	NA	NA	NA	NA

The following emission limits shall not be exceeded:

⁽¹⁾ The emission limit is expressed as the average of three (3) runs.
⁽²⁾ The emission limit is a twelve (12) month rolling total.

⁽³⁾ The owner/operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

⁽⁴⁾ The lead limit is established at 0.01 tons of lead per rolling 3-month average; that correlates to a lead silt content of 0.00281 g/m^2 and maximum potential operation (all raw material/product is shipped or received by truck). The lead limit is based on 95% reduction over baseline lead levels and is established to address the nonattainment designation for a portion of Pottawattamie County published in the Federal Register (76 FR 72097) on November 22, 2011. The compliance demonstration with this lead limit is based on maximum silt content, operating restrictions and work practice standards as specified in Conditions 14 and 15. Total silt load content of 2.7 g/m² has been established as a surrogate for total lead silt content.

11. Emission Point Characteristics

This emission point shall conform to the specifications listed below:

Parameter	Value
Stack Height, (ft, from the ground)	NA
Discharge Style	NA
Stack Opening, (inches, diameter)	NA
Exhaust Temperature (°F)	NA
Exhaust Flowrate (scfm)	NA

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

12. Compliance Demonstration(s)

Pollutant	Compliance	Compliance Methodology	Frequency
	Demonstration		
PM – Federal	No	NA	NA
PM – State	Yes	Silt Load Sampling	Monthly Basis
PM_{10}	No	NA	NA
PM _{2.5}	No	NA	NA
Opacity	No	NA	NA
SO ₂	No	NA	NA
NO _x	No	NA	NA
VOC	No	NA	NA
СО	No	NA	NA
Pb	No	NA	NA
CO ₂	No	NA	NA
CH ₄	No	NA	NA
N ₂ O	No	NA	NA
CO ₂ e	No	NA	NA
Single HAP	No	NA	NA
Total HAP	No	NA	NA

If an initial compliance demonstration specified above is testing, the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Permit Condition 10 within <u>90</u> days after issuance of this air construction permit unless otherwise specified.

<u>If subsequent testing is specified above</u>, the owner or the owner's authorized agent shall verify compliance with the emission limitations contained in Permit Condition 10 according to the frequency and timeframe noted above. The Department shall reserve the right to impose additional, different, or more detailed testing requirements.

13. New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

The emission unit is not subject to any of the New Source Performance Standards (NSPS).

This project is not subject to any National Emission Standards for Hazardous Air Pollutants Area Source Standards.

Failure to include any NSPS or NESHAP requirements as a part of this permit does not relieve the permittee from the requirement to comply with all applicable NSPS or NESHAP requirements.

14. Operating Limits

Operating limits for this emission unit shall be:

- A. All haul roads at the facility shall be paved. The facility shall complete the paving of haul road segments 7, 14, 15, and 16 by October 31, 2015.
- B. The facility shall stop using haul road segment 17 by October 31, 2015.
- C. Fugitive dust emissions generated from truck traffic on the paved haul roads shall, at a minimum, be controlled by:
 - Sweeping, at a minimum, 3 times per week when the haul roads are used six (6) days in a week, with a maximum of one operating day (i.e., Sunday and holidays would not be considered operating days since there is no movement of material) between sweeping events except as noted in Conditions 14C (i) through (iii). All sweeping must be completed using a Tymco DST-6 Sweeper or functionally equivalent sweeper type (as approved by the Department).
 - i. Paved road sweeping shall begin within seven (7) days of the permit issuance date.

14. Operating Limits (Continued)

- If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility ii. during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
- Paved road sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 iii. inches of precipitation (water equivalent) has occurred within the preceding 24-hour time period. However, paved road sweeping shall resume within 24-hours after the precipitation event has ended.
- iv. Paved road sweeping need not occur when the facility experiences no haul road traffic on that calendar day (i.e., the facility would not count this day towards the maximum of one day between sweeping).
- The facility may request reduced sampling frequency should 12 consecutive tests show compliance with v. the silt load limit. The facility shall submit the test results to the Department with the permit modification request to reduce sampling frequency.
- D. If sweeping cannot be accomplished for the entire month due to ambient temperatures or hazardous weather, silt load testing is not required for that month.
- E. The haul road surface silt loading shall not exceed 2.70 g/m^2 .
- F. Traffic on the haul roads shall not exceed 20 mph. The speed limit shall be posted on all haul roads.
- G. The facility is limited to shipping (inbound and outbound) material between the hours of 5am to 8 pm, Monday through Friday and 8 am to 12 pm on Saturday.
- H. The facility is limited to processing/shipping (inbound and outbound) no more than 946,000 tons of material per rolling 12-month period.
- I. Internal transfers at the facility are limited to Monday through Friday.
- J. Best Management Practices (BMP) Clean up spills, truck scale areas, etc. Alter Metal shall implement "good housekeeping" or best management practices to minimize fugitive emissions. Such practices include but are not limited to:
 - Clean up spills of raw materials or product on the haul road surface as expeditiously as possible and in a i. manner consistent with good practice for minimizing emissions.
 - Clean on weekly basis, around truck scale areas and process buildings. ii.
 - iii. Maintain and post speed limit signs.
- K. Limit public access. Starting on either July 31, 2014, or by no later than 30 days after the date of permit issuance, whichever comes later, Alter Metal shall restrict public access to the facility by posting signs warning of restricted access to the facility at all property boundary lines not secured with fencing. During those days the facility is operating, in-person surveillance of the boundary shared with the rail line shall be conducted by Alter Metal staff periodically throughout the day, including documentation as to surveillance times and locations. In lieu of in-person surveillance the facility may maintain and operate equipment adequate to ensure surveillance of the boundary shared with the rail line during plant operations.

The restriction does not apply to Alter Metal employees, employees, owner or lessees of contiguous properties, federal, state or local officials, emergency and maintenance service personnel (both private and public section), who have a legitimate reason or need for accessing the rail spur.

- L. Contingency Measures
 - After November 30, 2014, the facility shall increase the frequency of cleaning/sweeping of the haul roads i. to daily within seven (7) days after notification by the Department that a monitored exceedance of the lead NAAQS occurred. The facility shall submit sweeping data to the Department and continue daily cleaning/sweeping until notified by the Department that a different cleaning/sweeping frequency shall be used.
 - If a monitored exceedance of the lead NAAOS occurs after the provisions of Permit Condition 14.L.i. ii. have been implemented for three (3) full calendar months, Alter Metal will submit an emissions evaluation meeting the criteria and timeline specified by the Department.

15. Operating Condition Monitoring and Recordkeeping

Unless specified by a federal regulation, all records as required by this permit shall be kept on-site for a minimum of two (2) years and shall be available for inspection by the Department. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The facility shall record the frequency of cleaning/sweeping performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
- B. The facility shall record daily the date and time of material processed at the facility (i.e., record inbound and outbound shipments of process material).
- C. The facility shall calculate on a monthly basis the amount of material processed/shipped (inbound and outbound) and calculate the rolling 12-month total amount of material processed (in tons).
- D. Performance testing on the haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations. The three sampled locations shall then be averaged to determine the silt loading average results. Performance testing shall be completed prior to paved road sweeping. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading.
- E. The owner or operator shall maintain a log of each silt load sampling event that contains the following:
 - i. The date of silt load sampling event;
 - ii. The location of the sample taken;
 - iii. The measured silt content in grams;
 - iv. Sample area used for silt load sampling in meters; and,
 - v. The operator's initials.
- F. Record the date paving of haul road segments 7, 14, 15, and 16 was completed.
- G. Record the date the closure of haul road segment 17 was finalized.
- H. The facility shall maintain records of BMP activities completed under Condition 14J.
- I. Record the date control measures restricting public access to the facility (posting signs, performing in-person surveillance and/or installing electronic surveillance, installing fences, etc.) is initiated. Record the date, with documentation, for all subsequent surveillance times and locations.

16. Continuous Emission Monitoring

This permit does not require continuous emission monitoring.

17. Permit History

Permit No.	Proj. No.	Description	Date	Stack Testing

18. Description of Terms and Acronyms

The descriptions below are meant only as a brief explanation of terms contained within the permit and may not be the exact definition of the term or acronym as contained within the regulations.

acfm	Actual cubic feet per minute
Applicant	The owner, company official or authorized agent
Btu	British thermal unit
°C	Degrees Celsius
Condensable PM	Material that condenses and/or reacts upon cooling and dilution in the ambient air to form
Condensable I M	particulate matter immediately after discharge from the stack
CO ₂ e	Carbon dioxide equivalent which is the aggregate emissions of greenhouse gas (GHG)
	emissions based on global warming potentials
Department	Iowa Department of Natural Resources
dia.	Diameter
°F	
	Degrees Fahrenheit
ft	Foot
GHG	Greenhouse Gas which is defined as being the group of carbon dioxide (CO_2) , methane (CU_2) , norther and (NO_2) hydrofluoreaethang (UEC) norther are the second s
	(CH_4) , nitrous oxide (N_2O) , hydrofluorocarbons (HFC), perfluorocarbons (PFC) and where function (CE_1)
-	sulfur hexafluoride (SF ₆)
g a/daam	grams Crome nor dry standard subio mater
g/dscm	Grams per dry standard cubic meter Grains
gr gr/daaf	
gr/dscf gr/scf	Grains per dry standard cubic foot Grains per standard cubic foot
HAP	Hazardous Air Pollutant(s)
_	
hp hr	horsepower Hour
lli lb	Pound
lb/hr	Pounds per hour
	Meter
m	Milligram
mg MM	Million
MM MW	
	Megawatt Not Applicable
NA	Not Applicable
PM _{2.5}	Particulate Matter with an aerodynamic diameter equal to or less than 2.5 microns
PM ₁₀ PM – Federal	Particulate Matter with an aerodynamic diameter equal to or less than 10 microns Particulate Matter that does not include the condensable PM
PM – State	Particulate Matter that includes condensable PM
ppm	parts per million
ppm _v	parts per million by volume
ppm _w RACT	parts per million by weight
-	Reasonably Available Control Technology
scfm SHAP	Standard cubic feet per minute
ТНАР	Single hazardous air pollutant
	Total hazardous air pollutants
tons/yr	Tons per year Year
yr	1 Cat

END OF PERMIT

EPA Rulemakings

CFR:	40 C.F.R. 52.820(d)(111)
FRM:	81 FR 9770 (2/26/16)
PRM:	80 FR 59695 (10/2/15)
State Submission:	2/9/15
State Final:	State effective date 1/29/15
APDB File:	IA-168; EPA-R07-OAR-2015-0582, EPA effective date 3/28/16
Description:	EPA approves Permit No. 14-A-521; Alter Metal Recycling.