

McCain Foods USA, Inc. )  
Aroostook County )  
Easton, Maine )  
A-436-70-C-A )

**Departmental  
Findings of Fact and Order  
Air Emission License  
Amendment #2**

After review of the air emissions license amendment 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 590, the Department finds the following facts:

**I. REGISTRATION**

**A. Introduction**

FACILITY	McCain Foods USA, Inc. (McCain)
LICENSE NUMBER	A-436-70-B-A
LICENSE TYPE	Part 70 Section 502(b)(10) Change
NAICS CODE	311411
NATURE OF BUSINESS	Frozen Potato Products
FACILITY LOCATION	Easton, Maine
DATE OF INITIAL LICENSE ISSUANCE	December 2, 2004
DATE OF AMENDMENT #2 ISSUANCE	
LICENSE EXPIRATION DATE	December 2, 2009

1. McCain Foods USA, Inc. (McCain) of Easton, Maine was issued their initial Part 70 Air Emission License A-436-70-A-I on December 2, 2004, permitting the operation of emission sources associated with their potato processing facility. McCain was recently issued Amendment #1, on April 13, 2006, to install two new boilers designated Boilers #8 and #9 that will replace Boilers #2 and #3. The new boilers have a maximum design heat input capacity of 49.5 MMBtu/hr (330 gal/hr) each.
2. McCain is requesting a Part 70 Section 502(b)(10) Change. McCain is proposing to install and operate an energy recovery system (ERS) on their Prime 2 Fryer line (prime/batter fryer).

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**B. Application Classification**

The application for McCain does not include the licensing of increased emissions or cause emissions of any pollutant not previously licensed. The request by McCain does not cause emissions in excess of the standards in the permit (whether expressed therein as a rate of emissions or in terms of total emissions) and therefore qualifies as a 502(b)(10) of the Clean Air Act.

**II. DESCRIPTION OF SECTION 502(B)(10) CHANGE**

**A. Fryer Energy Recovery System**

McCain is proposing to install and operate an energy recovery system (ERS) on their Prime 2 Fryer line (prime/batter fryer). Air emissions from the fryer will not be affected by this change, and the two existing rotoclones will continue to be utilized to reduce particulate emissions. However, after passing through the rotoclones, the two air flows from the fryer will be recombined and directed to an ERS where energy will be recovered for use in other areas of the potato processing plant, such as steam peeling or drying. Following passage through the ERS, the air flow will be discharged to the atmosphere through a new stack.

Currently, exhaust gases from the Prime 2 Fryer are discharged from two stacks. As part of the fryer ERS project, McCain proposes to replace the two existing stacks with one new stack located closer to the proposed ERS. Once the fryer ERS becomes fully operational, the existing stacks will be removed. Operation of the Prime 2 Fryer and the rotoclones will not change with installation of the ERS. However, the exhaust gas temperature will change due to the heat recovery, and the exhaust gas flow rate will change due to the use of one stack rather than two. The exit temperature of the exhaust gas is expected to be reduced from about 210°F, based on stack testing, to approximately 150°F with the fryer ERS operational. The exhaust gas flow rate for the new stack is expected to be approximately 14,000 actual cubic feet per minute (acfm) under typical operating conditions. The typical flow rate for each of the existing stacks ranges from 6,700 acfm to 7900 acfm, based on stack test data.

The Department has determined that no air dispersion modeling is required for installation and operation of the fryer ERS as long as the new stack's height is at least as tall as one of the existing stacks' height and the new stack's diameter is at least as wide as the one of the existing stacks' diameter. The height of each of the existing stacks for the Prime 2 Fryer is 55.5 feet above ground level. The height of the new stack will be 56 feet 2 inches, slightly taller than the existing stacks. The inside diameter at the top of each of the existing stacks is 1.64 feet, while the diameter of the new stack will be 2.42 feet.

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Based on the information submitted by McCain, the Department approves McCain's request to change its Part 70 air license conditions to include the installation of the ERS.

**ORDER**

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

- will receive Best Practical Treatment,
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.

The Department hereby grants this Part 70 Section 502(b)(10) amendment, subject to the conditions found in Part 70 Air Emission License A-436-70-A-I, subsequent amendments, and to the following conditions:

**NEW CONDITONS**

**(1) The following conditions are new to Air Emissions License, A-436-70-A-I.**

- (36) McCain is licensed to install and operate an energy recovery system (ERS) on their Prime 2 Fryer line (prime/batter fryer).

DONE AND DATED IN AUGUSTA, MAINE THIS                      DAY OF                      2006.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
                    DAVID P. LITTELL, COMMISSIONER

**The term of this 502(B)(10) Change shall be concurrent with the term of Air Emission License A-436-70-A-I.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 24, 2006

Date of application acceptance: June 6, 2006

Date filed with Board of Environmental Protection: \_\_\_\_\_

This Order prepared by Edwin Cousins, Bureau of Air Quality

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