

MEMORANDUM

DATE:

TO: Missouri Air Conservation Commission

FROM: Sara Parker Pauley, Director
Department of Natural Resources

SUBJECT: Variance Request – F&S Printing, Inc.

F&S Printing Company is a printing company formed in 1989 and located in St. Louis County. Its only function is to provide printing services to its affiliated company Checker Bag Company, which makes cellophane, propylene and polyethylene bags for the food services industries. Together, F&S Printing and Checker Bag Company employ eighty people. The companies operate from two nearby locations on Midwest Industrial Boulevard in St. Louis County.

F&S Printing owns three presses; a two-color press, a six-color press and an eight-color central impression press. Materials that are manufactured by Checker Bag, with printing by F&S Printing, are sold into a number of markets, including the market for advertising and tradeshow materials, bakeries, candy, chemical, food, and ice applications.

St. Louis County, as part of the St. Louis Ozone Non-attainment Area, is subject to the St. Louis Metropolitan Area Rules. As such, F&S Printing is subject to Missouri Air Conservation Commission Regulation, 10 CSR 10-5.340, “*Control of Emissions From Rotogravure and Flexographic Printing Operations*,” (the rule) which was revised August 30, 2011.

F&S Printing’s main issue of non-compliance with the rule lies in the excess volatile organic compound emissions from printing and cleaning activities. To comply with the rule, a facility meeting the applicability requirements must either install control equipment or use low solvent technology to reduce volatile organic compound emissions.

The facility reports installing control equipment will force them to raise product prices, which they also report will greatly reduce their ability to compete with other businesses. The facility has been attempting to achieve compliance through low solvent technology but has been unable to create or find an ink that will meet the durability and print quality standards set by their customers. As their attempts at compliance have failed, we agree that a variance is in order.

However, we usually grant variances for a one-year time period and would agree with a one-year variance as opposed to the three they request. The extension will allow the facility additional time to research viable options.

Upon certain conditions, the Commission may grant a variance, pursuant to state law (Section 643.055 and 643.110, RSMo). The Department has reviewed each of these conditions and compared them with the facts of this situation. State law authorizes the Commission to grant a variance if the person applying for the variance can show that compliance with the rule:

“would cause economic hardship” (643.055.2(1), RSMo);
“is physically impossible” (643.055.2(2), RSMo);
“is more detrimental to the environment than the variance would be” (643.055.2(3), RSMo);
“is impractical or of insignificant value under the existing conditions” (643.055.2(4), RSMo);
“will result in taking of property without just compensation” (643.110.1, RSMo); or
“in the closing and elimination of any lawful business, occupation, or activity, without sufficient corresponding benefit or advantage to the people” (643.110.1, RSMo).

The Department believes F&S Printing has adequately shown that the request for variance from 10 CSR 10-5.340 meets the conditions of 643.055.2(1) and 643.110.1 in that it would cause economic hardship, and could result in the closing and elimination of a lawful business without sufficient corresponding benefit to the people.

Thank you for your consideration of this recommendation.

SPP:rsv

**Missouri Department of Natural Resources' Director's Recommendation to
The Missouri Air Conservation Commission on
F&S Printing
Variance Petition and Order**

Introduction

On January 2, 2014, the Missouri Department of Natural Resources' Air Pollution Control Program (APCP) received an official variance request from F&S Printing asking for a variance granting them until October 31, 2016, to comply with Missouri Air Conservation Commission Regulation 10 CSR 10-5.340 "*Control of Emissions from Rotogravure and Flexographic Printing Operations.*" F&S Printing is located in St. Louis, Missouri, in St. Louis County. Its only function is to provide printing services to its affiliated company Checker Bag Company, which makes cellophane, propylene and polyethylene bags for the food services industries. They employ approximately 80 people. After the facility had been in operation for some time, 10 CSR 10-5.340 was revised to be more stringent as part of a State Implementation Plan and the facility was required to meet those requirements by November 1, 2012, according to the August 24, 2012, inspection. Specifically, the inks and solvent they use contain volatile organic compounds (VOCs) that, when used in the quantities necessary, exceed the emission threshold set forth in the aforementioned rule. To attain compliance with the rule, the facility would be required to install control equipment which they find cost prohibitive.

Background

Since being informed of the stricter requirements during the August 24, 2012, inspection, F&S Printing has been in discussions with the APCP and the St. Louis County Health Department concerning this matter. F&S Printing reports they have been conducting testing on many products, processes and materials to use that will result in an end product meeting the durability requirements needed by their customers and that also allow them to fall under the threshold of 25 tons of VOCs emitted in any 12 month rolling period to avoid having to install control equipment required by 10 CSR 10-5.340. As of yet, F&S printing has been unable to find an ink or discover a process in which the end product will meet the new stricter standards in the regulation along with the durability requirements. The standard they must meet is specific to businesses located in St. Louis City and in Jefferson, St. Charles, Franklin, and St. Louis Counties. Other businesses, not in the area, using the same inks in the same quantities would not be considered in violation, which puts F&S printing at an economic disadvantage to their competitors in the state.

Essentially, 10 CSR 10-5.340, as it relates to this facility, requires that F&S Printing install control equipment because it has the potential to emit 25 tons or more of VOCs in any twelve month rolling period. F&S Printing appears to operate consistently, emitting approximately 60 tons of VOCs in any 12 month rolling period, and has been struggling to find a way to meet the revised rule, which requires the facility to either reduce potential emissions or install control equipment. Before the revision of 10 CSR 10-5.340 on August 30, 2011, the rule only required facilities with the potential to emit 100 tons of VOCs in a twelve month rolling period to meet certain requirements. F&S Printing was found in compliance with the rule at that time. F&S has

found that installing control equipment is cost prohibitive and has been researching to find a process and inks that will allow them to fall under the 25 tons limit for VOC emissions while still producing a quality product for their customers.

Based upon the fact that F&S Printing emits low amounts of air contaminants, the Department is of the opinion this variance will result in no substantial negative impact on air quality. Accordingly, the Department supports this request for a variance extension. However, the Department suggests the variance be granted for one year beyond the date it is heard and approved by the Missouri Air Conservation Commission, as opposed to the October 31, 2016 request from the facility. Should F&S show progress and continue to work with the Department and the St. Louis County Health Department, the Department would look at, if needed, pursuing an extension to this variance.

The Commission may grant a variance extension, pursuant to state law, Section 643.055 and 643.110, RSMo, if certain conditions are met. The Department has reviewed each of these conditions and compared them with the facts of this situation. State law authorizes the Commission to grant a variance extension if the person applying for the variance can show that compliance with the rule:

- “would cause economic hardship” (643.055.2(1), RSMo);
- “is physically impossible” (643.055.2(2), RSMo);
- “is more detrimental to the environment than the variance would be” (643.055.2(3), RSMo);
- “is impractical or of insignificant value under the existing conditions” (643.055.2(4), RSMo);
- “will result in taking of property without just compensation” (643.110.1, RSMo); or
- “in the closing and elimination of any lawful business, occupation, or activity, without sufficient corresponding benefit or advantage to the people” (643.110.1, RSMo).

The APCP believes F&S Printing has adequately shown that the request for variance extension from 10 CSR 10-5.340 meets the conditions of 643.055.2(1) and 643.110.1, in that it would cause economic hardship and could result in the closing and elimination of a lawful business without sufficient corresponding benefit to the people.

Furthermore, the Commission is legally precluded from granting a variance extension “where the effect of the variance extension will permit the continuance of a health hazard” (643.110.1, RSMo.) The APCP is of the opinion that granting of this variance extension will not result in a health hazard.

Recommendation

The Director of the program recommends the Commission grant a variance extension to Missouri State Rule 10 CSR 10-5.340 as it pertains to F&S Printing. The net effect of this variance extension will be to allow F&S to continue research, which it must fund through conducting regular business activities otherwise prohibited by 10 CSR 10-5.340 without installing control equipment. The Director of the program also recommends that F&S Printing be held to a limit of 70 tons of VOCs emissions in any 12 month rolling period.

MEMORANDUM

DATE:

TO: Missouri Air Conservation Commission

FROM: Sara Parker Pauley, Director
Department of Natural Resources

SUBJECT: Variance Request – Empire Electric Company

Empire District Electric Company is an investor owned, regulated utility providing electric, natural gas (through its wholly owned subsidiary The Empire District Gas Company), and water service, with approximately 216,000 customers in Missouri, Kansas, Oklahoma, and Arkansas. A subsidiary of the company provides fiber optic services.

Empire District Electric Company's Asbury Power Plant obtained a de-minimis construction permit on February 21, 2012, to construct a flue gas (FGD) system, powered activation carbon (PAC) system, and bag house in preparation for compliance under the federal and state Mercury and Air Toxics Standards (the MATS rule) as found in 10 CSR 10-6.075, "*Maximum Achievable Control Technology Regulations*," which adopts by reference 40 CFR Part 63, Subpart UUUUU "*National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units*." The newly constructed systems will be routed to exhaust flue gases through a newly constructed stack. In order to comply with the MATS rule, Asbury Power Plant will also be required to install a PM CEMS on the new stack. Compliance with the MATS rule is required by April 16, 2015. Construction is currently in progress and is expected to be completed with the final tie-in of the new pollution control systems to the new stack during the fall outage of 2014.

10 CSR 10-6.220 "*Restriction of Emission of Visible Air Contaminants*," (the opacity rule) currently requires sources such as the Asbury Power Plant to use a continuous opacity monitoring system (COMS) to demonstrate compliance. The Department plans a change to the opacity rule in the near future. As part of this rule change, the

Department has worked closely with the Environmental Protection Agency (EPA) regarding the possibility of adding an exemption from the opacity rule to exempt those sources that use PM CEMS in compliance with the MATS Rule. In the MATS Rule, EPA has acknowledged that a source that employs the PM CEMS option in order to comply may discontinue the use of the COMS. The EPA has reviewed the Department's technical demonstration and has verbally approved of adding this exemption.

Empire District Electric Company has requested approval to install a PM CEMS and discontinue use of the COMS. Due to the proposed early compliance by Empire District Electric Company's Asbury Power Plant with this more stringent federal rule and the strong likelihood of the state opacity rule exempting the facility from their existing COMS requirement, the Department is in favor of a variance.

SPP:ewv

**Missouri Department of Natural Resources' Director's Recommendation to
The Missouri Air Conservation Commission on
Empire District Electric Company
Variance Petition and Order**

Introduction

Empire District Electric Company is an investor owned, regulated utility providing electric, natural gas (through its wholly owned subsidiary The Empire District Gas Company), and water service, with approximately 216,000 customers in Missouri, Kansas, Oklahoma and Arkansas. A subsidiary of the company provides fiber optic services.

Empire District Electric Company's Asbury Power Plant is located in Bolivar, Polk County, Missouri. On December 18, 2013, the Missouri Department of Natural Resources' Air Pollution Control Program (APCP) received an official variance request from Empire District Electric Company requesting a variance for the Asbury Power Plant from the continuous opacity monitoring system (COMS) requirements as found in Missouri Air Conservation Commission Regulation 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*. The source obtained a de-minimis construction permit February 21, 2012, to construct a flue gas desulfurization system, powdered activation carbon and bag house in preparation for compliance with the federal and state Mercury and Air Toxics Standards (the MATS rule), 10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*, which adopts by reference 40 CFR Part 63, Subpart UUUUU, *National Emission Standards for Hazardous Air Pollutants from Coal and Oil-Fired Electric Utility Steam Generating Units*. The newly constructed system will be routed to exhaust flue gas through a newly constructed stack. Construction is currently in progress and is expected to be completed with the final tie-in of the new pollution control system to the new stack during the fall outage of 2014.

Background

The opacity rule currently requires sources such as the Asbury Power Plant to use a COMS to demonstrate compliance. COMS can be an indicator of particulate emissions but, when measuring emission amounts, is not as accurate as a Particulate Matter Continuous Emissions Monitoring System (PM CEMS) as required under the MATS rule. The Department plans a change to the opacity rule in the near future. As part of this rule change, the Department has worked closely with the Environmental Protection Agency (EPA) regarding the possibility of adding an exemption from the opacity rule to exempt those sources that use PM CEMS in compliance with the MATS rule. In the MATS rule, EPA has acknowledged that a source that employs the PM CEMS option in order to comply may discontinue the use of the COMS. The EPA has reviewed the Department's technical demonstration and has verbally approved of adding this exemption.

In order to comply with the MATS rule the Asbury Power Plant will install a PM CEMS on the new stack and has requested a variance from the opacity rule to discontinue the use of the COMS upon compliance via the PM CEMS. As the federal rule is more protective of the environment by requiring facilities to more accurately measure emissions by installing a PM

CEMS, the Department is in favor of granting a variance until such time as the APCP can implement an update to the opacity rule. The APCP estimates that the update to the opacity rule will be no sooner than mid-summer 2015.

Based upon the fact that Empire District Electric Company has been proactive and will comply with the more stringent requirements of the MATS rule, the Department is of the opinion this variance will result in no negative impact on air quality.

The Commission may grant a variance, pursuant to state law, Section 643.055 and 643.110, RSMo, if certain conditions are met. The Department has reviewed each of these conditions and compared them with the facts of this situation. State law authorizes the Commission to grant a variance if the person applying for the variance can show that compliance with the rule:

- “would cause economic hardship” (643.055.2(1), RSMo);
- “is physically impossible” (643.055.2(2), RSMo);
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- “is impractical or of insignificant value under the existing conditions” (643.055.2(4), RSMo);
- “will result in taking of property without just compensation” (643.110.1, RSMo); or
- “in the closing and elimination of any lawful business, occupation, or activity, without sufficient corresponding benefit or advantage to the people” (643.110.1, RSMo).

The APCP believes Empire District Electric Company has adequately shown that the request for variance from 10 CSR 10-6.220, the opacity rule, meets the conditions of 643.055.2(4).

Furthermore, the Commission is legally precluded from granting a variance “where the effect of the variance will permit the continuance of a health hazard” (643.110.1, RSMo). The APCP is of the opinion that granting of this variance will not result in a health hazard.

Recommendation

The Director of the program recommends the Commission grant a variance to Missouri State Rule 10 CSR 10-6.220 as it pertains to Empire District Electric Company’s Asbury Power Plant. The net effect of this variance extension will be to allow Empire District Electric Company’s Asbury Power Plant to attain compliance with a stricter federal standard.