



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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9/29/15

Mr. Hubert McGovern
OMG, Inc.
153 Bowles Road
Agawam, MA 01001

RE: AGAWAM
Transmittal No.: X266816
Application No.: WE-15-009
Class: SM79-7
FMF No.: 131657
AIR QUALITY PLAN APPROVAL

Dear Mr. McGovern:

The Massachusetts Department of Environmental Protection (“MassDEP”), Bureau of Waste Prevention, has reviewed your Limited Plan Application (“Application”) listed above. This Application concerns the proposed construction, and operation of a steel wire heat treating process at your manufacturing facility located at 153 Bowles Road in Agawam, Massachusetts (“Facility”).

This Application was submitted in accordance with 310 CMR 7.02 Plan Approval and Emission Limitations as contained in 310 CMR 7.00 “Air Pollution Control,” regulations adopted by MassDEP pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Section 142 A-J, Chapter 21C, Section 4 and 6, and Chapter 21E, Section 6. MassDEP’s review of your Application has been limited to air pollution control regulation compliance and does not relieve you of the obligation to comply with any other regulatory requirements.

MassDEP has determined that the Application is administratively and technically complete and that the Application is in conformance with the Air Pollution Control regulations and current air pollution control engineering practice, and hereby grants this **Plan Approval** for said Application, as submitted, subject to the conditions listed below.

Please review the entire Plan Approval, as it stipulates the conditions with which the Facility owner/operator (“Permittee”) must comply in order for the Facility to be operated in compliance with this Plan Approval.

1. DESCRIPTION OF FACILITY AND APPLICATION

OMG, Inc. manufactures fasteners out of steel wire at its production facility located at 153 Bowles Road in Agawam, Massachusetts. The manufacturing of fasteners is a multi-step process to draw and shape steel wire into fasteners, followed by heat-treating to harden the steel wire and then coating to finish the fasteners. OMG performs all of these process steps except heat-treatment at the 153 Bowles Road Facility in Agawam.

OMG, Inc. plans to install a metal parts heat treating process at its manufacturing facility in Agawam. To form fasteners, OMG buys annealed steel wire from suppliers. The wire purchased is the lowest tensile strength (softest) steel in order to more easily form it into the different size and shape fasteners that OMG sells. Once the fasteners are formed the strength has to be increased in order to perform in various applications. Heating and rapid cooling of steel realigns the crystalline structure of the iron molecules in the steel to give it more strength.

The new heat treat equipment will include three continuous mesh belt furnaces (two initially, one future), and two integral quench batch furnaces (one initially, one future). Each furnace is electrically heated which uses indirect heating to perform the heat-treating process. The heat treating operations generate waste oil, but no other hazardous waste. Ancillary equipment for the heat treatment process will include two endogenerators to crack natural gas to produce “endogas”, a 1000 gallon anhydrous ammonia tank, a 1000 gallon nitrogen tank, and an oil chiller system.

The parts exiting each continuous belt mesh furnace and integral quench batch furnace are quenched in an oil bath tank. Oil from the bath is re-circulated through a chiller system to maintain an oil tank temperature at or about 190 °F. Evaporative emissions from the oil bath are the largest potential source of emissions during the heat-treatment process.

None of the combustion sources on the process are greater than 3 million British thermal units per hour (“MMBtu/hr”) and the continuous belt mesh furnace and IQ batch furnace are electrically heated to minimize combustion emissions.

Small amounts of oil vapor (VOC) are emitted from the pre-wash, oil quench, and final wash operations. Potential emissions from each source are less than 1.0 tons per year. The largest oil vapor emission source is 0.8 tons per year from the continuous mesh belt oil quench and final wash. Due to the low amount and concentration of VOCs in the exhaust stream, add on controls were not considered feasible for this proposed project.

The process is not subject to 40 CFR Part 63, Subpart M, National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products because OMG, through Plan Approval #1-P-12-006, has limited its HAP emissions to area source levels (40 CFR 63.3881(b)). The process is not subject to 40 CFR 63 Subpart XXXXXX, National Emission Standards for Hazardous Air Pollutants Area Source Standards for Nine Metal

Fabrication and Finishing Categories because in accordance with §63.11522 machining, shearing, cutting and forming processes specifically excluded are hand held devices and any process employing fluids for lubrication or cooling.

2. EMISSION UNIT (EU) IDENTIFICATION

Each Emission Unit (EU) identified in Table 1 is subject to and regulated by this Plan Approval:

Table 1			
EU#	Description	Design Capacity	Pollution Control Device (PCD)
12 13 14	Continuous Mesh Belt Heat Treat Line	1,750 ft ² parts per hour	None
15 16	Integral Quench Batch Furnace	500 ft ² parts per batch	None

Table 1 Key:

EU# = Emission Unit Number
 PCD = Pollution Control Device
 ft² = square feet

3. APPLICABLE REQUIREMENTS

A. OPERATIONAL, PRODUCTION and EMISSION LIMITS

The Permittee is subject to, and shall not exceed the Operational, Production, and Emission Limits as contained in Table 2 below:

Table 2			
EU#	Operational / Production Limit	Air Contaminant	Emission Limit
12 13 14	1,750 ft ² of parts per hour	VOC	0.6 TPM / 3.0 TPY
		Single HAP	0.1 TPY
		Total HAPs	0.1 TPY
15 16	500 ft ² of parts per batch	VOC	0.1 TPM / 0.5 TPY
		Single HAP	0.1 TPY
		Total HAPs	0.1 TPY
Facility-Wide		VOC	30 TPY
		Total HAPs	9.0 TPY

Table 2 Key:

EU# = Emission Unit Number
 VOC = Volatile Organic Compounds
 ft² = square feet
 HAP (single) = maximum single Hazardous Air Pollutant

HAPs (total) = total Hazardous Air Pollutants
TPM = tons per month
TPY = tons per consecutive 12-month period

B. COMPLIANCE DEMONSTRATION

The Permittee is subject to, and shall comply with, the monitoring, testing, record keeping, and reporting requirements as contained in Tables 3, 4, and 5 below:

Table 3	
EU#	Monitoring and Testing Requirements

Table 3

EU#	Monitoring and Testing Requirements
12 13 14 15 16	<p>1. The Permittee must perform visual determination of fugitive emissions from each emission unit exhaust point according to the procedures of EPA Method 22, of 40 CFR Part 60, Appendix A-7. The Facility must conduct the EPA Method 22 test while the affected source is operating under normal conditions. The duration of each EPA Method 22 test must be at least 15 minutes, and visible emissions will be considered to be present if they are detected for more than six minutes of the fifteen minute period.</p> <p>2. Visual determinations of fugitive emissions must be performed in accordance with Provision (1) of this section and according to the following schedule outlined in this section.</p> <p style="margin-left: 20px;">a. <i>Daily Method 22 Testing.</i> Perform visual determination of fugitive emissions once per day, on each day the process is in operation, during operation of the process.</p> <p style="margin-left: 20px;">b. <i>Weekly Method 22 Testing.</i> If no visible fugitive emissions are detected in consecutive daily EPA Method 22 tests, performed in accordance with paragraph 2(a) of this section for 10 days of work day operation of the process, the Permittee may decrease the frequency of EPA Method 22 testing to once every five days of operation of the process (one calendar week). If visible fugitive emissions are detected during these tests, the Permittee must resume EPA Method 22 testing of that operation once per day during each day that the process is in operation, in accordance with paragraph 2(a) of this section.</p> <p style="margin-left: 20px;">c. <i>Monthly Method 22 Testing.</i> If no visible fugitive emissions are detected in four consecutive weekly EPA Method 22 tests performed in accordance with paragraph 2(b) of this section, the Permittee may decrease the frequency of EPA Method 22 testing to once per 21 days of operation of the process (one calendar month). If visible fugitive emissions are detected during these tests, you must resume weekly EPA Method 22 in accordance with paragraph 2(b) of this section.</p> <p style="margin-left: 20px;">d. <i>Quarterly Method 22 Testing.</i> If no visible fugitive emissions are detected in three consecutive monthly EPA Method 22 tests performed in accordance with paragraph 2(c) of this section, the Permittee may decrease the frequency of EPA Method 22 testing to once per 60 days of operation of the process (3 calendar months). If visible fugitive emissions are detected during these tests, the Permittee must resume monthly EPA Method 22 in accordance with paragraph 2(c) of this section.</p> <p style="margin-left: 20px;">e. If at the end of four (4) consecutive quarters of operation, no measurements of fugitive emissions greater than 6 minutes of the 15 minute period are recorded, OMG may request a written approval from MassDEP allowing a reduction in the frequency of fugitive emission observations. This request shall be made in writing to MassDEP and shall include a demonstration that fugitive emissions have not exceeded emission limits established in this approval.</p>
12 13	<p>3. The Permittee shall monitor initial oil purchases for the parts quenching oil bath and make-up oil rates to the quench bath.</p>

Table 3	
EU#	Monitoring and Testing Requirements
14 15 16	4. The Permittee shall monitor waste oil amounts from the pre-wash, continuous mesh belt oil quench, and final wash that are recovered from the respective oil-water separators.
	5. The Permittee shall monitor all operations to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
Facility-wide	6. If and when MassDEP requires it, the Permittee shall conduct emission testing in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13

Table 3 Key:

EU# = Emission Unit Number

Table 4	
EU#	Record Keeping Requirements
12 13 14 15 16	1. The Permittee shall record oil make-up to the continuous mesh belt and batch oil quench tanks, and waste oil amounts from the oil-water separators serving the pre-wash, post-wash and batch furnaces operations.
	2. The Permittee shall maintain adequate records on-site to demonstrate compliance with all operational, production, and emission limits contained in Table 2 above. Records shall also include the actual emissions of air contaminant(s) emitted for each calendar month and for each consecutive twelve month period (current month plus prior eleven months). These records shall be compiled no later than the 15 th day following each month. An electronic version of the MassDEP approved record keeping form, in Microsoft Excel format, can be downloaded at http://www.mass.gov/dep/air/approvals/aqforms.htm#report .
	3. The Permittee shall maintain records of monitoring and testing as required by Table 3.
	4. The Permittee shall maintain a copy of this Plan Approval, underlying Application and the most up-to-date SOMP for the EU(s) approved herein on-site.
	5. The Permittee shall maintain a record of routine maintenance activities performed on the approved EU(s), PCD(s) and monitoring equipment. The records shall include, at a minimum, the type or a description of the maintenance performed and the date and time the work was completed.
	6. The Permittee shall maintain a record of all malfunctions affecting air contaminant emission rates on the approved EU(s) and monitoring equipment. At a minimum, the records shall include: date and time the malfunction occurred; description of the malfunction; corrective actions taken; the date and time corrective actions were initiated and completed; and the date and time emission rates and monitoring equipment returned to compliant operation.
Facility-wide	7. The Permittee shall maintain records to ensure sufficient information is available to comply with 310 CMR 7.12 Source Registration.
	8. The Permittee shall maintain records required by this Plan Approval on-site for a minimum of five (5) years.

Table 4	
EU#	Record Keeping Requirements
	9. The Permittee shall make records required by this Plan Approval available to MassDEP and USEPA personnel upon request.

Table 4 Key:

EU# = Emission Unit Number

PCD = Pollution Control Device

SOMP = Standard Operating and Maintenance Procedure

USEPA = United States Environmental Protection Agency

Table 5	
EU#	Reporting Requirements
Facility-wide	1. The Permittee shall submit to MassDEP all information required by this Plan Approval over the signature of a “Responsible Official” as defined in 310 CMR 7.00 and shall include the Certification statement as provided in 310 CMR 7.01(2)(c).
	2. The Permittee shall notify the Western Regional Office of MassDEP, Bureau of Air & Waste Section Chief by telephone (413) 755-2115, email, marc.simpson@state.ma.us or fax (413) 784-1149, as soon as possible, but no later than one (1) business day after discovery of an exceedance(s) of Table 2 requirements. A written report shall be submitted to the BAW Section Chief at MassDEP within three (3) business days thereafter and shall include: identification of exceedance(s), duration of exceedance(s), reason for the exceedance(s), corrective actions taken, and action plan to prevent future exceedance(s).
	3. The Permittee shall report <i>every year</i> to MassDEP, in accordance with 310 CMR 7.12, all information as required by the Source Registration/Emission Statement Form. The Permittee shall note therein any minor changes (under 310 CMR 7.02(2)(e), 7.03, 7.26, etc.), which did not require Plan Approval.
	4. The Permittee shall provide a copy to MassDEP of any record required to be maintained by this Plan Approval within 30-days from MassDEP’s request.
	5. The Permittee shall submit to MassDEP for approval a stack emission pretest protocol, at least 30 days prior to emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.
	6. The Permittee shall submit to MassDEP a final stack emission test results report, within 45 days after emission testing, for emission testing as defined in Table 3 Monitoring and Testing Requirements.

Table 5 Key:
 EU# = Emission Unit Number

4. SPECIAL TERMS AND CONDITIONS

The Permittee is subject to, and shall comply with, the following special terms and conditions:

- A. The Permittee shall comply with the Special Terms and Conditions as contained in Table 6 below:

Table 6	
EU#	Special Terms and Conditions
Facility-wide	1. The Permittee shall ensure that the anhydrous ammonia tank to be constructed shall comply with the requirements of MassDEPs Ammonia Storage and Handling Guidelines (June, 2011). 2. Any prior Plan Approvals issued under 310 CMR 7.02 shall remain in effect unless specifically changed or superseded by this Plan Approval. The Permittee shall not exceed the emission limits and shall comply with approved conditions specified in the prior Plan Approval(s) unless specifically altered by this Plan Approval.

Table 6 Key:

EU# = Emission Unit Number

- B. The Permittee shall install and use an exhaust stack, as required in Table 7, on each of the Emission Units that is consistent with good air pollution control engineering practice and that discharges so as to not cause or contribute to a condition of air pollution. Each exhaust stack shall be configured to discharge the gases vertically and shall not be equipped with any part or device that restricts the vertical exhaust flow of the emitted gases, including but not limited to rain protection devices known as “shanty caps” and “egg beaters.” The Permittee shall install and utilize exhaust stacks with the following parameters, as contained in Table 7 below, for the Emission Units that are regulated by this Plan Approval:

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions* (feet)	Stack Gas Exit Velocity Range* (feet per second)	Stack Gas Exit Temperature Range (°F)
12A 13A 14A	50	1.33	30-60	70-150
12B 13B 14B	50	1.33	30-60	150-200

Table 7				
EU#	Stack Height Above Ground (feet)	Stack Inside Exit Dimensions* (feet)	Stack Gas Exit Velocity Range* (feet per second)	Stack Gas Exit Temperature Range (°F)
12C 13C 14C	50	2.0	30-60	100-200
15 16	50	1.33	30-60	200-300

***Note: Stack Inside Exit Dimensions are based upon current best estimates. Final stack inside dimensions may vary. Final inside exit dimensions will be provided in the Source Registration for these units.**

Table 7 Key:

EU# = Emission Unit Number

°F = Degree Fahrenheit

5. GENERAL CONDITIONS

The Permittee is subject to, and shall comply with, the following general conditions:

- A. Pursuant to 310 CMR 7.01, 7.02, 7.09 and 7.10, should any nuisance condition(s), including but not limited to smoke, dust, odor or noise, occur as the result of the operation of the Facility, then the Permittee shall immediately take appropriate steps including shutdown, if necessary, to abate said nuisance condition(s).
- B. If asbestos remediation/removal will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that all removal/remediation of asbestos shall be done in accordance with 310 CMR 7.15 in its entirety and 310 CMR 4.00.
- C. If construction or demolition of an industrial, commercial or institutional building will occur as a result of the approved construction, reconstruction, or alteration of this Facility, the Permittee shall ensure that said construction or demolition shall be done in accordance with 310 CMR 7.09(2) and 310 CMR 4.00.
- D. Pursuant to 310 CMR 7.01(2)(b) and 7.02(7)(b), the Permittee shall allow MassDEP and / or USEPA personnel access to the Facility, buildings, and all pertinent records for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.
- E. This Plan Approval does not negate the responsibility of the Permittee to comply with any other applicable Federal, State, or local regulations now or in the future.

- F. Should there be any differences between the Application and this Plan Approval, the Plan Approval shall govern.
- G. Pursuant to 310 CMR 7.02(3)(k), MassDEP may revoke this Plan Approval if the construction work is not commenced within two years from the date of issuance of this Plan Approval, or if the construction work is suspended for one year or more.
- H. This Plan Approval may be suspended, modified, or revoked by MassDEP if MassDEP determines that any condition or part of this Plan Approval is being violated.
- I. This Plan Approval may be modified or amended when in the opinion of MassDEP such is necessary or appropriate to clarify the Plan Approval conditions or after consideration of a written request by the Permittee to amend the Plan Approval conditions.
- J. The Permittee shall conduct emission testing, if requested by MassDEP, in accordance with USEPA Reference Test Methods and regulation 310 CMR 7.13. If required, a pretest protocol report shall be submitted to MassDEP at least 30 days prior to emission testing and the final test results report shall be submitted within 45 days after emission testing.
- K. Pursuant to 310 CMR 7.01(3) and 7.02(3)(f), the Permittee shall comply with all conditions contained in this Plan Approval. Should there be any differences between provisions contained in the General Conditions and provisions contained elsewhere in the Plan Approval, the latter shall govern.

6. MASSACHUSETTS ENVIRONMENTAL POLICY ACT

MassDEP has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Energy & Environmental Affairs, for air quality control purposes, was not required prior to this action by MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and 301 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions,” which allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report (EIR) at a later time.

7. APPEAL PROCESS

This Plan Approval is an action of MassDEP. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Plan Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts, which are the grounds for the request, and the relief sought. Additionally, the request must state why the Plan Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to the Commonwealth of Massachusetts in the amount of one hundred dollars (\$100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

This request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below. The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

MassDEP may waive the adjudicatory hearing-filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.

Enclosed is a stamped approved copy of the application submittal.

Should you have any questions concerning this Plan Approval, please contact Todd Wheeler by telephone at (413) 755-2297, or in writing at the letterhead address.

*This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.*

Marc Simpson
Permit Chief
Bureau of Air & Waste

Enclosure

ecc: MassDEP/Boston - Yi Tian
MassDEP/WERO – Peter Czapienski
Berkshire Environmental Consultants – Maura J. Hawkins

