



Missouri Department of dnr.mo.gov

# NATURAL RESOURCES

Eric R. Greitens, Governor

Carol S. Comer, Director

MAR 08 2017

Ms. Kathy French  
Director EHS  
CLARCOR  
417 SE Thompson  
Lee's Summit, MO 64082

RE: New Source Review Permit Amendment - Permit Number: 112016-003A  
Project Number: 2017-01-037; Installation Number: 095-0298

Dear Ms. French:

This amendment is a result of the application received January 20, 2017, to add a nanofiber plasma treatment unit to the Lee's Summit installation. The plasma unit will treat nanofibers that were created in the forcespinning unit. The forcespinning unit was issued a permit under 112016-003. Due to the time proximity and inter-relatedness of the forcespinning and plasma units, they are one project for permitting. The potential emissions of the forcespinning unit and plasma unit are combined for permit applicability. This is an amendment to permit 112016-003. All special conditions of that permit remain. This amendment does not add any new special conditions.

Potential emissions of the plasma unit were calculated without considering control devices (the scrubbers pre-installed on the unit), therefore there are no special conditions requiring their use. Since operation of the control devices is not required, then emission inventories should use the uncontrolled emission factors. Emission factors were obtained from a test report based upon uncontrolled emissions, *Emission measurements Hydrophobic coating CD1000 Nanofics (260) – no scrubber – Particulate F (09/02/2016)*, Europlasma NV. The emission factors are concentrations in units of milligrams per cubic meter of exhaust flow, with the CD1000 being rated at 6 cubic meters per hour wet. The model proposed to be installed is a "Junior", while the tested model is a "CD1000". CLARCOR claims the Junior is a smaller model compared to the tested model. Therefore, using the tested model's emission rates provides a conservatively high estimate. Potential emissions of the plasma unit were calculated at 8,760 hours per year. Potential emissions are summarized below.



Potential Emissions (tpy)

Pollutant	De minimis / SMAL (tpy)	Existing Potential Emissions	Permit 112016-003	Plasma Unit	Conditioned Project PTE
PM	25.0	N/D	0.04	2.90E-07	0.04
PM <sub>10</sub>	15.0	0.60	0.04	2.90E-07	0.04
PM <sub>2.5</sub>	10.0	N/D	0.04	2.90E-07	0.04
SO <sub>2</sub>	40.0	0.04	N/A	0.026	0.03
NO <sub>x</sub>	40.0	7.27	N/A	N/A	N/A
VOC	40.0	155.2	11.66	3.36E-05	11.66
CO	100.0	6.10	N/A	0.038	0.04
Fluorides excluding HF	3.0	N/D	N/A	6.72E-05	6.72E-05
Combined HAPs	25.0	0.14	1.00E+00	0.0314	1.03E+00
DMF	1	N/D	< 1	N/A	< 1
Formaldehyde	2	N/D	1.25E-05	N/A	1.25E-05
Acrolein	0.04	N/D	1.68E-07	N/A	1.68E-07
Acetaldehyde	9	N/D	7.74E-06	N/A	7.74E-06
Propionaldehyde	5	N/D	8.41E-07	N/A	8.41E-07
HF	0.1	N/D	N/A	0.031	3.14E-02
Benzene	2	N/D	N/A	1.68E-05	1.68E-05

N/D = not determined

N/A = not applicable

The forcespinning and plasma units should be added to the operating permit. No NSPS or MACT apply to the plasma unit. See permit 112016-003 for the forcespinning unit requirements. You are still obligated to meet all applicable air pollution control rules, Department of Natural Resources' rules, or any other applicable federal, state, or local agency regulations.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: [www.oe.mo.gov/ahc](http://www.oe.mo.gov/ahc).

Ms. French  
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If you have any questions regarding this amendment, please do not hesitate to contact David Little, at the department's Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM



Kendall B. Hale  
Permits Section Chief

KBH:dlj

Enclosures

c: Kansas City Regional Office  
PAMS File: 2017-01-037