

31 July 2009

Ms. Kathryn Hinckley  
Environmental Health and Safety Manager  
Stanley Fastening Systems, L.P.  
2 Briggs Drive  
East Greenwich, RI 02818-9949

Dear Ms. Hinckley:

The Department of Environmental Management, Office of Air Resources has reviewed and approved your application for the installation of process and air pollution control equipment at your facility, located at 2 Briggs Drive, East Greenwich, RI.

Enclosed is a minor source permit issued pursuant to our review of your application (Approval Nos. 2061-2067).

If there are any questions concerning this permit, please contact me at 222-2808, extension 7020.

Sincerely,

Pamela E. Crump, EIT  
Air Quality Specialist  
Office of Air Resources

cc: East Greenwich Building Official  
Peter Anderson, ERM

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES

MINOR SOURCE PERMIT

*STANLEY FASTENING SYSTEMS, L.P.*

APPROVAL NOs. 2061-2067

Pursuant to the provisions of Air Pollution Control Regulation No. 9, this minor source permit is issued to:

*Stanley Fastening Systems, L.P.*

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**For the following:**

*Installation of four (4) Bright Basic wire draw machines (Approval Nos. 2061-2064)*

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*and three (3) Rod Breakdown wire draw machines (Approval Nos. 2065-2067). Two (2)*

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*Torit Model DFT 3-12 dust collectors and two (2) Torit Model DFT 2-8 dust collectors*

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*will control particulate emissions from the Bright Basic wire draw machines. One Torit*

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*Model DFT 4-96 dust collector will control particulate emissions from the Rod*

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*Breakdown wire draw machines.*

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**Located at:**

*2 Briggs Drive, East Greenwich*

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**This permit shall be effective from the date of its issuance and shall remain in effect until revoked by or surrendered to the Department. This permit does not relieve *Stanley Fastening Systems, L.P.* from compliance with applicable state and federal air pollution control rules and regulations. The design, construction and operation of this equipment shall be subject to the attached permit conditions and emission limitations.**

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**Douglas L. McVay, Acting Chief  
Office of Air Resources**

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**Date of issuance**

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR RESOURCES**

**Permit Conditions and Emission Limitations**

Stanley Fastening Systems, L.P.

**Approval Nos. 2061-2067**

A. Emission Limitations

1. Hazardous Air Pollutant (HAP) and Air Toxic Emission Limitations

The emissions of listed toxic air contaminants discharged to the atmosphere from the wire draw machines shall not exceed the limitations in Table 1. These limitations were established to ensure that emissions from this facility do not exceed any of the Acceptable Ambient Levels (AALs) listed in Air Pollution Control Regulation No. 22. The limitations shown in pounds per year are calculated on a 12-month rolling average basis.

B. Operating Requirements

1. Particulate matter generated from each wire draw machine shall be captured, contained, and routed to a dust collector for treatment prior to discharge.
2. The filter cartridges used in each dust collector shall be Torit-Built<sup>®</sup> Ultra-Web filters or its equivalent in terms of filtration efficiency.
3. All reasonable precautions shall be taken to prevent visible fugitive emissions from the wire draw machines.
4. The dust collectors shall be operated according to good engineering practice and design specifications whenever the wire draw machines are emitting air contaminants.
5. All access doors and hatches on the shrouded enclosures shall be closed during routine operation to maintain a negative pressure within the enclosures. Brief, occasional openings of doors and hatches to allow for access and inspection are acceptable.
6. An air intake plenum located above the wire draw machines shall be operated whenever the wire draw machines are in operation, and shall draw workroom air into the Torit Model DFT 4-96 dust collector.

7. The overhead roll-up doors and interior passageways to the manufacturing room containing the wire draw machines shall be equipped with plastic stripping and/or laminar flow blowers. All doorways shall be closed when not in use.

C. Monitoring Requirements

1. The pressure drop across each dust collector shall be monitored continuously and checked a minimum of once per day and the date, time and measurement shall be recorded.
2. On a quarterly basis, the owner/operator shall obtain a composite sample of the dust captured by the dust collectors that is collected in receiving drums and analyze the dust for the three toxic air contaminants listed in Table 1. Upon consultation with and approval by the Office of Air Resources, the frequency of analysis of the dust may be lessened to semi-annually based on analysis of the previous year's analytical results.
3. The owner/operator shall determine the quantity of dust captured by each dust collector that is collected in receiving drums on a monthly basis.

D. Recordkeeping and Reporting Requirements

1. The owner/operator shall maintain records of the analytical results of composite samples of dust captured by the dust collectors.
2. The owner/operator shall maintain records of the quantity of dust captured by each dust collector.
3. The owner/operator shall maintain records of the quantity of steel rod processed for the Bright Basic wire draw machines and the quantity of steel rod processed for the Rod Breakdown wire draw machines on a monthly basis.
4. The owner/operator shall maintain records of the daily pressure drop measurement of each dust collector.
5. The owner/operator shall notify the Office of Air Resources in writing of the date of actual start-up of each of wire draw machine and each dust collector no later than fifteen (15) days after such date.
6. The owner/operator shall calculate the total quantity of each listed toxic air contaminant in Table 1 discharged to the atmosphere from the wire draw machines. The owner/operator shall keep records of this determination and provide such records to the Office of Air Resources upon request.

Emissions of listed toxic air contaminants from the wire draw machines shall be calculated based on a mass balance calculation using the overall dust collection system control efficiency and analysis of a representative composite sample of the dust captured by the dust collectors. As part of the calculation the owner/operator shall determine that the amount of dust captured during the representative time period correlates to the amount of steel rod processed to document that the dust collection system is operating properly and capturing the expected amount of particulate matter generated by the wire draw machines.

- a. For pollutants with a pound/hour or pound/day limitation – calculate emissions on a monthly basis, no later than 10 days after the first of the month, by back-calculation using the most recent records of analytical results and quantity of dust collected.
  - b. For pollutants with a pound/year limitation – calculate emissions on a monthly basis, no later than 10 days after the first of the month, using the most recent records of analytical results and quantity of dust collected. Monthly and 12-month rolling averages shall be calculated and used for comparison with emission limitations.
7. The owner/operator shall notify the Office of Air Resources in writing whenever the total quantity of a listed toxic air contaminant, discharged to the atmosphere from the wire draw machines, exceeds the limitations in Table 1. For the purposes of the Table 1 listed toxic air contaminants, the following notification timelines apply:
- a. For pollutants with a pound/hour or pound/day limitation – written notification is required within 24 hours.
  - b. For pollutants with a pound/year limitation – written notification is required within 15 days.
8. The owner/operator shall notify the Office of Air Resources of any new sources of emissions of the three toxic air contaminants listed in Table 1 (excluding emissions from the combustion of fuel oil, propane or natural gas in fuel burning equipment). Any such new source shall have the approval of the Director prior to installation.
9. The owner/operator shall notify the Office of Air Resources of any anticipated noncompliance with the terms of this permit or any other air pollution control rules and regulations applicable to the wire draw machines.

10. The owner/operator shall notify the Office of Air Resources of any record showing noncompliance with the terms of this permit or any other air pollution control rule or regulation applicable to the wire draw machines by sending a copy of the record to the Office of Air Resources within 30 days following the occurrence.
11. The owner/operator shall notify the Office of Air Resources in writing of any planned physical or operational change to any equipment that would:
  - a. Change the representation of the facility in the application.
  - b. Alter the applicability of any state or federal air pollution rules or regulations.
  - c. Result in the violation of any terms or conditions of this permit.
  - d. Qualify as a modification under APC Regulation No. 9.

Such notification shall include:

- Information describing the nature of the change.
- Information describing the effect of the change on the emission of any air contaminant.
- The scheduled completion date of the planned change.

Any such change shall be consistent with the appropriate regulation and have the prior approval of the Director.

12. Deviations from permit conditions, including those attributable to upset conditions as defined in this permit, shall be reported, in writing, within five (5) business days of the deviation, to the Office of Air Resources. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.
13. All records required of this approval shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Office of Air Resources upon request.

#### E. Other Permit Conditions

1. To the extent consistent with the requirements of this permit and applicable federal and state laws, the facility shall be designed, constructed and operated in accordance with the representation of the facility in the permit application.

2. There shall be no bypassing of the air pollution control equipment at any time.
3. Employees of the Office of Air Resources and its authorized representatives shall be allowed to enter the facility at all times for the purpose of inspecting any air pollution source, investigating any condition it believes may be causing air pollution or examining any records required to be maintained by the Office of Air Resources.
4. At all times, including periods of startup, shutdown and malfunction, the permittee shall, to the extent practicable, maintain and operate the facility in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Office of Air Resources, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
5. The emission and dispersion characteristics of the listed toxic air contaminants in Table I shall be consistent with the parameters used in the air quality modeling to demonstrate that the emissions from the wire draw machines do not cause an impact, at or beyond the property line of the facility, which exceeds the Acceptable Ambient Level for that substance. The Office of Air Resources, in its sole discretion, may reopen this minor source permit if it determines that the emission and dispersion characteristics have changed significantly and that emission limitations must be revised and/or added to this permit to ensure compliance with Air Pollution Control Regulation No. 22.

F. Malfunctions

1. Malfunction means a sudden and unavoidable breakdown of process or control equipment. In the case of a malfunction of any air pollution control system, all reasonable measures shall be taken to assure resumption of the designed control efficiency as soon as possible. In the event that the malfunction of an air pollution control system is expected or may reasonably be expected to continue for longer than 24 hours and if the owner or operator wishes to operate the source on which it is installed at any time beyond that period, the Director shall be petitioned for a variance under Section 23-23-15 of the General Laws of Rhode Island, as amended. Such petition shall include, but is not limited to, the following:
  - a. Identification of the specific air pollution control system and source on which it is installed;

- b. The expected period of time that the air pollution control system will be malfunctioning or out of service;
  - c. The nature and quantity of air contaminants likely to be emitted during said period;
  - d. Measures that will be taken to minimize the length of said period;
  - e. The reasons that it would be impossible or impractical to cease the source operation during said period.
2. The owner/operator may seek to establish that a malfunction of any air pollution control system that would result in noncompliance with any of the terms of this permit or any other applicable air pollution control rules and regulations was due to unavoidable increases in emissions attributable to the malfunction. To do so, the owner/operator must demonstrate to the Office of Air Resources that:
- a. The malfunction was not attributable to improperly designed air pollution control equipment, lack of preventative maintenance, careless or improper operation, or operator error;
  - b. The malfunction was not part of a recurring pattern indicative of inadequate design, operation, or maintenance;
  - c. Repairs were performed in an expeditious fashion. Off-shift labor and overtime should be utilized, to the extent practicable, to ensure that such repairs were completed as expeditiously as practicable.
  - d. All possible steps were taken to minimize emissions during the period of time that the repairs were performed.
  - e. Emissions during the period of time that the repairs were performed will not:
    - (1) Cause an increase in the ground level ambient concentration at or beyond the property line in excess of that allowed by Air Pollution Control Regulation No. 22 and any Calculated Acceptable Ambient Levels; and
    - (2) Cause or contribute to air pollution in violation of any applicable state or national ambient air quality standard.
  - f. The reasons that it would be impossible or impractical to cease the source operation during said period.



- g. The owner/operator's action in response to the excess emissions were documented by properly signed, contemporaneous operating logs or other relevant evidence.

This demonstration must be provided to the Office of Air Resources, in writing, within two working days of the time when the malfunction occurred and contain a description of the malfunction, any steps taken to minimize emissions and corrective actions taken.

The owner/operator shall have the burden of proof in seeking to establish that noncompliance was due to unavoidable increases in emissions attributable to the malfunction.

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**Table 1. Emission Limitations**

| Pollutant             | Limitation |           |            |
|-----------------------|------------|-----------|------------|
|                       | pound/hour | pound/day | pound/year |
| Manganese             |            | 0.098     | 35.7       |
| Vanadium              | 8.12E-05   |           |            |
| Sulfates <sup>1</sup> | 0.029      |           | 252.6      |

<sup>1</sup> Includes ammonium bisulfate [(NH<sub>4</sub>)HSO<sub>4</sub>, CAS 7803-63-6], ammonium sulfate [(NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, CAS 7783-20-2], ferric sulfate [Fe(SO<sub>4</sub>)<sub>3</sub>, CAS 10028-22-5] and sodium sulfate [Na<sub>2</sub>SO<sub>4</sub>, CAS 7757-82-6]