



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

JUL 16 2007

REPLY TO THE ATTENTION OF:

(AE-17J)

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Dawn M. Chappell  
Health, Safety & Environmental Coordinator  
Radiac Abrasives, Inc.  
1015 South College Avenue  
Salem, IL 62881

Re: Notice of Violation  
Finding of Violation  
Radiac Abrasives, Inc.  
Salem, Illinois

Dear Ms. Chappell:

This is to advise you that the United States Environmental Protection Agency (U.S. EPA) has determined that Radiac Abrasives, Inc. (Radiac), located at 1015 South College Avenue, Salem, Illinois, is in violation of the Clean Air Act (CAA). A list of the requirements violated is provided below. A Finding and Notice of Violation (FOV/NOV) for these violations is being issued and is enclosed for your review.

On February 21, 1980, the U.S. EPA approved Illinois Administrative Code Title 35, Sections 215.301 and 215.302 (previously codified as Rule 205(f)), as part of the federally enforceable Illinois State Implementation Plan (SIP) (45 Federal Register 11472). This rule requires that not more than 8 pounds per hour (lb/hr) of organic material be emitted from each unit at a source.

Radiac owns and operates 19 kilns at its grinding wheel production facility, each of which is not allowed to emit more than 8 lb/hr of organic material. This limitation was applied to Radiac when the SIP rule was approved on February 21, 1980.

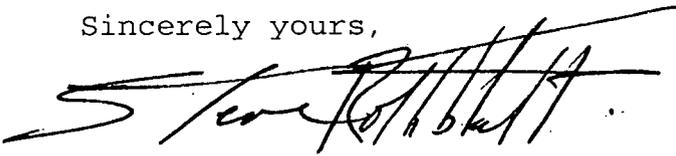
Section 113 of the CAA gives us several enforcement options to resolve these violations, including: issuing an administrative compliance order, issuing an administrative penalty order, bringing a judicial civil action, and bringing a judicial

criminal action. The option we select, in part, depends on the efforts taken by Radiac to correct the alleged violations and the timeframe in which you can demonstrate and maintain continuous compliance with the requirements cited in the FOV/NOV.

Before we decide which enforcement option is appropriate, we are offering you the opportunity to request a conference with us about the violations alleged in the FOV/NOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for your facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

The EPA contact in this matter is Kushal Som. You may call him at (312) 353-5792 if you wish to request a conference. EPA hopes that this FOV/NOV will encourage Radiac's compliance with the requirements of the Clean Air Act.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Stephen Rothblatt". The signature is stylized and somewhat cursive, with a long horizontal line extending from the end.

Stephen Rothblatt, Director  
Air and Radiation Division

Enclosure

cc: David Bloomberg, Acting Section Manager  
Compliance and Systems Management Section  
Illinois Environmental Protection Agency

**United States Environmental Protection Agency  
Region 5**

**IN THE MATTER OF:** )  
 )  
Radiac Abrasives, Inc. ) **NOTICE OF VIOLATION AND**  
Salem, Illinois ) **FINDING OF VIOLATION**  
 )  
 ) **EPA-5-07-10-IL**  
 )  
Proceedings Pursuant to )  
the Clean Air Act, )  
42 U.S.C. §§ 7401 et seq. )

**NOTICE OF VIOLATION AND FINDING OF VIOLATION**

Radiac Abrasives, Inc. (you or Radiac) owns and operates 19 kilns that produce grinding wheels. The facility is located in Salem, Illinois. The underlying statutory and regulatory requirements include provisions of the Clean Air Act (the Act or CAA) and its implementing regulations.

U.S. EPA Region 5 is providing you with the opportunity to request a conference with us to discuss the violations alleged in the FOV. This conference will provide you a chance to present information on the identified violations, any efforts you have taken to comply, and the steps you will take to prevent future violations. Please plan for the Facility's technical and management personnel to take part in these discussions. You may have an attorney represent and accompany you at this conference.

**Explanation of Violations**

1. The regulatory and facility requirements relevant to this FOV/NOV are as follows:
  - a. Title V of the CAA, 42 U.S.C. §§ 7661 et seq., established an operating permit program for major sources of air pollution. Section 502(d) of the CAA, 42 U.S.C. § 7661a(d), provides that each state must submit to the Administrator of U.S. EPA a permit program meeting the requirements of Title V.

- b. Pursuant to Section 502(b) of the CAA, 42 U.S.C. § 7661a(b), the Administrator promulgated regulations, subsequently codified at 40 C.F.R. Part 70, providing for the establishment of Title V permitting programs.
- c. The regulation at 40 C.F.R. § 70.7(b) prohibits a source, which is subject to 40 C.F.R. Part 70, from operating except in compliance with a permit issued under a 40 C.F.R. Part 70 program.
- d. U.S. EPA promulgated final approval of the Illinois Title V program on December 4, 2001 (66 Fed. Reg. 62946), and the program became effective on that date.
- e. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that it is unlawful for any person to violate any requirement of a permit issued under Title V of the CAA.
- f. On February 21, 1980, U.S. EPA approved Ill. Admin Code tit. 35, Sections 215.301 and 215.302 (previously codified as Rule 205(f)), as part of the federally enforceable Illinois SIP. 45 Fed. Reg. 11472.
- g. IEPA issued a Title V permit [Permit No. 95090063] to Radiac, effective on February 28, 2001.
- h. Section 7.3.3(e) of Radiac's Title V permit provides that Kilns 1 and 2 are subject to Section 301, and each are prohibited (unless controlled) from discharging more than 8 lb/hr of organic material.
- i. Section 7.4.3(e) of Radiac's Title V permit provides that Kilns 3 through 18 are subject to Section 301, and each are prohibited (unless controlled) from discharging more than 8 lb/hr of organic material.
- j. Section 7.5.3(e) of Radiac's Title V permit provides that Kiln 19 is subject to Section 301, and is prohibited (unless controlled) from discharging more than 8 lb/hr of organic material.

- k. Section 215.301 prohibits the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any source unless such organic material emissions are controlled (e.g., reduced to 10 ppm equivalent methane or 85 percent, See Section 215.302). If no odor nuisance exists, the limitation shall apply only to photochemically reactive material.
- l. Radiac owns and operates a grinding wheel manufacturing facility at Salem, Illinois, in Marion County.
- m. Based upon complaints received by the IEPA and Region 5, and an air inspection conducted by Region 5 documenting odors, Region 5 has determined that an odor nuisance exists from Radiac's facility.
- n. On February 7, 2007, emission testing was performed at representative kiln (Kiln Number 1 (401)) at the Radiac facility pursuant to the U.S. EPA's CAA Section 114 Information Request, dated September 15, 2006. The results of this testing, using U.S. EPA Reference Method 25, demonstrated VOC emission rates of:

Hour	VOC Emissions (pounds/hour)
1	1.52
2	3.12
3	14.72
4	14.39
5	16.46
6	17.88

- o. By emitting VOCs at a rate in excess of 3.6 kg/hr (8 lbs/hr), with no controls, for each of Radiac's 18 kilns (Kilns 1 through 19), Radiac is violating Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), and Conditions 7.3.3(e), 7.4.3(e) and 7.5.3(e) of its Title V Permit.
- p. By emitting VOCs at a rate in excess of 8 lbs/hour, with no controls, Radiac is violating Section 301 of the federally enforceable Illinois SIP.

### Environmental Impact of Violations

Each of Radiac's 19 kilns has emitted up to 9.88 lbs/hour above the 8 lbs/hour VOC federally enforceable limit. VOC's along with nitrogen oxides (NOx) are the major precursors in the formation of atmospheric level ozone, a photochemical oxidant associated with a number of detrimental health and environmental effects. In the presence of sunlight, and influenced by a variety of meteorological conditions, VOC's and NOx react with oxygen in the air to produce ozone. Although ozone's precursors are naturally occurring in the environment, their existence is greatly enhanced in and around urban areas by anthropogenic contributions.

Ozone is one of six listed criteria pollutants targeted for control under the Clean Air Act by the establishment of a National Ambient Air Quality Standard (NAAQS). Its human health effects are largely associated with decreased respiratory function, even among healthy individuals. Accompanying symptoms from exposure may include sore throat, tightness or pain on breathing, coughing and headache. Those with asthma or other underlying respiratory ailments may be at higher risk for adverse effects from ozone exposure. Aside from its human health impact, ozone can prove harmful to crops and vegetation and can cause materials such as rubber to prematurely degrade. As a component in "smog," ozone contributes to decreased visibility in urban areas.

7/16/2007

Date



Stephen Rothblatt, Director  
Air and Radiation Division

CERTIFICATE OF MAILING

I, Betty Williams, certify that I sent a Finding of Violation, No. EPA-5-07-10-IL, by Certified Mail, Return Receipt Requested, to:

Dawn M. Chappell  
Health, Safety & Environmental Coordinator  
Radiac Abrasives, Inc.  
1015 South College Avenue  
Salem, IL 62881

I also certify that I sent a copy of the Finding of Violation, No. EPA-5-07-10-IL, by First Class Mail to:

on the 17<sup>th</sup> day of July 2007.

David Bloomberg  
Acting Section Manager  
Compliance and Systems Management Section  
Illinois Environmental Protection Agency  
1021 North Grand Avenue East  
Springfield, Illinois 62702



Betty Williams, Secretary  
AECAS (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0005 8920 1590