

APS Premise No. 06-61-00-0028 -  
PTI Application No. 06-5517  
Fee \$2,400\*

\*Fee Doubled

CENTRAL OFFICE USE ONLY

PERMIT TO INSTALL WORKSHEET

Issuance Date: \_\_\_\_\_

1. TYPE OF SOURCE: Check as applicable:

Effective Date: \_\_\_\_\_

AIR - Major Source?  YES  NO - Was a New Source Review Data  Yes  No Sheet (for modeling) submitted to APC for this source?

NSPS  PSD  CEM  NESHAPS  Emission Offsets  
Category \_\_\_\_\_ Category \_\_\_\_\_

WATER - Pertains to  Sewers  Waste Water Treatment  Industrial Facility  
 SOLID WASTE  
 HAZARDOUS WASTE DISPOSAL FACILITY - Is a HWFAB Permit required?  YES  NO

2. Check One:  APPROVAL  DENIAL

3. FACILITY NAME: Sharon Stone Company - Slag Plant

4. APPLICANT/PERSON TO CONTACT: Jeff Gerst phone (740) 732-7100

5. MAILING ADDRESS: P.O. Box 100  
(City) Dexter City (State) OH (Zip) 45727

6. LOCATION OF PROPOSED SOURCE: Always complete b (city or township) and c (county).  
Specific  
a. Street Address or Location Description County Road 10, 0.2 miles west of the intersection of State Rt. 7  
b. City/Township Marietta  
c. County/Countries Washington  
d. Sewer District, if applicable NA

7. DESCRIPTION OF PROPOSED SOURCE (Max. 120 Characters)

P	O	R	T	A	B	L	E	M	A	N	G	A	N	E	S	E	F	U	M	E	/	C	C	N	C	R	E	T	E	M	I	X	T	U	R	E	
-	M	A	N	G	A	N	E	S	E	B	R	I	C	K	L	I	N	E																			

8. DATE COMPLETE APPLICATION RECEIVED: 06/11/98

9. CONSTRUCTION STATUS:  Not Started  Partially Completed  Completed

10. DATE CONSTRUCTION TO BEGIN: 09/97

11. ESTIMATED COST OF WASTE TREATMENT FACILITY PROJECT: NA

NOTE: ATTACH INSTALLATION SCHEDULE TO THIS WORKSHEET FOR AIR POLLUTION SOURCES.

12. DO/LAA Engr. Review By: Daniel J. Canter Date 6/29/98  
13. Review Approved: \_\_\_\_\_ Date \_\_\_\_\_  
14. D.O. Review as Required: \_\_\_\_\_ Date \_\_\_\_\_  
15. Central Office Review: \_\_\_\_\_ Date \_\_\_\_\_

16. For any Combined Permits:

AIR REVIEW (DO/LAA) \_\_\_\_\_ Date \_\_\_\_\_  
WASTE WATER REVIEW \_\_\_\_\_ Date \_\_\_\_\_  
SOLID WASTE REVIEW \_\_\_\_\_ Date \_\_\_\_\_  
HAZARDOUS WASTE REVIEW \_\_\_\_\_ Date \_\_\_\_\_

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FOR DENIALS ONLY

RULES IN VIOLATION: \_\_\_\_\_

SPECIFIC REASONS FOR DENIAL: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PERMIT TO INSTALL DISTRIBUTION SHEET  
INDICATE BELOW TO WHOM COPIES ARE TO BE SENT

Applicant's Mailing Address	P E R M I T	R E P O R T	P E L A N S	DATA SHEETS
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Mr. Jeff Gerst				
PERSON TO CONTACT				
Sharon Stone Company	X			
APPLICANT				
P.O. Box 100				
STREET				
Dexter City	OH	45727		
CITY	STATE	ZIP		
Copy to:				
Copy to:				
Copy to:				
Local Air Agency _____				
District Office				
NEDO _____ NWDO _____ CDO _____ SEDO <u>X</u> SWDO _____	X			
Central Office				
DAPC <u>X</u> DWPC _____ DLPC _____ DHMM _____	X			

PTI NUMBER: 06-5517 FACILITY NAME: Sharon Stone Company - Slag Plant

Preliminary \_\_\_\_\_ X Final

1. CONSTRUCTION STATUS (do not use with #2, 3A or 3B)

source name:

2. NSPS REQUIREMENTS

source #:

source description :

NSPS subpart:

3A. NESHAP REQUIREMENTS

source #:

source description :

NESHAP reg:

3B. RADIONUCLIDES NESHAP REQUIREMENTS:

source #:

source description:

4. PERFORMANCE TEST REQUIREMENTS:  
 C. (optional) source: Pollutant(s):  
 D. (optional) Test shall include a determination of the uncontrolled mass rate of emissions.

5. MONITORING REQUIREMENTS:  
 type of monitor: source:

6. PSD REQUIREMENTS:  
 7. APPENDIX S - EMISSION OFFSET INTERPRETIVE RULING:  
 8. RECORDS RETENTION AND AVAILABILITY:  
 9. REPORTING REQUIREMENTS:  
 10. WASTE DISPOSAL:  
 11. MAINTENANCE OF EQUIPMENT:  
 12. MALFUNCTION/ABATEMENT:  
 13. AIR POLLUTION NUISANCES PROHIBITED:  
 14. NINETY DAY OPERATING PERIOD:  
 15. GASOLINE DISPENSING FACILITIES:  
 16. DIESEL AND/OR KEROSENE DISPENSING FACILITIES:  
 17. GASOLINE DISPENSING OPERATIONS (SUBMERGED FILL ONLY)  
 annual limit of throughput (gallons):  
 18. MISC. STORAGE TANKS:  
 19. NSPS SUBPART Kb, 40 CFR 60.116b (a) AND (b)  
 source number(s): tank size max vapor pressure

In Addition:

- A. 40 CFR 60.116b (a) and (c):  
 source number(s): tank size max vapor pressure

- B. 40 CFR 60.116b (a) and (d):  
 source number(s): tank size max vapor pressure

- C. other applicable rules \_\_\_\_\_:  
 source number(s): tank size max vapor pressure

20. BAT FOR OPEN TOP VAPOR DEGREASERS:  
 21. BAT FOR COLD CLEANERS:  
 22. BAT FOR CONVEYORIZED DEGREASERS:  
 23. NOTICE OF INTENT TO RELOCATE:  
 24. ADDITIONAL TERMS AND CONDITIONS: \_\_\_\_\_ AIR \_\_\_\_\_ DSHWM \_\_\_\_\_ WW

AIR EMISSION SUMMARY

The air contaminant sources listed below comprise the Permit to Install for Sharon Stone Company - Slag Plant located in Washington County. The sources listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

Ohio EPA Source Number	Source Identification / Description	BAT Determination	Applicable Federal and OAC Rules	Permit Allowable Mass Emissions and/or Control & Usage Requirements
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F004	Manganese Brick Line - Storage Piles	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.	3745-31-05 (A)(3) 3745-17-08 (B)(6)	1.5 TPY of particulate emissions.  No visible particulate emissions except for one minute in any hour.
P001	Cement Silo	Pneumatic loading/vented to a fabric filter. Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.	3745-31-05 (A)(3) 3745-17-11 (B)	1.0 TPY of particulate emissions.  0.030 Gr/dscf of exhaust gases or no visible emissions.
F005	Manganese Screening	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.	3745-31-05 (A)(3) 3745-17-08 (B)(6)	1.5 TPY of particulate emissions from fugitive emission points.  No visible particulate emissions except for one minute in any hour.
F006	Manganese/Concrete batching and conveying.	Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.	3745-31-05 (A)(3) 3745-17-08 (B)(6)	0.75 TPY of particulate emissions from fugitive emission points.  No visible particulate emissions except for one minute in any hour.
B001	Manganese Screening Generator	Diesel Fuel - Compliance with all applicable regulations	3745-31-05 (A)(3) 3745-17-11 (B)(5)	1.43 pounds per hour and 6.26 TPY of NOx. 0.72 pounds per hour and 3.2 TPY of CO. 0.11 pounds per hour and 0.5 TPY of particulate.
B002	Batching/Conveying Generator	Diesel Fuel - Compliance with all applicable regulations	3745-31-05 (A)(3) 3745-17-11 (B)(5)	1.76 pounds per hour and 7.7 TPY of NOx. 0.55 pounds per hour and 2.4 TPY of CO. 0.13 pounds per hour and 0.6 TPY of particulate.

SUMMARY  
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons/Year
PM	5.85
NOx	13.96
CO	5.6

**1. Additional Terms and Conditions for F004, F005, and F006:**

1. The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

F004 - Manganese Brick line Storage Piles

The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the load-in and load-out materials with water and/or ant other suitable dust suppression chemicals to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat each storage pile with water to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as

a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

2. The material handling operation(s) that are covered by this permit and subject to the above-mentioned requirements are listed below:

F005 - Manganese Screening  
F006 - Manganese/Concrete Batching and Conveying

The permittee shall employ best available control measures for the above-identified material handling operation(s) for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measure(s) to ensure compliance:

<u>material handling operation(s)</u>	<u>control measure(s)</u>
F005 - Manganese Screening material shall content of 20% or greater shall not be allowed to dry.	Wet suppression - incoming have a moisture and
F006 - Manganese/Concrete Batching suppression/wet mixing of materials.	Enclosure, wet and Conveying

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

Implementation of the above-mentioned control measure(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rules 3745-17-08 and 3745-31-05.

**A. Monitoring and/or Recordkeeping Requirements for F004:**

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

<u>frequency</u>	<u>storage pile identification</u>	<u>minimum load-in inspection</u>
	<u>F004</u>	<u>Daily</u>

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

<u>storage pile identification</u>	<u>minimum load-out</u>
<u>inspection frequency</u>	
<u>F004</u>	Daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

<u>inspection</u>	<u>storage pile identification</u>	<u>minimum wind erosion</u>
		<u>frequency</u>
	<u>F004</u>	<u>Daily</u>

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.
6. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned

applicable requirements.

7. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 7.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **B. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and
  - b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **C. Testing Requirements:**

1. Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B) (4) (a) through (B) (4) (c) of OAC rule 3745-17-03.

#### **D. Monitoring and/or Recordkeeping Requirements for F005, F006:**

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

<u>material handling operation(s)</u>	<u>minimum inspection frequency</u>
F005, F006	Daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.
3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
4. The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measure(s);
  - c. the dates the control measure(s) was (were) implemented; and
  - d. on a calendar quarter basis, the total number of days the control measure(s) was (were) implemented.

The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

#### **E. Reporting Requirements**

1. The permittee shall submit deviation reports that identify any of the following occurrences:
  - a. each day during which an inspection was not performed by the required frequency; and
  - b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.
2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

#### **F. Testing Requirements**

1. Compliance with the visible emission limitations for the Manganese Screening Operation (F005) and Manganese/Concrete Batching and Conveying (F006), identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996,

and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

**2. Additional Terms and Conditions for B001, B002:**

**A. Monitoring and Recordkeeping Requirements:**

None.

**B. Reporting Requirements:**

None.

**C. Testing Requirements for B001, B002:**

1. Applicable Compliance Method:

Compliance with the allowable mass emission rate for TSP shall be determined by multiplying an emission factor of 0.31 lbs of TSP per million Btu's of diesel fuel burned. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1. No testing is specifically required by this permit but, if required, the permittee shall demonstrate compliance with this emission limitation in accordance with test method 5 specified in "Appendix on Test Method" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

**NO<sub>x</sub> Emission Limitation:**

B001, B002

Applicable Compliance Method:

Compliance with the allowable mass emission rate for NO<sub>x</sub> shall be determined by multiplying an emission factor of 4.41 lbs of NO<sub>x</sub> per million Btu's of diesel fuel burned. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1. No testing is specifically required by this permit but, if required, the permittee shall demonstrate compliance with this emission limitation in accordance with test method 7 or 7E specified in "Appendix on Test Method" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

Emission Limitation

0.72 lb/hr of CO for B001, 0.55 lb/hr for B002

Applicable Compliance Method

Compliance with the allowable mass emission rate for CO shall be determined by multiplying an emission factor of 0.95 lbs of CO per million Btu's of diesel fuel burned. This emission factor is specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1. No testing is

specifically required by this permit but, if required, the permittee shall demonstrate compliance with this emission limitation in accordance with test method 10 specified in "Appendix on Test Method" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources").

Emission Limitation:

20% opacity for B001, B002

Applicable Compliance Method:

Compliance with the visible emission limit shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible emission testing is specifically required to demonstrate compliance with this limit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

**D. Miscellaneous Requirements:**

None

**3. Additional Terms and Conditions for P001:**

1. The permittee shall employ reasonably available control measures for the purpose of ensuring compliance with the above mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to both maintain enclosures around the emissions unit and vent emissions to a fabric filter baghouse, which is capable of meeting the applicable requirements to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**A. Monitoring and Recordkeeping Requirements:**

1. The permittee shall perform daily checks, while the equipment is in operation, for any unusual visible emissions of fugitive dust escaping the capture system and for any visible emissions from the baghouse serving the emissions unit. A record of the necessary and completed corrective actions resulting from the daily checks shall be maintained by the permittee.

**B. Reporting Requirements:**

1. The permittee shall submit reports in accordance with the reporting requirements of the General Terms and Condition which identify each day that the observations required under the monitoring section of this permit were not performed and each day that any corrective measures required to be taken pursuant to the monitoring section of this permit were not performed.

**C. Testing Requirements:**

1. Compliance with the emission limitations identified above shall be determined in accordance with the following method:

a. Emission Limitation

0.030 grains per dry standard cubic foot of exhaust gases, or no visible emissions, whichever is less stringent.

Applicable Compliance Method:

Compliance shall be determined in accordance with 40 CFR 60 Appendix A, Methods 1-5 and the procedures specified in OAC rule 3745-17-03(B)(1). No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04. Compliance will be determined through the monitoring and recordkeeping in the above sections.

b. Emission Limitation:

20% opacity as a three minute average for fugitive emissions

Applicable Compliance Method:

Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

c. Emission Limitation

1.0 Tons per Year of Particulate Matter

Applicable Compliance Method:

A one time calculation of Potential to Emit based upon baghouse design as follows:

$0.030 \text{ gr/dscf} * 900 \text{ acfm} * 60 \text{ min/hr} \div 7,000 \text{ gr/lb} * 8760 \text{ hr/yr} = 1.01 \text{ TPY}$

**E. Miscellaneous Requirements:**

None