

**Morin Brick Company
Androscoggin County
Auburn, Maine
A-209-70-B-R**

**Departmental
Findings of Fact and Order
Part 70 Air Emission License**

After review of the Part 70 License application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. Registration

A. Introduction

| | |
|--------------------------|---------------------------|
| FACILITY | Morin Brick Company (MB) |
| LICENSE NUMBER | A-209-70-B-R |
| LICENSE TYPE | Part 70 License Renewal |
| NAICS CODES | 327121 |
| NATURE OF BUSINESS | Brick Manufacturing |
| FACILITY LOCATION | Old Danville Road, Auburn |
| DATE OF LICENSE ISSUANCE | May 14, 2004 |
| LICENSE EXPIRATION DATE | May 14, 2009 |

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

| EMISSION UNIT ID | UNIT CAPACITY | UNIT TYPE |
|-------------------------|-------------------------------|-------------------|
| Brick Kiln, 1K | 9.67 MMBtu/hr 10,733 lb/hr | Process Equipment |
| Brick Dryer, 1BD | 13,067 lb/hr | Process Equipment |
| Batch Brick Dryer, 2BD | 1.4 MMBtu/hr 25,000 lb/hr | Process Equipment |

MB has additional insignificant activities which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

C. Application Classification

MB has requested two Part 70 Administrative Revisions in addition to the license renewal to correct typographical and calculation errors. These revisions will have no effect on actual emissions. Therefore, this license is considered to be a Part 70 License Renewal with Administrative Revision issued under Chapter 140 of the Department's regulations for a Part 70 source.

II. EMISSION UNIT DESCRIPTION

A. Process Description

Morin Brick Company manufactures brick using two separate processes, stiff mud extrusion and a water struck process.

Clay is obtained from a mine in the vicinity of the brick manufacturing plant and is delivered to the site via dump trucks. The raw clay is unloaded at the extruded grinding area and is fed into a hopper which regulates the flow of clay into a disintegrating crusher (25 ton per hour capacity) where the clay is initially sized. The clay exits the crusher and is conveyed to a second disintegrating crusher (25 ton per hour capacity) where the clay size is further reduced. After exiting the second crusher, the clay is conveyed to a pug mill where it is mixed with lime, sand, or water, depending on the consistency of the clay. Additives including manganese dioxide and barium carbonate may be mixed in the clay at the pug mill to obtain different color schemes in the fired brick. The mixed clay is then discharged to a vacuum chamber to remove air from the material which is extruded through dies where brick are formed by stiff mud extrusion. No.2 fuel oil or specification waste oil is used as a lubricant during the extrusion of the brick column through the dies. After the extrusion process, the column is wire cut into bricks which are then hand set onto kiln cars.

Once loaded, the kiln cars enter the brick dryer where moisture is driven out of the brick body. The dryer is heated by waste heat from the cooling zone of the brick kiln and maintains a temperature of approximately 350°F. The supply of heated air from the cooling zone is controlled by a series of mechanical dampers, which limit the introduction of products of combustion from the kiln firing area into the dryer.

After approximately 24 hours in the brick dryer, the kiln cars are loaded into the brick kiln. Morin Brick Company utilizes a tunnel kiln, which consists of three separate areas: the preheat zone, the firing zone, and the cooling zone. In the preheat zone, propane or natural gas is combusted to create the required temperature gradient prior to firing the brick and for drafting purposes. A process called flashing, used to add color to the fired brick, is also conducted in the firing

zone. During flashing, an excess amount of fuel (propane or natural gas) is introduced into the kiln, producing reducing conditions. Flashing does not occur for more than 8 minutes in any given hour. The firing zone is equipped with 50 burners (five groups of ten burners each) firing natural gas or propane with a combined firing capacity of 7,612 cubic feet of natural gas per hour. A temperature of 1975°F to 2050°F is typically maintained in the firing zone.

After leaving the firing zone, the kiln cars enter the cooling zone where the bricks are slowly cooled to prevent breaking. An air supply fan is located at the end of the cooling zone, which forces outside air over the cooling bricks. A portion of the heated air is then ducted to either the brick dryer or the batch dryer. The remaining air flows into the firing zone and is exhausted through the kiln stack. Once cooled the bricks exit the kiln and are packaged for shipping. The entire firing/cooling process generally lasts for approximately 60 hours.

In addition to stiff mud extrusion, bricks are manufactured using a soft mud or water struck process. Raw clay is fed into a pug mill where it is mixed with water. The clay is then fed into a disintegrating crusher (20 ton per hour capacity) along with sand. After exiting the crusher, the clay/sand mixture is conveyed to a pug mill where it is mixed with water to a moisture content between 34 and 36 percent. Additives may be mixed in to obtain different color schemes in the fired brick. The resulting clay slurry is then placed in molds which are initially dried in the batch dryer. Heat to the batch dryer is provided by waste heat from the kiln and an auxiliary boiler with a maximum design firing rate of 1.4 MMBtu/hr. After preliminary drying in the batch dryer the bricks are removed from the molds, placed on kiln cars, sent to the brick dryer, and then are fired in the kiln.

Emissions from the kiln result from both fuel combustion and liberation/conversion of material in the brick body. Emissions from the brick body are typically sulfur dioxide and hydrogen fluoride (HF). Emissions from the brick dryer result from the volatilization of the distillate oil used for brick extrusion.

B. Brick Kiln

The brick kiln was manufactured by Lingl Corporation in 1979 and is equipped with 50 burners (five groups of ten burners each). Each burner is a Lingl Corporation and North American Model with a total combined maximum firing rate of 7,612 cubic feet of natural gas per hour. The kiln has a total maximum heat input capacity of 9.67 MMBtu/hr. The raw material process rate through the kiln is 10,733 lb/hr, and the finished material rate is 10,500 lb/hr.

Emissions limits for criteria pollutants from the Brick Kiln are based on AP-42 data for “Bricks and Related Clay Products” (Section 11.3) for a natural gas fired

kiln and include fuel combustion emissions. Emission limits for hydrogen fluoride are based on values obtained from a mass balance analysis completed on dried and fired brick from this facility.

In August 2002, clay and fired brick samples from MB were sent to the National Brick Research Center in South Carolina for analysis. The analyses showed that the percent chlorides in every sample from both before and after the kiln were below detection limits. Therefore, HCl emissions from the kiln are assumed to be insignificant.

On May 16, 2003, EPA promulgated National Emission Standards for Hazardous Air Pollutants for Brick and Structural Clay Products Manufacturing (40 CFR Part 63, Subpart JJJJ). This rule requires affected major sources of Hazardous Air Pollutants (HAPs) to comply with applicable emission standards. MB is considered to be in the Brick and Structural Clay Products Manufacturing source category and is a major source of HAPs. However, Section 63.8390(d) of the final rules exempts from the requirements of Subpart JJJJ existing tunnel kilns with a federally enforceable permit condition that restricts kiln operation to less than 10 tons/hr of fired product on a 12-month rolling average basis.

MB is subject to a federally enforceable permit condition restricting the facility to an annual brick production limit of 45,990 tons per year on a 12-month rolling total basis. Through discussions with EPA, it has been determined that this condition is sufficient to restrict MB to less than 10 ton/hr, such that the facility is not subject to Subpart JJJJ.

Streamlining

1. Opacity
MEDEP Chapter 101, Section (2)(B)(3)(d) contains the only applicable opacity standard for this unit. **No streamlining requested.**
2. Particulate Matter
 - a. MEDEP Chapter 105 contains an applicable PM lb/hr emission limit.
 - b. BPT establishes an applicable PM lb/hr emission limit.

MB accepts streamlining for the PM lb/hr emission standard. The BPT limit is the most stringent and is therefore the only PM lb/hr emission limit included in this license.

3. PM₁₀
BPT establishes the only applicable PM₁₀ emission limit.
No streamlining requested.

4. SO₂
BPT establishes the only applicable SO₂ emission limit.
No streamlining requested.
5. NO_x
BPT establishes the only applicable NO_x emission limit.
No streamlining requested.
6. CO
BPT establishes the only applicable CO emission limit
No streamlining requested.
7. VOC
BPT establishes the only applicable VOC emission limit.
No streamlining requested.
8. HF
BPT establishes the only applicable HF emission limit.
No streamlining requested.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of brick throughput, brick additives, and fuel use through purchase receipts indicating amount (scf or gallons).

Based on best management practices and the type of fuel for which the Brick Kiln was designed, it is unlikely that the Brick Kiln will exceed the emissions listed. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting MB to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no parameter monitors required for the Brick Kiln.

Control Equipment

There is no add on control equipment required for the Brick Kiln.

C. Brick Dryer

The brick dryer was manufactured by Lingl Corporation in 1979. The green brick process rate input to the dryer is 13,067 lb/hr, and the dried brick output is 10,733 lb/hr.

Streamlining

1. Opacity
 - a. MEDEP Chapter 101, Section 2(B)(3)(d) contains an applicable opacity standard.
 - b. BPT establishes an applicable opacity limit.

MB accepts streamlining for the opacity standard. The BPT limit is the most stringent and is therefore the only opacity limit included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of brick throughput.

Based on raw material moisture content, there is no reasonable likelihood that the brick dryer will exceed the opacity and PM limits. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting MB to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no Parameter Monitors required for the Brick Dryer.

Control Equipment

There is no add on control equipment required for the Brick Dryer.

D. Batch Dryer

The batch dryer was manufactured by Pixley Ceriv in 1987 and is equipped with one Multifire III burner. The burner was manufactured by Maxon Burner Corporation with a maximum design heat input capacity of 1.4 MMBtu/hr. The batch dryer fires natural gas or propane. The molded brick process rate input to the dryer is 25,000 lb/hr and molded brick output rate is approximately 25,000 lb/hr.

Emissions limits for criteria pollutants from the Batch Dryer are based on AP-42 data for "Bricks and Related Clay Products" (Section 11.3) for a natural gas fired kiln.

Streamlining

1. Opacity

MEDEP Chapter 101, Section (2)(B)(3)(d) contains the only applicable opacity standard for this unit. **No streamlining requested.**

2. Particulate Matter
 - a. MEDEP Chapter 105 contains an applicable PM lb/hr emission limit.
 - b. BPT establishes an applicable PM lb/hr emission limit.

MB accepts streamlining for the PM lb/hr emission standard. The BPT limit is the most stringent and is therefore the only PM lb/hr emission limit included in this license.

3. PM₁₀

BPT establishes the only applicable PM₁₀ emission limit.
No streamlining requested.
4. SO₂

BPT establishes the only applicable SO₂ emission limit.
No streamlining requested.
5. NO_x

BPT establishes the only applicable NO_x emission limit.
No streamlining requested.
6. CO
BPT establishes the only applicable CO emission limit
No streamlining requested.
7. VOC
BPT establishes the only applicable VOC emission limit.
No streamlining requested.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes records of brick throughput and fuel use through purchase receipts indicating amount (scf or gallons).

Based on best management practices and the type of fuel for which the Batch Dryer was designed it is unlikely that the Batch Dryer will exceed the emissions listed. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting MB to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no parameter monitors required for the Brick Kiln.

Control Equipment

There is no add on control equipment required for the Brick Kiln.

E. Grinding and Crushing Operations

MB operates some miscellaneous emission units including the grinding and crushing operations for the raw materials, and primary crushers used to process the raw materials.

Streamlining

1. Opacity
MEDEP Chapter 101, Section (2)(B)(3)(d) contains the only applicable opacity standard for these units. **No streamlining requested.**
2. Particulate Matter
MEDEP Chapter 105, Section 2 contains the only applicable PM lb/hr standard. **No streamlining requested.**

Periodic Monitoring

Based on best management practices it is unlikely that the Grinding and Crushing Operations will exceed the opacity and PM emission limits. Therefore, periodic monitoring by the source for these pollutants is not required. However, neither the EPA nor the State is precluded from requesting MB to perform testing and may take enforcement action for any violations discovered.

Parameter Monitors

There are no Parameter Monitors required for the Grinding and Crushing Operations.

Control Equipment

There is no add on control equipment required for the Grinding and Crushing Operations.

F. Fugitive Emissions

Fugitive particulate matter emissions sources at Morin Brick include material stockpiles, paved and unpaved surfaces.

Streamlining

Opacity

MEDEP Chapter 101, Section (2)(B)(4) contains the only applicable opacity standard for these emissions. **No streamlining requested.**

Periodic Monitoring

Based on best management practices it is unlikely that MB will exceed the fugitive emissions opacity emission. Therefore, periodic monitoring by the source for opacity is not required. However, neither the EPA nor the State is precluded from requesting MB to perform testing and may take enforcement action for any violations discovered.

G. Part 70 Administrative Revisions

1. In MB's Initial Part 70 License the annual brick production limit was listed as 45,900 ton/year. This was a typographical error. The correct annual production limit should be 45,990 ton/year as shown below:

$$\left(\frac{10,500 \text{ lb of brick}}{\text{hour}}\right) \times \left(\frac{8,760 \text{ hour}}{\text{year}}\right) \times \left(\frac{\text{ton}}{2000 \text{ lb}}\right) = 45,990 \text{ ton of brick/year}$$

2. When the Initial Part 70 License was issued, MB was using approximately 1,825 gals/year of oil as lubrication for extrusion. However, MB is permitted to use up to 2,000 gals/year in this process. The facility wide annual VOC emission limit in the Initial Part 70 License was calculated erroneously using 1,825 gals/year instead of 2,000 gals/year. The facility wide annual VOC emission limit has been recalculated using the correct limit.

H. Facility Emissions

Total Licensed Annual Emission for the Facility
Tons/year
(used to calculate the annual license fee)

| <u>Pollutant</u> | <u>Tons/Year</u> |
|-------------------|------------------|
| PM | 24.9 |
| PM ₁₀ | 24.9 |
| SO ₂ | 18.0 |
| NO _x | 15.0 |
| CO | 36.0 |
| VOC | 8.4 |
| Hydrogen Fluoride | 27.6 |

III. AIR QUALITY ANALYSIS

According to Chapter 140 of the Department's regulations, an existing Part 70 source shall be exempt from an impact analysis with respect to a regulated pollutant whose allowable emissions do not exceed the following:

| <u>Pollutant</u> | <u>Tons/year</u> |
|------------------|------------------|
| PM | 25 |
| PM ₁₀ | 25 |
| SO ₂ | 50 |
| NO _x | 100 |
| CO | 250 |

Based on facility license allowed emissions, MB is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this sources:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-209-70-B-R pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Morin Brick Company pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

STANDARD STATEMENTS

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement.
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
 - A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
 - B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated September 2003.

| | SOURCE | CITATION | DESCRIPTION | BASIS FOR DETERMINATION |
|---|----------|----------|-------------------------------|---|
| A | Facility | 112(r) | Accidental Release Prevention | Large propane storage tank on site is not under MB's control and is not owned by MB |

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;
- B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
- C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
- D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[MEDEP Chapter 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any

- period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request; **Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
 - (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions; **Enforceable by State-only**
 - (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;
 - (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.
 - (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:
 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
 2. to demonstrate compliance with the applicable emission standards; or
 3. pursuant to any other requirement of this license to perform stack testing.

- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.
[MEDEP Chapter 140]
Enforceable by State-only
- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.
[MEDEP Chapter 140]
Enforceable by State-only
- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.
- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the

probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRS § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.
[MEDEP Chapter 140]

- (11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- (a) The identification of each term or condition of the Part 70 license that is the basis of the certification;
 - (b) The compliance status;
 - (c) Whether compliance was continuous or intermittent;
 - (d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

- (e) Such other facts as the Department may require to determine the compliance status of the source;

SPECIAL CONDITIONS

(14) **Brick Kiln**

- A. The Brick Kiln shall not exceed a heat input rate of 9.67 MMBtu/hr of propane and natural gas. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- B. Flashing in the Brick Kiln shall be limited to 20 gallons per hour for propane and 1,777 cubic feet per hour for natural gas. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- C. The Brick Kiln shall be limited to the firing of propane and natural gas only. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- D. Emissions from the Brick Kiln shall not exceed the following limits:

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|--------------|-----------------------------|----------------------------------|
| PM | 5.1 | MEDEP Chapter 140, BPT | Federally Enforceable |
| PM ₁₀ | 4.6 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| SO ₂ | 3.5 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| NO _x | 3.5 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| CO | 6.4 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| VOC | 7.8 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| HF | 6.3 | MEDEP Chapter 140, BPT | Enforceable by State-only |

- E. Compliance with the lb/hr limits listed in Condition (14)(D) above shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]
- F. MB shall operate the Brick Kiln such that the visible emissions from the kiln do not exceed 20% opacity on a six (6) minute block average basis, for more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101]

- G. Compliance with the opacity limit listed in Condition (14)(F) above shall be demonstrated by stack testing, upon request by the Department, in accordance with 40 CFR Part 60, Appendix A, Method 9, or other method approved by the Department. [MEDEP Chapter 140, BPT]
- H. MB shall maintain monthly records of brick additives (including manganese dioxide) indicating amount of additive purchased and weigh percent HAP. [MEDEP Chapter 140, BPT]
- (15) **Process Limit**
- MB shall not exceed an annual (12-month rolling total) brick production limit of 45,990 tons per year. Morin Brick Company shall maintain records of monthly brick throughput. [MEDEP Chapter 140, BPT]
- (16) **Brick Dryer**
- A. MB shall operate the Brick Dryer such that the visible emissions from the Brick Dryer do not exceed an opacity of 10% on a six (6) minute block average basis, for more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 140, BPT]
- B. VOC emissions from the brick dryer shall not exceed 1.6 lb/hr. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- C. Compliance with the VOC lb/hr limit shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- (17) **Batch Dryer**
- A. The Batch Dryer shall not exceed a heat input rate of 1.4 MMBtu/hr of natural gas and propane demonstrated by records of the fuel firing rate into the batch dryer. [MEDEP Chapter 140, BPT] **Enforceable by State-only**
- B. The Batch Dryer shall be limited to firing natural gas and propane. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

C. Emissions from the batch dryer shall not exceed the following limits:

| Pollutant | lb/hr | Origin and Authority | Enforceability |
|------------------|-------|------------------------|----------------------------------|
| PM | 3.0 | MEDEP Chapter 140, BPT | Federally Enforceable |
| PM ₁₀ | 3.0 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| SO ₂ | 0.1 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| NO _x | 0.51 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| CO | 1.63 | MEDEP Chapter 140, BPT | Enforceable by State-only |
| VOC | 0.16 | MEDEP Chapter 140, BPT | Enforceable by State-only |

D. Compliance with the lb/hr limits listed in Condition (17)(C) above shall be demonstrated by stack testing upon request by the Department. [MEDEP Chapter 140, BPT]

E. Morin Brick Company shall operate the Batch Dryer such that the visible emissions from the dryer do not exceed an opacity of 20 percent on a six (6) minute block average basis, for more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 140, BPT]

F. Compliance with the opacity limit listed in Condition (17)(E) above shall be demonstrated by stack testing, upon request by the Department, in accordance with 40 CFR Part 60, Appendix A, Method 9, or other method approved by the Department. [MEDEP Chapter 140, BPT]

(18) **Facility Fuel Use**

A. For the fuel oil utilized as a lubricant during the extrusion of the brick column through the dies, MB shall not exceed an annual distillate oil (including #2 fuel oil and specification waste oil) use cap of 2,000 gallons per year (12-month rolling total) demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

B. The sulfur content of the distillate fuel used as in Condition (18)(A) above shall not exceed 0.5% by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

C. MB shall keep monthly records of the amount of each fuel fired at the facility. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

(19) **Specification Waste Oil**

A. The waste oil utilized in Condition (18)(A) above shall meet the following criteria for Specification Waste Oil:

Specification Waste Oil: Waste oil which shall not exceed any of the following standards, which does not otherwise exhibit hazardous waste characteristics, and which has not been mixed with hazardous waste.

| <u>Constituent/Property</u> | <u>Allowable Level*</u> |
|----------------------------------|-------------------------|
| Arsenic | 5.0 ppm maximum |
| Cadmium | 2.0 ppm maximum |
| Chromium | 10 ppm maximum |
| Lead | 100 ppm maximum |
| Polychlorinated Biphenyls (PCBs) | 10 ppm maximum |
| Total Halogens | 1,000 ppm maximum |
| Flash Point | 100°F minimum |

* Concentrations are in parts per million on a dry weight basis, values for metals are for total metal concentration, not EP Toxic concentration.

- B. MB shall maintain records of a representative sample of the waste oil utilized demonstrating that the waste oil does not exceed the allowable level for the above constituents and property.
- C. Purchase receipts shall be kept documenting the quantity and type of waste oil utilized in the brick extrusion process and the receipts shall be made available to the Department upon request.

[MEDEP Chapter 140, BPT] **Enforceable by State-only**

- (20) MB shall not exceed the following annual emission limits on a 12-month rolling total basis:

| <u>Pollutant</u> | <u>TPY</u> | <u>Origin and Authority</u> |
|------------------|------------|-----------------------------|
| PM | 24.9 | MEDEP Chapter 140, BPT |

Enforceable by State-only

Compliance with the emission limits listed above shall be calculated based upon brick production and using AP-42 data for “Bricks and Related Clay Products” (Section 11.3) for a natural gas fired kiln and mass balance data where available.

(21) **Fugitive Emissions**

- A. Potential sources of fugitive PM emissions including material stockpiles, paved, and unpaved roadways shall be controlled when appropriate by wetting with water, with calcium chloride, or other methods as approved by the Department to prevent visible emissions in exceed of 20% opacity, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any 1-hour. [MEDEP Chapter 101]
- B. When visible emissions from the clay pile exceed 10% opacity, MB shall wet the storage pile to reduce fugitive particulate matter emissions.
[MEDEP Chapter 140, BPT] **Enforceable by State-only**

(22) **Monitoring and Recordkeeping Requirements**

[MEDEP Chapters 140]

The following are identified as Periodic Monitors:

1. Brick throughput
2. Amount of brick additive used
3. Fuel use (propane and natural gas)
4. Amount of #2 fuel oil and specification waste oil used in the extrusion process
5. Sulfur content of the #2 fuel oil used in the extrusion process

(23) **Semiannual Reporting**

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due on July 31st and Jan 31st of each year. The postmarked date of the submittal shall be used to determine compliance with the timeliness of the semiannual reporting.

- A. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- B. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

[MEDEP Chapter 140]

(24) **Annual Compliance Certification**

MB shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31 of each year.

The postmarked date of the submittal shall be used to determine compliance with the timeliness of the annual reporting. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [MEDEP Chapter 140]

(25) **Annual Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted as specified by Chapter 137.

(26) **Toxic Air Pollutants Emission Statement**

In accordance with MEDEP Chapter 137, the licensee shall report, in a timeframe designated by the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

- (27) The licensee is subject to the State regulations listed below.

| <u>Origin and Authority</u> | <u>Requirement Summary</u> | <u>Enforceability</u> |
|---|----------------------------------|---------------------------|
| Chapter 102 | Open Burning | - |
| Chapter 109 | Emergency Episode Regulation | - |
| Chapter 110 | Ambient Air Quality Standard | - |
| Chapter 116 | Prohibited Dispersion Techniques | - |
| 38 M.R.S.A. Section 3 §585-B, sub-§5 | Reduce Mercury Use and Emissions | Enforceable by State-only |

- (28) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs. [40 CFR, Part 82, Subpart F]

- (29) **Payment of Fees**

MB shall pay the annual air emission license fee within 30 days of August 31st of each year. Pursuant to 38 M.R.S.A. Section 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for revocation of the license under 38 M.R.S.A. Section 341-D, Subsection 3.

