



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

SEP 27 2013

REPLY TO THE ATTENTION OF:

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

Brian Thiesse  
Head of U.S. SHEQ Operations  
Linde Gas North America, LLC  
575 Mountain Avenue  
Murray Hill, New Jersey 07974

Dear Mr. Thiesse:

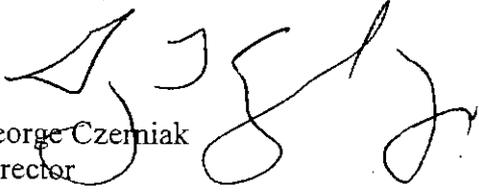
The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Linde Gas North America's facility located at 810 East 135th Street, Romeoville, Illinois (Linde or facility) under Section 113(a)(1) of the Clean Air Act (the Act), 42 U.S.C. § 7413(a)(1). We find that you are violating Prevention of Significant Deterioration regulations, non-attainment New Source Review regulations, and operating permit requirements under Title V of the Act, as well as requirements of the Illinois State Implementation Plan.

Section 113 of the Act 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, or bringing a judicial criminal action.

We are offering you the opportunity to request a conference with us to discuss the violations identified in this NOV/FOV. A conference should be requested within 10 days following receipt of this notice. We should hold any conference within 30 calendar days following receipt of this letter. 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 refinery'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 William Wagner. You may call him at (312) 886-4684 to request a conference. EPA hopes that this notice will encourage Linde's compliance with the requirements of the Act.

Sincerely yours,



George Czerniak  
Director  
Air and Radiation Division

cc: Ray Pilapil, Manager  
Compliance and Enforcement Section  
Illinois Environmental Protection Agency

Enclosure

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

<b>IN THE MATTER OF:</b>	)	
	)	
<b>Linde Gas North America, LLC</b>	)	<b>NOTICE OF VIOLATION and</b>
<b>Romeoville, Illinois</b>	)	<b>FINDING OF VIOLATION</b>
	)	
	)	<b>EPA-5-13-IL-44</b>
Proceedings Pursuant to	)	
the Clean Air Act	)	
42 U.S.C. § 7401 <i>et seq.</i>	)	

**NOTICE AND FINDING OF VIOLATION**

Linde Gas North America, LLC (you or Linde) owns and operates a facility located at 810 East 135th Street, Romeoville, Illinois, (Linde or facility). The facility consists of a number of pieces of equipment that generate air pollution and are subject to provisions of the Clean Air Act. The equipment includes a reformer.

The U.S. Environmental Protection Agency (EPA) is sending this Notice of Violation and Finding of Violation (NOV/FOV or Notice) to notify you of several items. We find that you constructed major modifications causing significant net emissions increases in nitrogen oxides, particulate matter less than 10 microns (PM<sub>10</sub>), and PM less than 2.5 microns (PM<sub>2.5</sub>) at a major stationary source in an area that was designated as nonattainment for PM<sub>2.5</sub>, and attainment or unclassifiable for nitrogen dioxide and PM<sub>10</sub> at the time of the modifications, without first obtaining a construction permit meeting the non-attainment New Source Review regulations in the Illinois State Implementation Plan, 40 C.F.R. Part 51, Appendix S, and the Prevention of Significant Deterioration regulations.

**Regulatory Background**

1. The Clean Air Act (the Act) is designed to protect and enhance the quality of the nation's air so as to promote the public health and welfare and the productive capacity of its population. Section 101(b)(1) of the Act, 42 U.S.C. § 7401(b)(1).

The National Ambient Air Quality Standards

2. Section 108(a) of the Act, 42 U.S.C. § 7408(a), requires the Administrator of EPA to identify and prepare air quality criteria for each air pollutant, emissions of which may endanger public health or welfare, and the presence of which results from numerous or diverse mobile or stationary sources. For each such "criteria" pollutant, Section 109 of the Act, 42 U.S.C. § 7409, requires EPA to promulgate national ambient air quality standards (NAAQS) requisite to protect the public health and welfare.

3. Pursuant to Sections 108 and 109, 42 U.S.C. §§ 7408 and 7409, EPA has identified NO<sub>x</sub>, particulate matter (PM), PM less than 10 microns (PM<sub>10</sub>), and PM less than 2.5 microns (PM<sub>2.5</sub>) as criteria pollutants, and has promulgated NAAQS for these pollutants. 40 C.F.R. §§ 50.6, 50.7, 50.8, 50.9, 50.10, and 50.11.
4. Under Section 107(d) of the Act, 42 U.S.C. § 7407(d), each state is required to designate those areas within its boundaries where the air quality is better or worse than the NAAQS for each criteria pollutant, or where the air quality cannot be classified due to insufficient data. These areas are called air quality control regions (AQCRs). An area that meets the NAAQS for a particular pollutant is termed an "attainment" area with respect to such pollutant. An area that does not meet the NAAQS for a particular pollutant is termed a "nonattainment" area with respect to such pollutant.
5. An area that cannot be classified as either "attainment" or "nonattainment" with respect to a particular pollutant due to insufficient data is termed "unclassifiable" with respect to such pollutant.

#### The Prevention of Significant Deterioration Program

6. Part C of Title I of the Act, 42 U.S.C. §§ 7470-7492, sets forth requirements for the prevention of significant deterioration of air quality in those areas designated as either attainment or unclassifiable for purposes of meeting the NAAQS standards. These requirements are designed to protect public health and welfare, to assure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and to assure that any decision to permit increased air pollution is made only after careful evaluation of all the consequences of such a decision and after public participation in the decision making process. 42 U.S.C. § 7470. These provisions are referred to herein as the "PSD program."
7. Section 165(a) of the Act, 42 U.S.C. § 7475(a), prohibits, among other things, a "major emitting facility" from constructing a "major modification" in any area which is attaining the NAAQS, unless it has obtained a pre-construction permit issued under the PSD regulations that applies "Best Available Control Technology" (BACT) to control emissions from the proposed modified emissions unit, and has conducted an analysis to determine the air quality impacts of the modification. See also, 40 C.F.R. § 52.21(a)(2)(iii).
8. Section 169(2)(C) of the Act, 42 U.S.C. § 7479(2)(C), defines "construction" to include "modification." "Modification" is defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a), to be "any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted." See also 40 C.F.R. § 52.21(b)(1)(i)(a).
9. Sections 110(a) and 161 of the Act, 42 U.S.C. §§ 7410(a) and 7471, require each state to adopt a SIP that contains emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality in areas designated as

attainment or unclassifiable. The Administrator promulgated regulations at 40 C.F.R. § 51.166 setting forth state implementation plan (SIP) approval requirements for the prevention of significant deterioration of air quality.

10. 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, which must be at least as stringent as those set forth at 40 C.F.R. § 51.166, approved by EPA as part of its SIP. If a state does not have a PSD program that has been approved by EPA and incorporated into its SIP, the federal PSD regulations set forth at 40 C.F.R. § 52.21 may be incorporated by reference into the SIP. 40 C.F.R. § 52.21(a).
11. On August 7, 1980, EPA disapproved Illinois' proposed PSD program and then incorporated by reference the PSD regulations of 40 C.F.R. § 52.21, except paragraph 40 C.F.R. § 52.21(a)(1), into the Illinois SIP. 40 C.F.R. § 52.738 (45 Fed. Reg. 52676, 52741). On January 29, 1981, EPA delegated to the Illinois Environmental Protection Agency (IEPA) the full authority to implement and enforce the federal PSD program. 46 Fed. Reg. 9584. On December 31, 2002, EPA published revisions to the PSD and nonattainment new source review (NSR) regulations in 40 C.F.R. Parts 51 and 52. 67 Fed. Reg. 80186. These revisions are referred to as "NSR Reform." On December 24, 2003, EPA issued a final rule incorporating the newly promulgated PSD provisions of NSR Reform into the Illinois SIP. 68 Fed. Reg. 74489. The NSR Reform provisions at 40 C.F.R. § 52.21 were incorporated into and were part of the Illinois SIP at the time of the major modifications alleged in this Notice.
12. The PSD regulations set forth in 40 C.F.R. § 52.21 apply to any "major stationary source" that intends to construct a "major modification" in an attainment or unclassifiable area. 40 C.F.R. § 52.21(i)(2).
13. 40 C.F.R. § 52.21(b)(1)(i)(a) defines "major stationary source" as any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant.
14. 40 C.F.R. § 52.21(b)(2)(i) defines "major modification" as any physical change or change in the method of operation of a major stationary source that would result in a significant net emission increase of any pollutant subject to regulation under the Act.
15. 40 C.F.R. § 52.21(b)(3)(i) defines "net emissions increase" as 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; and (b) any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable
16. Under the PSD regulations, a "significant" net emissions increase means an increase in the rate of emissions that would equal or exceed any of the following rates for the following pollutants: 40 tpy of NO<sub>x</sub>, 15 tpy of PM<sub>10</sub> and 10 tpy of PM<sub>2.5</sub>. 40 C.F.R. § 52.21(b)(23)(i).

17. The PSD regulations define "actual emissions" as the average rate, in tpy, at which the unit "actually emitted the pollutant during a two-year period which precedes the particular date" and which is representative of normal operation. 40 C.F.R. § 52.21(b)(21)(i)-(ii). In addition, for any emissions unit that "has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date." 40 C.F.R. § 52.21(b)(21)(iv).
18. 40 C.F.R § 52.21(a)(2)(iv) provides that the requirements of the PSD program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f).
19. 40 C.F.R § 52.21(a)(2)(iv)(b) provides that the procedure for calculating (before beginning actual construction) whether a significant emissions increase will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. Emission units can be either existing or new. 67 Fed. Reg. 80186, at 80198.
20. 40 C.F.R § 52.21(a)(2)(iv)(d) requires an actual-to-potential test for projects that only involve construction of a new emissions unit(s).
21. Under 40 C.F.R § 52.21(a)(2)(iv)(d), using the actual-to-potential test, a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each new emissions unit, using the method specified in paragraph (a)(2)(iv)(d), equals or exceeds the significant amount for that pollutant.
22. 40 C.F.R § 52.21(a)(2)(iii) prohibits the actual construction of a major stationary source or modification without a permit which states that the major stationary source or modification will meet the requirements of 40 C.F.R. § 52.21(j) through (r).
23. Under the PSD regulations, "construction" means "any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit)" that "would result in a change in emissions." 40 C.F.R. § 52.21(b)(8); *see also* 42 U.S.C. § 7479(2)(C) ("construction" includes the "modification" (as defined in Section 111(a) of the Act, 42 U.S.C. § 7411(a)) of any source or facility).
24. A major stationary source subject to the requirements of paragraphs (j) through (r) must, among other things, obtain a PSD permit, install and operate BACT controls for each regulated PSD pollutant for which the modification would result in a significant net emissions increase, conduct a source impact analysis, perform air quality modeling and analysis, and allow for meaningful public participation in the process. 40 C.F.R. § 52.21(j)-(r).
25. 40 C.F.R. § 52.21(b)(12) defines BACT as "an emissions limitation . . . based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such

source or modification through application of production processes or available methods, systems, and techniques . . . for control of such pollutant.”

26. “Emission limitation” is defined at section 302(k) of the Act, 42 U.S.C. § 7602(k), as a requirement which “limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction . . . .”
27. No major stationary source to which the requirements of paragraphs (j) through (r) of 40 C.F.R. § 52.21 apply shall begin actual construction of a major modification without a permit which states that the stationary source or modification will meet those requirements (a PSD permit). 40 C.F.R. § 52.21(i)(1).
28. Any owner or operator of a source or modification subject to 40 C.F.R. § 52.21 who constructs or operates a source not in accordance with a PSD application or commences construction without applying for and receiving approval thereunder is subject to an enforcement action. 40 C.F.R. § 52.21(r)(1).
29. 40 C.F.R. § 52.23 states, among other things, that failure to comply with any provision of 40 C.F.R. Part 52, or with any approved regulatory provision of a SIP, shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the Act.

#### The Non-Attainment New Source Review Program

30. Part D of Title I of the Act, 42 U.S.C. §§ 7501-7515, sets forth provisions for New Source Review (NSR) requirements for areas designated as being in nonattainment with the NAAQS standards. These provisions are referred to herein as the “Nonattainment NSR” program. The Nonattainment NSR program is intended to reduce emissions of air pollutants in areas that have not attained NAAQS so that the areas make progress towards meeting the NAAQS.
31. Section 173(a) of the Act, 42 U.S.C. 7503(a), provides, among other things, that construction and operating permits may be issued if, among other things, sufficient offsetting emission reductions have been obtained to reduce existing emissions to the point where reasonable further progress towards meeting the national ambient air quality standards is maintained, and the pollution controls to be employed will reduce emissions to the “lowest achievable emission rate” (LAER).
32. Pursuant to Sections 110 and 172(c)(5) of the Act, 42 U.S.C. § 7410 and 7502(c)(5), each state is required to adopt Nonattainment NSR SIP rules that include provisions to require permits that conform to the requirements of Section 173 of the Act, 42 U.S.C. § 7503, for the construction and operation of modified major stationary sources within nonattainment areas. Section 173 of the Act, in turn, sets forth a series of minimum requirements for the issuance of permits for major modifications to major stationary sources within nonattainment areas. EPA promulgated regulations at 40 C.F.R. § 51.165 to implement

Nonattainment NSR permit program requirements under Sections 172(c)(5) and 173 of the Act. *See* Fed. Reg. 40669 (November 7, 1986), and subsequent amendments.

### Illinois SIP Regulatory Requirements

33. On December 17, 1992, EPA approved the Illinois non-attainment NSR SIP rules, 35 Illinois Administrative Code (IAC) Part 203. 57 FR 59928. Illinois submitted and EPA approved revisions to this rule on September 27, 1995 (60 Fed. Reg. 49780) and May 13, 2003 (68 Fed. Reg. 25504).
34. 35 IAC § 203.207(a) defines “major modification” as a physical change, or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant for which the area is designated a nonattainment area.
35. 35 IAC § 203.203 provides that a construction permit is required prior to actual construction of a major new source or major modification, and that the application for the permit must meet the requirements of Part 203, including Subpart C, “Requirements for Major Stationary Sources in Nonattainment Areas.”
36. 35 IAC Part 203, Subpart C, at § 203.301(a), defines “lowest achievable emission rate” as, in pertinent part, “the most stringent emission limitation which is achieved in practice by such a class or category of stationary source.”
37. 35 IAC Part 203, Subpart C, at § 203.302(a), provides that the owner or operator of a new major source or major modification shall provide emission offsets equal to or greater than the allowable emissions from the source, or the net increase in emissions from the modification, sufficient to allow the Agency to determine that the source or modification will not interfere with reasonable further progress.
38. 35 IAC § 203.103 defines “actual construction” as initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and erection of permanent storage structures.
39. 35 IAC § 203.201 states that in any nonattainment area, no person shall cause or allow the construction of a new major stationary source or major modification that is major for the pollutant for which the area is designated a nonattainment area, except as in compliance with 35 IAC Part 203 for that pollutant.

### 40 C.F.R. Part 51, Appendix S

40. On May 16, 2008, EPA promulgated regulations implementing the NSR Program for Particulate Matter Less Than 2.5 Micrometers. 73 Fed. Reg. 28321. The preamble to the final rule provides that because the PM<sub>2.5</sub> nonattainment designations became effective on April 5, 2005 (*see*, 70 Fed. Reg. 944 (January 5, 2005)), states were required to issue major nonattainment NSR permits that address the requirements of Section 173 of the Act as required for PM<sub>2.5</sub> as of the effective date of these regulations, July 15, 2008. The preamble also provides that after July 15, 2008, states are not permitted to implement a

nonattainment NSR program for PM<sub>2.5</sub> using PM<sub>10</sub> as a surrogate for the PM<sub>2.5</sub> nonattainment NSR requirements. Further, until EPA approves changes to a state's SIP-approved nonattainment NSR program to reflect the new requirements under 40 C.F.R. § 51.165, states are to implement a transitional PM<sub>2.5</sub> nonattainment NSR program under 40 C.F.R. Part 51, Appendix S (as amended by the May 16, 2008 rulemaking). 73 Fed. Reg. at 28342.

41. 40 C.F.R. § 52.24(k) provides that for an area designated as nonattainment after July 1, 1979, the Emission Offset Interpretative Ruling, 40 CFR Part 51, Appendix S (Appendix S) shall govern permits to construct and operate applied for during the period between the date of designation as nonattainment and the date the NSR permit program meeting the requirements of Part D is approved.
42. On March 8, 2007, EPA finalized revisions to Appendix S to conform the nonattainment permitting rules that apply during the SIP development period following nonattainment designations. The revisions to Appendix S conform the permitting rules to, among other things, the NSR reform provisions. 72 Fed. Reg. 10367.
43. Appendix S at II.A.3 defines "potential to emit" as the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable.
44. Appendix S at II.A.4(i)(b)(1) defines "major stationary source" as any stationary source which emits, or has the potential to emit, 100 tons per year or more of any pollutant subject to regulation under the Act.
45. Appendix S at II.A.5(i) defines "major modification" as any physical change in or change in the method of operation of a major stationary source that would result in: (a) a significant emissions increase of a regulated NSR pollutant and (b) a significant net emissions increase of that pollutant from the major stationary source.
46. Appendix S at II.A.6(i) defines "net emissions increase," with respect to any regulated NSR pollutant emitted by a major stationary source, as 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 IV.J of Appendix S; and (b) any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable.
47. Appendix S at II.A.10(i) defines "significant" as, in reference to a net emissions increase or the potential of a source to emit PM<sub>2.5</sub>, a rate of emissions that would equal or exceed 10 tpy of direct PM<sub>2.5</sub> emissions or 40 tpy of sulfur dioxide emissions.
48. Appendix S at IV.I.1 requires that to determine whether a project constitutes a major

modification, the reviewing authority shall apply the principles set out in paragraphs IV.I.1(i) through (v).

49. Appendix S at IV.I.1(ii) provides that the procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs IV.I.1(iii) through (v).
50. Appendix S at II.A.7 defines "emissions unit" as any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant. There are two types of emissions units: (a) a new emissions unit is any emissions unit which is (or will be) newly constructed and which has existed for less than 2 years from the date such emissions unit first operated; (b) an existing emissions unit is any emissions unit that does not meet the definition of a new emissions unit.
51. Appendix S at IV.I.1(iv) requires an actual-to-potential test for projects that only involve construction of a new emissions unit(s).
52. Under Appendix S at IV.I.1(iv), a significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each new emissions unit, using the method specified in paragraphs IV.I.1(iv) of Appendix S, equals or exceeds the significant amount for that pollutant (as defined in paragraph II.A.10 of Appendix S).
53. Appendix S at IV.A specifies that if the reviewing authority finds that the major stationary source or major modification would be constructed in an area designated in 40 C.F.R. § 81.300 *et seq.* as nonattainment for a pollutant for which the stationary source or modification is major, approval may be granted only if the following conditions are met:
  - Condition 1.* The new source is required to meet an emission limitation which specifies the LAER for each emission unit.
  - Condition 2.* The applicant must certify that all existing major sources owned or operated by the applicant (or any entity controlling, controlled by, or under common control with the applicant) in the same State as the proposed source are in compliance with all applicable emission limitations and standards under the Act (or are in compliance with an expeditious schedule which is Federally enforceable or contained in a court decree).
  - Condition 3.* Emission reductions (offsets) from existing sources in the area of the proposed source (whether or not under the same ownership) are required such that there will be reasonable progress toward attainment of the applicable NAAQS.
  - Condition 4.* The emission offsets will provide a positive net air quality benefit in the affected area.

54. Appendix S at II.A.18 defines "lowest achievable emission rate" as, for any source, the

more stringent rate of emissions based on the following: (i) the most stringent emissions limitation which is contained in the implementation plan of any State for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or (ii) the most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

55. Appendix S at IV.D requires that the owner or operator of a new or modified major stationary source may comply with any offset requirement in effect under Appendix S for increased emissions of any air pollutant only by obtaining emissions reductions of such air pollutant from the same source or other sources in the same nonattainment area.

#### Federal Title V Requirements

56. EPA promulgated interim approval of the Illinois Title V program on March 7, 1995. *See* 60 Fed. Reg. 12478. EPA promulgated full approval of the Illinois Title V program on November 30, 2001. *See* 40 C.F.R. Part 70, Appendix A. Illinois' Title V program became effective on this date. *See* 66 Fed. Reg. 62946.
57. The Illinois regulations governing the Title V permitting program are codified at 415 Illinois Compiled Statutes (ILCS) 5/39.5, and are federally enforceable pursuant to Section 113(a)(3).
58. Section 503 of the CAA, 42 U.S.C. § 7661b, sets forth the requirement to submit a timely, accurate, and complete application for a permit, including information required to be submitted with the application.
59. Section 504(a) of the CAA, 42 U.S.C. § 7661c(a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements, including those contained in a SIP. 42 U.S.C. § 7661c(a).
60. 40 C.F.R. § 70.1(b) provides that: "All sources subject to these regulations shall have a permit to operate that assures compliance by the source with all applicable requirements." *See also* 415 ILCS 5/39.5.7.a.
61. 40 C.F.R. § 70.2 defines "applicable requirement" to include "(1) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act, including revisions to that plan promulgated in part 52 of this chapter . . ." *See also* 415 ILCS 5/39.5.1.

62. 40 C.F.R. § 70.5(a) and (c) require timely and complete permit applications for Title V permits with required information that must be submitted and 40 C.F.R. § 70.6 specifies required permit content. *See also* 415 ILCS 5/39.5.5, 39.5.6, and 39.5.7.
63. 40 C.F.R. § 70.5(b) provides that: “Any 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. In addition, 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* 415 ILCS 39.5.5.i.

### **Factual Background**

64. Linde has owned and operated a hydrogen plant (Lemont Hydrogen Plant I) in Romeoville, Will County, Illinois, which is adjacent to the Citgo Refinery located at 135<sup>th</sup> Street and New Avenue in Lemont, Will County, Illinois. The Linde Hydrogen Plant I has the potential to emit NO<sub>x</sub> in excess of 250 tpy, making it a major stationary source.
65. At all times relevant to this Notice, Will County has been part of an AQCR designated as nonattainment for PM<sub>2.5</sub> (*see*, 70 Fed. Reg. 944 (January 5, 2005), 74 Fed. Reg. 58688 (November 13, 2009), and 74 Fed. Reg. 62243 (November 27, 2009); *but see*, 78 Fed. Reg. 48103 (August 7, 2013)), and classified as attainment or unclassifiable for NO<sub>x</sub> and PM<sub>10</sub>.
66. Linde constructed the Lemont Hydrogen Plant II to service new emission units being constructed as part of a project at the adjacent Citgo Refinery (the Citgo ULSD project). The construction of the new Lemont Hydrogen Plant II constituted construction at a major stationary source.
67. Based on Linde’s permit application number 07120053, Illinois EPA issued a construction permit to Linde on June 16, 2008, granting Linde approval to construct emission source(s) and/or air pollution control equipment consisting of the Lemont Hydrogen Plant II.
68. On December 29, 2009, Illinois approved revisions to Linde’s construction permit.
69. In permit application number 07120053, Linde sought to use certain emission reductions in the amounts of 300 tpy NO<sub>x</sub>, 300 tpy SO<sub>2</sub>, and 20 tpy PM<sub>10</sub> and 20 tpy of PM<sub>2.5</sub> for purposes of netting in Linde’s construction permit. The emission reductions which Linde sought to use as netting credits allegedly arose pursuant to Paragraph 137 of a global refinery Consent Decree between U.S. EPA *et al.* and Citgo Petroleum Corporation, *et al.*, which was entered in the United States District Court of the Southern District of Texas, on October 6, 2004 (Citgo Consent Decree). However, the Citgo Consent Decree provides at Paragraph 137 that “CD Emissions Reductions may only be used at the refinery that generated them.” Pursuant to Paragraph 10. GG. of the Citgo Consent Decree, Linde is not part of the Citgo Refinery and thus was not allowed to use any

netting credits generated under the Citgo Consent Decree. Furthermore, as described in Notice and Finding of Violation EPA-5-11-IL-10, issued to Citgo on September 30, 2011 (Citgo NOV/FOV), Citgo failed to meet the requirements of Paragraph 137.i of the Consent Decree, such that no netting credits were generated for use. (The Citgo NOV/FOV is enclosed for your convenience.)

70. The net emissions change from the Linde/Citgo netting analysis with the inclusion of the CD-related emission reductions was -65.12 tpy NO<sub>x</sub>, -457.83 tpy SO<sub>2</sub> and +6.62 tpy PM<sub>10</sub> under the PSD program, -446.20 tpy NO<sub>x</sub> and +11.33 tpy PM<sub>2.5</sub> under non-attainment NSR.
71. The Linde/Citgo netting analysis, excluding the 300 tpy NO<sub>x</sub> credit, 300 tpy SO<sub>2</sub> credit and 20 tpy PM credit, results in a net emissions increase of 234.88 tpy NO<sub>x</sub>, -157.83 tpy of SO<sub>2</sub>, and 26.62 tpy of PM<sub>10</sub> under the PSD program, and -146.20 tpy NO<sub>x</sub> and 31.33 tpy of PM<sub>2.5</sub> under non-attainment NSR, thus making the project a major modification for NO<sub>x</sub> and PM<sub>10</sub> under the PSD program and for PM<sub>2.5</sub> under non-attainment NSR.

### **Finding of Violations**

72. The construction of the Hydrogen Plant II, as described in Paragraphs 66 – 71, resulted in significant net emissions increases, as defined at 40 C.F.R. § 52.2 1(b)(3)(i) and (b)(23)(i); 35 IAC § 203.206(b)(3) and Part 51, Appendix S at II.A.6(i) and II.A.10(i), of NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub>, which constitute a major modification of a major stationary source under the provisions referenced above.
73. Linde failed to obtain a PSD/non-attainment NSR permit for the construction of the Hydrogen Plant II described in Paragraphs 66 – 71, as required by Sections 165(a) and 173(a) of the Act, 40 C.F.R. §§ 52.21 and 51.165, 40 C.F.R. Part 51, Appendix S. IV.A., and the Illinois SIP, including 35 IAC § 203.201.
74. Linde violated, and continues to violate, Sections 165(a) and 173(a) of the Act, 40 C.F.R. §§ 52.21 and 51.165, 40 C.F.R. Part 51, Appendix S.IV.A., and the Illinois SIP, including 35 IAC § 203.201, by constructing the Hydrogen Plant II without applying for or obtaining a PSD/non-attainment NSR permit, operating the modified facility without installing BACT and LAER for the control of such pollutants prior to commencing construction of such activities, and continues to operate the refinery without BACT/LAER and obtaining Federally enforceable emission offsets as great or greater as the new or modified source's emissions. Linde violated and continues to violate these provisions by failing to install the appropriate emission control equipment in accordance with BACT and LAER analyses, certifying that all other major sources that it owns or operates within Illinois are in compliance with the Act, and demonstrating that the benefits of the proposed source or modification significantly outweigh the environmental and social costs imposed as a result of its construction or modification.
75. Linde has failed to submit a timely and complete Title V permit application with information pertaining to the major modification that occurred due to the construction of the Hydrogen Plant II described in Paragraphs 66 – 71 and with information concerning

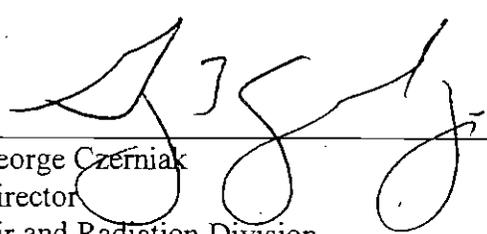
all applicable requirements, including, but not limited to, the requirement to apply, install and operate BACT for NO<sub>x</sub> and PM<sub>10</sub> and LAER with offsets for PM<sub>2.5</sub> and also failed to supplement or correct the Title V permit applications in violation of Sections 502, 503 and 504 of the Act, 42 U.S.C. §§ 7661a, 7661b and 7661c; the regulations at 40 C.F.R. Part 70, including, but not limited to, 40 C.F.R. §§ 70.1(b), 70.5(a), (b) and (c), and 70.6 and 70.7(b); and the Illinois Title V provisions at 415 ILCS 5/39.5.

### Enforcement Provisions

76. Sections 113(a)(1) and (3) of the Act, 42 U.S.C. § 7413(a)(1) and (3), provide that the Administrator may bring a civil action in accordance with Section 113(b) of the Act, 42 U.S.C. § 7413(b), whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of, *inter alia*, the PSD requirements of Section 165(a) of the Act, 42 U.S.C. § 7475(a); Title V of the Act, 42 U.S.C. §§ 7661-7661f, or any rule or permit issued thereunder; or the PSD provisions of the Illinois SIP. *See also* 40 C.F.R. § 52.23.
77. Section 113(b) of the Act, 42 U.S.C. § 7413(b), authorizes the Administrator to initiate a judicial enforcement action for a permanent or temporary injunction, and/or for a civil penalty of up to \$25,000 per day for each violation occurring on or before January 30, 1997; up to \$27,500 per day for each such violation occurring on or after January 31, 1997 and up to and including March 15, 2004; up to \$32,500 per day for each such violation occurring on or after March 16, 2004 through January 12, 2009; and up to \$37,500 per day for each such violation occurring on or after January 13, 2009, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990, 28 U.S.C. § 2461, as amended by 31 U.S.C. § 3701, 40 C.F.R. § 19.4, and 74 Fed. Reg. 626 (Jan. 7, 2009) against any person whenever such person has violated, or is in violation of, *inter alia*, the requirements or prohibitions described in the preceding paragraph.
78. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the PSD requirements in Part C of the Act.
79. Section 167 of the Act, 42 U.S.C. § 7477, authorizes the Administrator to initiate an action for injunctive relief, as necessary to prevent the construction, modification or operation of a major emitting facility which does not conform to the non-attainment NSR requirements in Part D of the Act

Date

9/27/13

  
George Czerniak  
Director  
Air and Radiation Division

**CERTIFICATE OF MAILING**

I, Loretta Shaffer, certify that I sent a Notice and Finding of Violation,  
No. EPA-5-13-IL-44, by Certified Mail, Return Receipt Requested, to:

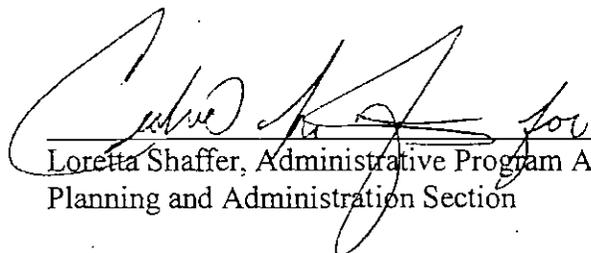
Brian Thiesse  
Head of U.S. SHEQ Operations  
Linde Gas North America, LLC  
575 Mountain Avenue  
Murray Hill, New Jersey 07974

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

Ray Pilapil, Manager  
Compliance and Systems Management Section  
Illinois Environmental Protection Agency  
1021 North Grand Avenue  
Springfield, Illinois 62702

On the 30<sup>th</sup> day of SEPTEMBER 2013.

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7676 1253

  
Loretta Shaffer, Administrative Program Assistant  
Planning and Administration Section