



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUN 24 2011

REPLY TO THE ATTENTION OF: **AE-17**

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Steven Yates
Environmental Health and Safety Manager
Gopher Resource, LLC
3385 Dodd Road
Eagan, Minnesota 55121

Dear Mr. Yates:

This is to advise you that the U.S. Environmental Protection Agency has determined that Gopher Resource, LLC's facility at 3385 Dodd Road, Eagan, Minnesota (the facility) is in violation of the Clean Air Act (the Act) and associated state or local pollution control requirements. A list of the requirements violated is provided below. We are today issuing to you a Notice of Violation and Finding of Violation (NOV/FOV) for these violations.

The Act requires the development of Primary and Secondary National Ambient Air Quality Standards (NAAQS) to protect public health and welfare. To attain and maintain these standards, each State is required to develop an implementation plan (SIP). Among other things, each implementation plan must include a permit program to regulate the modification and construction of any stationary source of air pollution as necessary to ensure achievement of the NAAQS. The State of Minnesota has incorporated such a permitting program into the Minnesota SIP. Under this program, owners or operators must obtain a construction permit from the director of the Minnesota Pollution Control Agency (MPCA) before beginning installation of a new source of air pollutants or the modification of an existing air contaminant source.

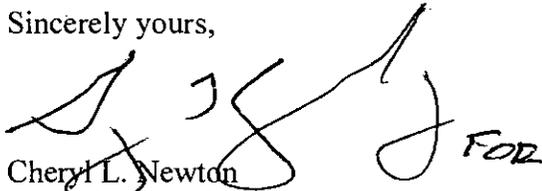
Title I, Part C of the Act requires that all SIP permit programs contain rules regulating the construction and modification of major stationary sources in areas that have achieved attainment with the NAAQS. These rules are known as Prevention of Significant Deterioration (PSD). Under PSD rules, any major stationary source must obtain a preconstruction permit prior to commencing construction on any modification, if the modification is major in that it is projected to result in a significant net increase in emissions of a regulated pollutant, and if the source is located in an area which has achieved the NAAQS for that pollutant. All preconstruction permits issued to sources subject to PSD must require (1) the application of Best Available Control Technology (BACT) and (2) a demonstration that the proposed modification does not cause or contribute to a violation of the NAAQS or cause any other significant deterioration of air quality.

EPA finds that you have violated the above-listed rules and regulations at your Egan, Minnesota facility. Section 113 of the Act gives EPA 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.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 calendar days of your receipt of this notice. A conference should be held within 30 calendar days of your receipt of this notice. This conference will provide you with a chance to present information on the identified violations, any efforts you have taken to comply with the applicable requirements 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 contacts in this matter are Virginia Palmer, Environmental Engineer, and Gary Steinbauer, Assistant Regional Counsel. You may call them at (312) 353-2089 and (312) 886-4306, respectively, if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Gopher's compliance with the requirements of the Act.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'C. Newton', with a large flourish extending to the right. The signature is written over the typed name 'Cheryl L. Newton'.

Cheryl L. Newton
Director
Air and Radiation Division

cc: Jeff T. Connell, Minnesota Pollution Control Agency

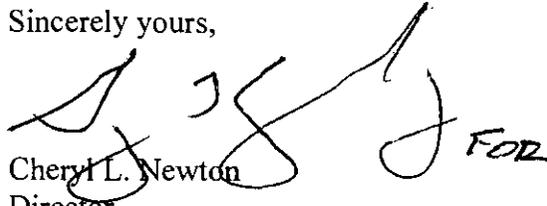
Enclosure

EPA finds that you have violated the above-listed rules and regulations at your Eagan, Minnesota facility. Section 113 of the Act gives EPA 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.

We are offering you the opportunity to request a conference with us about the violations alleged in the NOV/FOV. A conference should be requested within 10 calendar days of your receipt of this notice. A conference should be held within 30 calendar days of your receipt of this notice. This conference will provide you with a chance to present information on the identified violations, any efforts you have taken to comply with the applicable requirements 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 contacts in this matter are Virginia Palmer, Environmental Engineer, and Gary Steinbauer, Assistant Regional Counsel. You may call them at (312) 353-2089 and (312) 886-4306, respectively, if you wish to request a conference. EPA hopes that this NOV/FOV will encourage Gopher's compliance with the requirements of the Act.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Cheryl L. Newton" with a stylized flourish at the end.

Cheryl L. Newton
Director
Air and Radiation Division

cc: Jeff T. Connell, Minnesota Pollution Control Agency

Enclosure

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:)	
)	
GOPHER RESOURCE, LLC)	NOTICE OF VIOLATION and
Eagan, Minnesota)	FINDING OF VIOLATION
)	
)	EPA-5-11-MN-02
Proceedings Pursuant to)	
the Clean Air Act)	
42 U.S.C. § 7401 et seq)	

NOTICE AND FINDING OF VIOLATION

Gopher Resource, LLC (you or Gopher) owns and/or operates a secondary lead smelter at 3385 Dodd Road, Eagan, Minnesota (facility).

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV) because you conducted a major modification at the facility without obtaining a Prevention of Significant Deterioration (PSD) permit as required by PSD rules. Such a PSD permit would have required the installation and continuous operation of Best Available Control Technology (BACT) for control of sulfur dioxide (SO₂) on the East Reverberatory Furnace. The underlying statutory and regulatory requirements include provisions of the Clean Air Act (the Act), its implementing regulations, and the Minnesota State Implementation Plan (Minnesota SIP).

STATUTORY AND REGULATORY BACKGROUND

Prevention of Significant Deterioration Requirements

1. When Congress passed the Act in 1970, it exempted existing facilities from many of its requirements. Congress, however, made it clear that the exemption would not last forever. As the U.S. Court of Appeals for the District of Columbia explained in *Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979), “[t]he statutory scheme intends to ‘grandfather’ existing industries, but . . . this is not to constitute a perpetual immunity from all standards under the PSD program.” Rather, the Act requires grandfathered facilities to install modern pollution control devices before performing major modifications that may significantly increase emissions.

2. The Prevention of Significant Deterioration (PSD) provisions of Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, and their implementing regulations at 40 C.F.R. § 52.21 (collectively the PSD Program), establish preconstruction requirements applicable to the construction and modification of “major emitting facilities” located in areas designated as either

attainment or unclassifiable for purposes of meeting the National Ambient Air Quality Standards (NAAQS).

3. The PSD Program prohibits, among other things, a “major emitting facility” from constructing a “major modification” unless it has obtained a pre-construction PSD permit that applies Best Available Control Technology (BACT). 42 U.S.C. § 7475(a); *see also* 40 C.F.R. 52.21(a)(2)(iii). The PSD program further provides that such a facility must perform a source impact analysis, perform an air quality analysis and modeling, submit appropriate information, and conduct additional impact analyses as required. 42 U.S.C. § 7475(e).

4. Pursuant to Section 169 of the Act, 42 U.S.C. § 7479(1), a “major emitting facility” is defined to include, among others, any stationary source which emits, or has the potential to emit, 100 tons per year or more of any regulated PSD pollutant from secondary metal production facilities. *See also* 40 C.F.R. § 52.21(b)(1)(i)(a)-(b).

5. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a SIP containing regulations implementing the PSD Program.

6. A state may comply with Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, by having its own PSD regulations approved by EPA as part of its SIP, provided that the state’s PSD regulations are at least as stringent as those set forth at 40 C.F.R. § 51.166.

7. Pursuant to 40 C.F.R. § 52.21(a), if a state does not have PSD regulations that EPA has approved and incorporated into its SIP, EPA may incorporate the federal PSD regulations set forth at 40 C.F.R. § 52.21 into the SIP.

8. Pursuant to 40 C.F.R. § 52.23, any person failing to comply with 40 C.F.R. Part 52 or an approved regulatory provision of a SIP is subject to an enforcement action under Section 113 of the Act, 42 U.S.C. § 7413.

9. On August 7, 1980, EPA disapproved Minnesota's PSD program and incorporated the federal PSD regulations of 40 C.F.R. § 52.21(b) through (w) into the Minnesota SIP at 40 C.F.R. § 52.1234. 45 *Fed. Reg.* 52676, 52741 (August 7, 1980), as amended at 53 *Fed. Reg.* 18985 (May 26, 1988), codified at 40 C.F.R. 52.1234.¹ EPA delegated to MPCA the authority to review and process PSD permit applications, and to implement the federal PSD program. 46 *Fed. Reg.* 9580. (Jan. 29, 1981).

10. The PSD regulations set forth in 40 C.F.R. § 52.21 apply to “any project at an existing ‘major stationary source’” in an attainment or unclassifiable area. 40 C.F.R. § 52.21(a)(2)(i).

11. 40 C.F.R. § 52.21(b)(2)(i) provides that a “major modification” is defined as “any physical change in or change in the method of operation of a major stationary source that would

¹ For all PSD violations cited in this FOV/NOV, the applicable regulations are the federal PSD provisions of 40 C.F.R. §§ 52.21(b) through (w).

result in: a significant emissions increase... of a regulated NSR [PSD] pollutant...; and a significant net emissions increase of that pollutant from the major stationary source.”

12. Pursuant to 40 C.F.R § 52.21(a)(2)(iv)(a), “a project is a ‘major modification’ for a regulated NSR [PSD] pollutant if it causes two types of emissions increases”—a “significant emissions increase” and a “significant net emissions increase.”

13. A “net emissions increase” is “the amount by which the sum of the following exceeds zero: (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section [40 C.F.R. § 52.21(a)(2)(iv)]; and (b) Any other increases or decreases in actual emissions at the major stationary sources that are contemporaneous with that particular change and are otherwise creditable.” 40 C.F.R § 52.21(b)(3)(i).

14. Pursuant to 40 C.F.R § 52.21(b)(23)(i), a “significant net emissions increase” for sulfur dioxide (SO₂) means an increase in the rate of SO₂ emissions that would equal or exceed 40 tons per year (tpy).

15. Pursuant to 40 C.F.R § 52.21(a)(2)(ii) if a “major stationary source” in an attainment or unclassifiable area plans to construct a “major modification” under the foregoing definitions, then it is subject to the requirements of the PSD Program set forth at 40 C.F.R § 52.21(j)-(r).

16. Pursuant to 40 C.F.R § 52.21(a)(2)(iii), “[n]o new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements.”

17. Pursuant to 40 C.F.R § 52.21(j)-(r), to construct a “major modification” in an attainment area, a “major stationary source” subject to the PSD Program must, among other things: 1) meet all applicable emissions limitations under the SIP, along with any standards of performance under 40 C.F.R. Parts 60 and 61; 2) perform an analysis of source impacts; 3) perform air quality modeling and analysis; 4) obtain a PSD permit; and 5) install and apply BACT control devices for each regulated PSD pollutant for which the modification would result in a significant net emissions increase.

18. Pursuant to 40 C.F.R § 52.21(b)(48)(ii)(c), when calculating baseline actual emissions, the average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period.

19. “Best available control technology” means an emissions limitation reflecting the maximum degree of reduction of each regulated PSD pollutant which the permitting authority determines is achievable for a facility on a case-by-case basis, taking into account energy, environmental and economic impacts and other costs. Section 169(3) of the Act, 42 U.S.C.

§ 7479(3).

20. Pursuant to § 52.21(r)(1), any owner or operator who constructs or operates a source or modification not in accordance with its PSD application, or who commences construction without applying for and receiving an approved PSD permit, shall be subject to an enforcement action.

Facility Permit Requirements

21. Section 110 of the Act, 42 U.S.C. § 7410, requires each state to adopt and submit to the Administrator of EPA (Administrator) a plan which provides for the implementation, maintenance and enforcement of all national primary or secondary standards established pursuant to Section 109 of the Act, 42 U.S.C. § 7409. These SIPs are required to include enforceable emission limitations, control measures, schedules for compliance, and permit programs for new sources.

22. Section 110(n)(1) of the Act, 42 U.S.C. § 7410(n)(1), provides that any provision of any applicable SIP that was approved or promulgated by the Administrator pursuant to Section 110 of the Act, as in effect prior to November 15, 1990, shall remain in effect as part of such SIP, except to the extent that a revision to such provision is approved or promulgated by the Administrator.

23. Pursuant to Section 110 of the Act, 42 U.S.C. § 7410, the Administrator approved Minn. R. 7007.0150 as part of the federally enforceable SIP for Minnesota on December 4, 2001. *66 Fed. Reg.* 62967

24. Pursuant to Minn. R. 7007.0150, no person may construct, modify, reconstruct, or operate an emissions unit, emissions facility, or stationary source, except in compliance with an air emissions permit from MPCA. *See also* Minn. R. 7007.0300.

25. Pursuant to 40 C.F.R. § 52.23, failing to comply with any permit limitation or condition contained within a permit to operate issued under an EPA-approved program that is incorporated into the SIP, is a violation of the SIP and subject to enforcement under Section 113 of the Act, 42 U.S.C. § 7413. *See also* Minn. R. 7007.1750.

Title V Requirements

26. Title V of the Act, 42 U.S.C. §§ 7661-7661f, and its implementing regulations at 40 C.F.R. Part 70, establish an operating permit program for certain sources, including “major sources.” The purpose of Title V is to ensure that all applicable requirements, including PSD requirements, are included in the Title V operating permit for the source.

27. Pursuant to 40 C.F.R. § 70.1(b), Minn. R. 7007.0200, and Minn. R. 7007.0500, all sources subject to the Title V operating permit program, including “major sources,” shall have a permit to operate that ensures compliance by the source with “all applicable requirements.”

28. 40 C.F.R. § 70.7(b) provides that no source subject to 40 C.F.R. Part 70 requirements may operate without a permit as specified in the Act. *See also* Minn. R. 7007.0150.

29. Pursuant to Section 503 of the Act, 42 U.S.C. § 7661b, and 40 C.F.R. § 70.5(a), every owner or operator of a Part 70 source, including a “major source,” is required to timely submit an accurate and complete Title V permit application, including information required to be submitted with the application. *See also* Minn. R. 7007.0200.

30. Pursuant to Section 501(2)(B) of the Act, 42 U.S.C. § 7661, 40 C.F.R. § 70.2, and Minn. R. 7007.0200, a “major source” is defined, in part, as any stationary source that directly emits or has the potential to emit one hundred tons per year or more of any air pollutant.

31. Pursuant to Section 504(a) of the Act 42 U.S.C. § 7661c(a), and 40 C.F.R. § 70.5, every Title V operating permit is required to contain all applicable emission limitations, standards and requirements, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a SIP. *See also* Minn. R. 7007.0500, Minn. R. 7007.0800, and Minn. R. 7001.0300.

32. Pursuant to 40 C.F.R. § 70.2, an “applicable requirement” includes any standard or other requirement provided for in the applicable SIP approved or promulgated by EPA that implements the relevant requirements of the Act, including any SIP revisions. *See also* Minn. R. 7007.0100.

33. 40 C.F.R. § 70.5(a)(2) defines “complete application” to include information that is “sufficient to evaluate the subject source and its application and to determine all applicable requirements.” *See also* Minn. R. 7007.0500.

34. 40 C.F.R. § 70.5(c) provides that a source may not omit from its Title V permit application information needed to determine the applicability of, or to impose, any applicable requirement.

35. 40 C.F.R. § 70.5(c)(3)(vi) provides that a Part 70 source shall include in its Title V permit application all limitations on source operation affecting emissions, or any work practice standards, where applicable, for all regulated pollutants at the source. *See also* Minn. R. 7007.0500(2)(C)(9).

36. Pursuant to 40 C.F.R. § 70.5(b), an applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. *See also* Minn. R. 7007.0600.

37. 40 C.F.R. § 70.5(b) provides that “an applicant shall provide additional information as necessary to address any requirements that become applicable to the source after the date it filed a complete application but prior to release of a draft permit.” *See also* Minn. R. 7007.0600.

38. 40 C.F.R. § 70.3 provides that the requirements of Part 70 apply to any “major source” located in a state that has received whole or partial approval of its Title V program.

39. EPA approved Minnesota’s Title V operating program on an interim basis on June 16, 1995, and fully approved the program on December 4, 2001. *See* 60 *Fed. Reg.* 31637 (June 16, 1995), and 66 *Fed. Reg.* 62967 (Dec. 4, 2001). Minnesota’s Title V operating permit program regulations are codified at Minn. R. 7007, and are federally enforceable pursuant to Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3).

FACTUAL BACKGROUND

40. Gopher is a limited liability company organized under the laws of Minnesota.

41. Gopher is a “person,” as that term is defined in Section 302(e) of the Act, 42 U.S.C. § 7602(e).

42. Gopher has owned and/or operated the facility located at 3385 Dodd Road, Eagan, Minnesota, at all times relevant to this NOV/FOV.

43. The Gopher facility is a secondary lead smelting facility. Its processes include, among other things, a reverberatory furnace known as the East Reverberatory Furnace.

44. The Gopher facility has the potential to emit more than 100 tons per year of SO₂.

45. The Gopher facility is located in Dakota County, which was designated as an attainment area for the federal SO₂ standard at all times relevant to this NOV/FOV.

46. The Gopher facility is a “major emitting facility” within the meaning of Section 169(1) of the Act, 42 U.S.C. § 7479(1), and is a “major stationary source” within the meaning of 40 C.F.R. § 52.21(b)(1)(i)(a).

47. On or about April 6, 1990, Gopher installed four new oxygen burners at the East Reberberatory Furnace.

48. On or about June 18, 1991, MPCA issued Air Emission Permit No. 675-91-OT-5 to Gopher. This permit allowed for the construction of a desulfurization system, which was required for compliance with the NAAQS. On July 6, 1992, and December 22, 1992, MPCA issued permit amendments to allow Gopher to complete construction and modification of the desulphurization project by October 1, 1992, and May 1, 1993, respectively.

49. From approximately 2003 through 2005, Gopher increased the amount of oxygen used in the oxygen burners at the East Reverberatory Furnace.

50. Pursuant to 40 C.F.R § 52.21(b)(48)(ii)(c), when evaluating any emissions increases associated with the installation of the oxygen burners in 1990 and/or the increase in

oxygen usage from 2003 through 2005, Gopher is required to revise its baseline actual emissions to account for the effect of the desulfurization project that was done to ensure compliance with the NAAQS.

51. On April 14, 1995, Gopher applied for a Title V Total Facility Operating Permit (Title V Permit) from MPCA. On April 3, 2002, Gopher submitted a modification to this application. The initial Title V permit was issued on August 15, 2002. A major amendment to Gopher's Title V permit was issued on January 31, 2003.

52. On February 16, 2007, Gopher applied for a reissuance of the Title V Total Facility Operating Permit. Gopher's Title V Permit was reissued on June 29, 2010.

VIOLATIONS

Violations of the Prevention of Significant Deterioration Provisions

53. The installation of oxygen burners in 1990 and/or the increase in oxygen usage at the East Reverberatory Furnace from 2003 through 2005 set forth in Paragraphs 47 and 49 above, constituted a "major modification," as that term is defined at 40 C.F.R. § 52.21(b)(2)(i) and 40 C.F.R. § 52.21(a)(2)(iv)(a).

54. The installation of oxygen burners in 1990 and/or the increase in oxygen usage at the East Reverberatory Furnace from 2003 through 2005 set forth in Paragraphs 47 and 49 above, caused a "significant emissions increase" of SO₂, as that term is defined at 40 C.F.R. § 52.21(b)(40).

55. The installation of oxygen burners in 1990 and/or the increase in oxygen usage at the East Reverberatory Furnace from 2003 through 2005 set forth in Paragraphs 47 and 49 above, caused a "significant net emissions increase" of SO₂, as that term is defined at 40 C.F.R. §§ 52.21(b)(3) and (b)(23).

56. Gopher failed to apply for and obtain a PSD permit for the installation of oxygen burners and/or the increase in oxygen usage at the East Reverberatory Furnace.

57. Before installing oxygen burners and/or increasing oxygen usage at the East Reverberatory Furnace, Gopher failed to install and operate pollution control equipment reflecting the application of BACT for SO₂ on the East Reverberatory Furnace at its facility.

58. Gopher violated and continues to violate Section 165(a) of the Act, 42 U.S.C. § 7475(a), 40 C.F.R. § 52.21(a)(2)(iii), and 40 C.F.R. § 52.21(j), (k), (l), (m), and (r), by commencing construction of, and continuing to operate, a major modification at its facility without first applying for and obtaining the required pre-construction PSD permit, conducting a BACT analysis, conducting a source impact analysis, performing air quality modeling and analysis, and installing and operating BACT-level controls for SO₂ at the East Reverberatory Furnace.

Violations of the Title V Permit Program

59. As set forth in Paragraphs 47 and 49 above, Gopher undertook a major modification to the East Reverberatory Furnace which subjected the East Reverberatory Furnace to the PSD provisions of the Act and its implementing regulations.

60. At all times relevant to this NOV/FOV, Gopher failed to supplement, correct, or update the Title V permit application for its facility to include information pertaining to the major modification, identified in Paragraphs 47 and 49 above, and failed to cite and describe the requirement to apply/install BACT for SO₂ at the East Reverberatory Furnace.

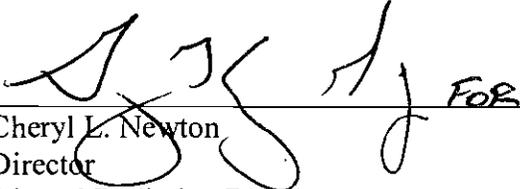
61. Gopher violated and continues to violate, Sections 503 and 504 of the Act, 42 U.S.C. §§ 7661b, and 7661c, 40 C.F.R. §§ 70.1(b) and 70.5, and the Title V provisions of the Minnesota SIP set forth at Minn. R. 7007.0150, 7007.0200, 7007.0500, 7007.0800, 7007.0600, by failing to supplement, correct, or update the Title V permit application for its facility to identify all applicable requirements and by failing to submit a timely, accurate, and complete Title V permit renewal application for its facility with information concerning all applicable requirements.

ENVIRONMENTAL IMPACT OF VIOLATIONS

62. Violation of SO₂ standards increases the quantity of SO₂ in the environment. SO₂ causes severe respiratory problems and contributes to childhood asthma. SO₂ is a significant contributor to acid rain, visibility impairment, fine particulate matter formation, and smog.

Date

6/24/11


Cheryl L. Newton
Director
Air and Radiation Division

CERTIFICATE OF MAILING

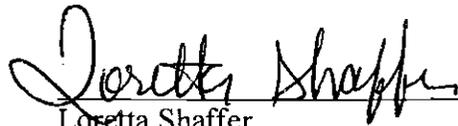
I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation, No. EPA-5-11-MN-02, by Certified Mail, Return Receipt Requested, to:

Steven Yates, Environmental Health and Safety Manager
Gopher Resource, LLC
3385 Dodd Road
Eagan, Minnesota 55121

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Jeff T. Connell, Manager
Compliance and Enforcement Section
Industrial Division
Minnesota Pollution Control Agency

On the 28 day of June 2011.



Loretta Shaffer
Administrative Professional Assistant
Planning and Administration Section

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0005 8915 9976

Standard bcc's: Official File w/Attachment(s)
Originating Organization Reading File w/Attachment(s)
Other bcc's: Gary Steinbauer, C-14J

Creation Date:	June 24, 2011
Filename:	G:\Gopher\NOV-FOV\Gopher NOV FOV 06 24 11
Legend:	ARD:AECAB:AECAS(MN/OH):v.palmer