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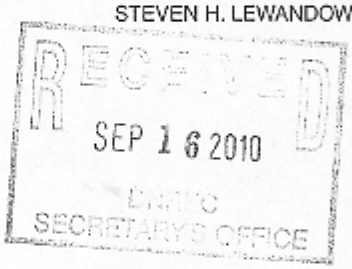
September 16, 2010




Ms. Lee Ann Walling
Chief of Planning
Department of Natural Resources
and Environmental Control
Office of the Secretary
89 Kings Highway
Dover DE 19901

HAND DELIVERED

Re: Application for Coastal Zone Act Permit
Mountaire Farms of Delaware Inc.

Dear Ms. Walling:

This letter is in regard to Mountaire Farms of Delaware Inc. application for a Coastal Zone Act Permit. We have been informed by the equipment supplier for the resource recovery project that the project will require two (2) thermal oxidizers rather than the one (1) thermal oxidizer that was initially planned. The two (2) thermal oxidizers are smaller than the single one that we based our emission calculations on. The new calculations show much smaller emission increases for $SO_x$, CO, VOC and PM-10, but a larger increase in $NO_x$ than what was previously submitted. The net result is an increase in emissions of approximately 1 ton per year, or less than 1%. This requires a revision to our Coastal Zone Act Permit application. Toward that end, we are submitting pages 7, 12 and 13 of the application, Attachment C, Page 11 and Attachment I to replace those in our previous submission.

We have contacted Ms. Joanna French at the Air Quality Management Section and have forwarded the revised emissions and offsets to her for review and comment.

September 16, 2010

We trust that you will be able to review the attachments and still be able to advertise on September 19, 2010. Should you have questions or require additional information, please do not hesitate to contact me or Robert W. Kerr of our office.

Very truly yours,

CABE ASSOCIATES, INC.

Lee J. Beetschen, P.E., DEE

LJB/RWK/cjk
206-063
cc: Mr. John Wren
Mountaire Farms of Delaware Inc. (W/Attach)
Attachments

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h. existing water bodies and wetlands and proposed dredge and fill areas, and;

i. existing and proposed drainage ways, gas, electric, sewer, water, roads, and other rights-of-way.

5.4 How many acres of land in total are required for this proposed project?

Existing/ currently utilized/ developed land: 4.18 acres.

New land: None acres.

5.5 Has the property been involved with a state or federal site cleanup program such as Superfund, Brownfields, HSCA Voluntary Cleanup Program, RCRA Corrective Action, Aboveground or Underground Storage Tank Cleanup Programs? If so please specify which program.

See Attachment F.

5.6 With regards to environmental cleanup actions, has a Uniform Environmental Covenant, Final Plan of Remedial Action, or no further action letter been issued by the Department? NO

If so are the planned construction activities consistent with the requirements or conditions stated in these documents?

## PART 6A

## ENVIRONMENTAL IMPACTS

### Air Quality

6.1 Describe project emissions (new, as well as any increase or decrease over current emissions) by type and amount under maximum operating conditions:

The existing emission sources consist of three (3) boilers, two (2) grain driers, and feed mill operations. The emissions from the boilers are the combustion products of No. 6 fuel oil (one (1) boiler) and natural gas (two (2) boilers). The emissions from the driers are the combustion products of natural gas. The emissions from the feed mill are particulate emissions from feed mill operations. The new emissions are from natural gas burners that oxidize collected vapors (the thermal

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ensuing table, along with the required offset and the actual offset. The overall emissions reduction created by the boiler replacement greatly exceeds the offset required.

| | Emissions Increase (TPY) | Required Offset (1.3 x Emissions Increase) (TPY) | Actual Offset (TPY) |
|---|---|---|---|
| SOx | 0.003 | 0.004 | 0.004 |
| NOx | 10 | 13 | 13 |
| CO | 0.033 | 0.043 | 0.043 |
| VOC | 0.029 | 0.038 | 0.038 |
| PM-10 | 0.20 | 0.26 | 0.26 |

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oxidizers). Two of the existing oil fired boilers will be replaced with natural gas fired boilers.

| Pollutant | Existing Emissions | | Net Increase/Decrease | | New Total Emissions | | Percent Change (compare tons/year) |
|---|---|---|---|---|---|---|---|
| | *Lbs/day* | *Tons/year* | *Lbs/day* | *Tons/year* | *Lbs/day* | *Tons/year* | |
| SOx | 674 | 123 | (384) | (70) | 290 | 53 | (57) |
| NOx | 186 | 34 | 11 | 2 | 197 | 36 | 6 |
| CO | 20 | 3.7 | 45 | 8.3 | 66 | 12 | 224 |
| VOC | 1.4 | 0.26 | 5.5 | 1.0 | 7.1 | 1.3 | 400 |
| PM-10 | 121 | 22 | 11 | (2) | 110 | 20 | (9) |
| | | | | | | | |

6.2 Describe how the above emissions change in the event of a mechanical malfunction or human error.

There are 4 scrubbers with hoods over equipment serving the building. They have oversized variable frequency drive motors that could be ramped up in the event of thermal oxidizer failure or one scrubber failure. If the latter, the number of room air changes would be reduced.

6.3 Describe any pollution control measures to be utilized to control emissions to the levels cited above in 5.1.

The pollution control equipment will be operated and maintained per the manufacturer's recommendations.

6.4 Show evidence that applicant has, or will have, the ability to maintain and utilize this equipment listed in 5.3 in a consistently proper and efficient manner. (For example, provide college transcripts and/or records of training courses and summary of experience with this pollution control equipment of person(s) responsible for pollution control equipment, and/or provide copies of contracts with pollution control firms to be responsible for maintaining and utilizing this equipment.)

Operators will be trained by the equipment suppliers prior to and during a 30 day startup.

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*Processes for the Abatement of Odor Emissions-continued*

The oxidation process in the Packed-Bed Scrubbers effectively destroys 90%-98% of the incoming odors. At this efficiency level any remaining odor emitted to the atmosphere is quickly diluted with outside air and is mostly undetectable beyond a few feet from the point of release. The Packed-Bed Scrubbers however are only suitable for handling the lower odor loads by collecting vapors exhausted from raw material handling and Milling Room Equipment. The high-strength odors of the non-condensibles generated in Hydrolyzation, Drying and Cooking requires more aggressive treatment.

Most all odors belong to a unique group of substances known as "Volatile Organic Compounds" (VOC). While not only being odorous, some VOCs can be hazardous pollutants such as fumes generated in metal stripping and painting operations. Destruction of these VOCs by Thermal Oxidation is the most commonly used, and most effective method of ensuring near total destruction of these compounds. Thermal Oxidation achieves restructuring of the VOC molecule by incineration.

All of the high-strength odors generated in the RRP processes are collected in a duct system and delivered to the Thermal Oxidizers for incineration. The Thermal Oxidizers will be fueled by Natural Gas. In the Thermal Oxidizers the odors are subjected to furnace temperatures of 1200°-1300° F before being exhausted to the atmosphere. Thermal Oxidation assures a 99.9% destruction of the odor molecules.

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# ATTACHMENT I

Mountaire has a Title V air permit that allows the combustion of No. 6 fuel oil in the three (3) facility boilers to provide steam for processing operations. In August 2010, two (2) of the boilers (boilers 5 and 6) are voluntarily being replaced and the replacements will combust natural gas only. The change in fuels results in a significant reduction (71 tons) of total emissions of the fuel combustion products. The current emissions, based on the 2009 emission inventory for the complex, are indicated in the Pre-Reduction column in the table below. The Post-Reduction emissions, including firing two (2) boilers on natural gas and emissions from the resource recovery operation, are also indicated.

Therefore, Mountaire is seeking to offset the proposed increase in emissions from the resource recovery operation with the emissions reduction achieved from the boiler replacement. The pre-reduction emissions from 2009 (pre-boiler replacement and pre-resource recovery plant) compared to the post-reduction (post-boiler replacement and post-resource recovery plant) from the complex are as follows:

| | **Pre-Reduction (tons)** | **Post-Reduction (tons)** | %Reduction |
|---|---|---|---|
| SOx | 123 | 53 | 57 |
| NOx | 34 | 36 | (6) |
| CO | 3.7 | 12 | (224) |
| VOC | 0.26 | 1.3 | (400) |
| PM-10 | 22 | 20 | 9 |
| **Total** | **183** | **122** | **33** |

The increase in emissions attributable to the proposed project, required offset and actual offset are as follows:

| | Emissions Increase (TPY) | Required Offset (1.3 x Emissions Increase) (TPY) | Actual Offset (TPY) |
|---|---|---|---|
| SOx | 0.003 | 0.004 | *0.004 |
| NOx | 10 | 13 | *13 |
| CO | 0.033 | 0.043 | *0.043 |
| VOC | 0.029 | 0.038 | *0.038 |
| PM-10 | 0.20 | 0.26 | *0.26 |
| TOTAL | 10.3 | 13.4 | 13.4 |

* The balance of available offset due to the change of boiler fuel for two (2) of the three (3) complex boilers described above is being held in reserve should additional projects subject to Delaware's Regulations Governing Coastal Zone be necessary. This balance is quantified at approximately 58 tons.