



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

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November 9, 2016

Mr. Shane Stewart  
Kraft Heinz Foods Company  
1000 Ericsson Drive  
Warrendale, PA 15086

**RE: Woburn**  
310 CMR 7.00 Appendix B  
Transmittal No.: X264868  
Application No.: BO-16-001  
FMF No.: 132626  
**Final Approval of Emission Reduction Credits**

Dear Mr. Stewart:

The Department of Environmental Protection (“MassDEP”) has determined that the referenced Emission Reduction Credits (“ERC”) application is administratively and technically complete. Kraft Heinz Foods Company’s application, submitted on May 20, 2016, is hereby incorporated by reference into this Approval. The MassDEP **approves** the certification of the amount of “actual” emissions reductions of Oxides of Nitrogen (“NOx”) emissions. The NOx emission reductions have been generated from the permanent shutdown of the gelatin and flavors and ingredients manufacturing operations and onsite steam plant at Kraft Heinz Foods’ facility located at Hill Street in Woburn, Massachusetts (“Facility”).

This **Final ERC Approval** is being issued in accordance with 310 CMR 7.00 Appendix B of the Air Pollution Control Regulations (“Regulations”), 310 CMR 7.00 as adopted pursuant to M.G.L. c.111, Section 142B and 142D. This application only applies to those ERCs in the Rate ERC Bank which would have been generated continuously from the “shutdown” of the facility’s equipment as identified herein for the useful life of said equipment.

MassDEP published a public hearing notice for the Proposed Approval of Emission Reduction Credits in the Woburn Daily Times Chronicle on October 7, 2016, in accordance with the provisions of Massachusetts General Laws Chapter 30A, Chapter 111, Sections 142A through 142E, and 310 CMR 7.00: Appendix B(6)(d)3. The public hearing was held on November 3, 2016 at 4:00PM at the MassDEP Northeast Regional Office. Additionally, comments on the Proposed Approval were accepted until 5:00 PM on November 7, 2016. No comments were received at the public hearing or in writing. Therefore, MassDEP is issuing the Final Approval of Emission Reduction Credits.

Please review the entire **Final Approval of ERCs** carefully as it stipulates the particular conditions the facility owner/operator must comply with for the ERCs to be considered **real, quantifiable, surplus, enforceable and permanent** in accordance with the Regulations.

The MassDEP has determined that the filing of an Environmental Notification Form (“ENF”) with the Secretary of Environmental Affairs, for air quality purposes, was not required prior to this action by the MassDEP. Notwithstanding this determination, the Massachusetts Environmental Policy Act and Regulation 310 CMR 11.00, Section 11.04, provide certain “Fail-Safe Provisions” which allow the Secretary to require the filing of an ENF and/or Environmental Impact Report at a later time.

**A. Equipment Description**

Kraft Heinz Foods Company has submitted information via a BWP AQ 18 ERC Application Form, which proposes that NOx, VOC and CO emission reductions from the shutdown of the following equipment at Kraft Heinz Foods’ facility located at Hill Street in Woburn, Massachusetts, will generate rate-based ERC.

<b>Emission Unit</b>	<b>Manufacturer/Model Number</b>	<b>Fuel</b>
Boiler (EU2)	Combustion Engineering/30VP-12	No. 6 oil/Natural Gas
Boiler (EU3)	Wicks/RB	No. 6 oil/Natural Gas

**B. Baseline Emissions**

The following tables summarize the facility’s baseline NOx, VOC and CO emissions based on historic data as submitted in the BWP AQ-18 application and supporting material. (Refer to 310 CMR 7.00: Appendix B(3)(c)2.c.)

<b>Emission Unit</b>	<b>Baseline Year</b>	<b>Fuel</b>	<b>Actual NOx Emission Rate<sup>(1)</sup> lb/MMBtu</b>	<b>Allowable NOx Emission Rate<sup>(2)</sup> lb/MMBtu</b>	<b>Baseline NOx Emission Rate<sup>(3)</sup> lb/MMBtu</b>	<b>Annual Capacity Utilization, MMBtu per year</b>	<b>Baseline NOx Emissions, tons per year</b>
EU2	2013	Natural Gas	0.122	0.40	0.122	655,038	40.0
	2014	Natural Gas	0.129	0.40	0.129	583,585	37.6
EU3	2013	Natural Gas	0.183	0.30	0.183	18,204	1.7
	2014	Natural Gas	0.193	0.30	0.193	33,733	3.3

Notes to Table:

- (1) Actual emission rate as determined from annual stack testing.
- (2) Allowable emission rate as stated in 310 CMR 7.19(4)(a)4.
- (3) In accordance with 310 CMR 7.00: Appendix B(3)(c)2.c., baseline emission rate equals the lower of the actual or allowable emission rate.

**1. MassDEP hereby determines:**

**Average Baseline NOx Emissions (2013/2014) =  
 (40.0 + 37.6 + 1.7 + 3.3)/2 = 41 tons NOx/year (rounded to the nearest whole number)**

Emission Unit	Baseline Year	Fuel	Actual VOC Emission Rate <sup>(1)</sup> lb/MMBtu	Allowable VOC Emission Rate lb/MMBtu	Baseline VOC Emission Rate <sup>(2)</sup> lb/MMBtu	Annual Capacity Utilization, MMBtu per year	Baseline VOC Emissions, tons per year
EU2	2013	Natural Gas	0.0053	NA	0.0053	655,038	1.7
	2014	Natural Gas	0.0053	NA	0.0053	583,585	1.5
EU3	2013	Natural Gas	0.0053	NA	0.0053	18,204	0.0
	2014	Natural Gas	0.0053	NA	0.0053	33,733	0.1

Notes to Table:

- (1) Actual emission rate as stated in EPA's AP-42 Table 1.4-2.
- (2) In accordance with 310 CMR 7.00: Appendix B(3)(c)2.c., baseline emission rate equals the lower of the actual or allowable emission rate.

**2. MassDEP hereby determines:**

**Average Baseline VOC Emissions (2013/2014) = (1.7 + 1.5 + 0.0 + 0.1)/2 = 1.7 tons VOC/year**

Emission Unit	Baseline Year	Fuel	Actual CO Emission Rate <sup>(1)</sup> lb/MMBtu	Allowable CO Emission Rate <sup>(2)</sup> lb/MMBtu	Baseline CO Emission Rate <sup>(3)</sup> lb/MMBtu	Annual Capacity Utilization, MMBtu per year	Baseline CO Emissions, tons per year
EU2	2013	Natural Gas	0.0045	0.15	0.0045	655,038	1.5
	2014	Natural Gas	0.0260	0.15	0.0260	583,585	7.6
EU3	2013	Natural Gas	0.0006	0.15	0.0006	18,204	0.0
	2014	Natural Gas	0.0002	0.15	0.0002	33,733	0.0

Notes to Table:

- (1) Actual CO emission rate is converted from annual stack testing (in ppmvd@3% O2).
- (2) Allowable CO emission rate is converted from permitted 200 ppmvd@3% O2 based on 310 CMR 7.19(4)(f).
- (3) In accordance with 310 CMR 7.00: Appendix B(3)(c)2.c., baseline emission rate equals the lower of the actual or allowable emission rate.

**3. MassDEP hereby determines:**

**Average Baseline CO Emissions (2013/2014) = (1.5 + 7.6 + 0.0 +0.0)/2 = 4.5 tons CO/year**

**C. Post-Reduction Emissions**

Since the facility has been permanently shut down, there are no post-reduction emissions from these units.

**D. Emissions Reduction Credit**

In accordance with 310 CMR 7.00: Appendix B(3)(c)4.a., the NO<sub>x</sub>, VOC and CO emission reductions are calculated by subtracting the potential post reduction emissions from the baseline emissions as summarized in the following tables:

<b>Emission Unit</b>	<b>Baseline NO<sub>x</sub> Emissions, tons per year</b>	<b>Post-Reduction NO<sub>x</sub> Emissions, tons per year</b>	<b>NO<sub>x</sub> Emissions Reduction, tons per year</b>
EU2 and EU3	41	0	41

<b>Emission Unit</b>	<b>Baseline VOC Emissions, tons per year</b>	<b>Post-Reduction VOC Emissions, tons per year</b>	<b>VOC Emissions Reduction, tons per year</b>
EU2 and EU3	1.7	0	1.7

<b>Emission Unit</b>	<b>Baseline CO Emissions, tons per year</b>	<b>Post-Reduction CO Emissions, tons per year</b>	<b>CO Emissions Reduction, tons per year</b>
EU2 and EU3	4.5	0	4.5

In accordance with 310 CMR 7.00: Appendix B(3)(c)4.b., ERCs will be certified by MassDEP after application of a compliance assurance multiplier, associated with the particular method of compliance assurance in 310 CMR Appendix B(3)(c), to the resulting difference between baseline emissions and post reduction emissions.

The ERCs can be approved, however, only where the emission reduction, as calculated under 310 CMR 7.00: Appendix B(3)(c)4.a., is greater than 5 tons per year for deposit in the Rate ERC Bank, or greater than 5 tons for the Mass ERC Bank.

The applicable compliance assurance multiplier is 1.0 (Irreversible Process Change).

The product of the NOx emissions reduction and compliance assurance multiplier equals the NOx emissions reduction credit.

**1. MassDEP hereby determines that the NOx emissions reduction credit is 41 tons per year.**

In accordance with 310 CMR 7.00: Appendix B(3)(c)4.d., ERCs certified from shutdowns shall be expressed in tons per year and will be placed in the Rate ERC Bank. In the event Kraft Heinz Foods Company or their successor wishes to transfer the ERCs in the Rate ERC Bank into the Mass ERC Bank, MassDEP has assigned the ERCs from the shutdown a “Remaining Useful Life” in years, which will be used to transfer the ERCs from the Rate ERC Bank to the Mass ERC Bank.

In accordance with 310 CMR 7.00: Appendix B(2), “Remaining Useful Life” is defined as the length of time for which the equipment that is being shut down would have continued to operate had the owner/operator chosen not to shut down the equipment and apply for certification of credits at that time. Remaining Useful Life shall be ten (10) years except in those cases where MassDEP determines a shorter period is appropriate, or the applicant demonstrates to MassDEP’s satisfaction that a period of longer than ten (10) years is warranted. MassDEP will use the following criteria for making the determination including, but not limited to: the age of the equipment; the type of equipment; maintenance history; operating history; and industry norms. In any case, remaining useful life shall not exceed twenty (20) years.

**2. MassDEP hereby determines that “Remaining Useful Life” is 10 years.**

Kraft Heinz Foods Company has applied for ERCs in the Rate ERC Bank only. Therefore, MassDEP hereby PROPOSES to certify NOx ERCs in the Rate ERC Bank in the amount of 41 tons per year. If Kraft Heinz Foods or their successor elects to convert the ERCs in the Rate ERC Bank to ERCs in the Mass ERC Bank, the result would be 41 tons per year times 10 years remaining useful life, or 410 tons of NOx ERCs in the Mass ERC Bank. Furthermore, should Kraft Heinz Foods or their successor request conversion to ERCs in the Mass ERC Bank, based on calendar quarterly operating hours fractions reported by Kraft Heinz in 2013 and 2014 Source Registrations, MassDEP PROPOSES to further define said ERCs in the Mass ERC Bank as 34% ozone season (May 1 through September 30) or 139 tons ozone season NOx ERCs in the Mass ERC Bank, and 66% non-ozone season (October 1 through April 30) or 271 tons non-ozone season NOx ERCs in the Mass ERC Bank.

**E. Expiration of Emission Reduction Credit**

In accordance with 310 CMR 7.00: Appendix B(3)(d)8., ERCs in the Rate ERC Bank shall revert to Massachusetts to be retired for the benefit of the environment if they have not been used by midnight of the date ten years from the date of MassDEP final approval. ERCs in the Mass ERC Bank shall not expire or cease to exist after a set period of time, even if not traded or used.

**F. Shutdown Condition**

On May 3, 2016, MassDEP terminated the Operating Permit No. MBR-95-OPP-082, as well as all associated Air Quality Plan Approvals for the facility issued to Kraft Heinz Foods Company and predecessors, including:

- MBR-80-IND-025, approval dated November 14, 1980
- MBR-81-IND-005, approval dated June 9, 1981
- MBR-82-IND-013, approval dated January 5, 1983
- MBR-83-COM-022, approval dated December 16, 1983
- MBR-85-IND-097, approval dated May 21, 1986
- MBR-87-IND-056, approval dated August 19, 1987
- MBR-87-IND-034/035, approval dated June 11, 1987
- MBR-88-IND-317/318, approval dated January 6, 1989
- MBR-89-IND-089, approval dated October 3, 1989
- MBR-89-IND-208, approval dated October 31, 1989
- MBR-94-COM-021, approval dated July 29, 1994

Should you have any questions concerning this **FINAL Approval**, please contact Yi Tian at (617) 292-5871.

Sincerely,

*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.*

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Marc Wolman  
Branch Chief  
Bureau of Air and Waste (BAW)

cc: Fire Chief, Town of Woburn  
Health Agent, Town of Woburn Board of Health  
Susan Ruch, MassDEP NERO  
Edward Braczyk, MassDEP NERO  
Yi Tian, MassDEP Boston  
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