



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

AUG 20 2013

REPLY TO THE ATTENTION OF:

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

Scott Strayer, Site Director, Ashtabula Complex  
Cristal U.S.A. Inc.  
2900 Middle Road  
P.O. Box 310  
Ashtabula, Ohio 44004

Re: Cristal U.S.A. Inc., Ashtabula Complex Administrative Consent Order  
EPA-5-13-113(a)-OH-05

Dear Mr. Strayer:

Enclosed is an executed original of the Administrative Consent Order regarding the above captioned case. If you have any questions about the Order, please contact me at 312-886-6073.

Sincerely,

A handwritten signature in cursive script, appearing to read "Brian H. Dickens".

Brian H. Dickens  
Chief  
Air Enforcement and Compliance Assurance Section (MN/OH)

Enclosure: Administrative Consent Order EPA-5-13-113(a)-OH-05

cc: Robert Hodanbosi, OEPA  
Ed Fasko, NEDO  
Amy O'Reilly, NEDO

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5**

<b>IN THE MATTER OF:</b>	)	<b>EPA-5-13-113(a)-OH-05</b>
	)	
<b>Cristal U.S. A., Inc.</b>	)	<b>Proceeding Under Sections 113(a)(3)</b>
<b>Ashtabula, Ohio</b>	)	<b>and 114(a)(1) of the Clean Air Act,</b>
	)	<b>42 U.S.C. §§ 7413(a)(3) and 7414(a)(1)</b>
<b>Respondent</b>	)	
_____	)	

**Administrative Consent Order**

1. The Director of the Air and Radiation Division, U.S. Environmental Protection Agency, Region 5, is issuing this agreed order to Cristal U.S.A., Inc. (Cristal) (formerly known as Millennium Inorganic Chemicals), under Sections 113(a)(3) and 114(a)(1) of the Clean Air Act (Act), 42 United States Code (U.S.C.) §§ 7413(a)(3) and 7414(a)(1).

**Statutory and Regulatory Background**

2. Section 111(b)(1)(A) of the Clean Air Act (the Act), 42 U.S.C. § 7411(b)(1)(A), requires the Administrator to publish a list of categories of stationary sources which, in the Administrator's judgment, cause or contribute significantly to air pollution which may reasonably be anticipated to endanger public health or welfare.

3. Section 111(b)(1)(B) of the Act, 42 U.S.C. § 7411(b)(1)(B), requires the Administrator to publish regulations establishing federal standards of performance for new sources within the listed stationary source categories.

4. The Administrator published a list of source categories in accordance with Section 111 of the Act, 42 U.S.C. § 7411 on January 8, 1982. 47 Fed. Reg. 951 (1982)(codified at 40 C.F.R. § 60.16).

5. The prioritized list of source categories includes Non-Metallic Mineral Processing (priority 13) and Metallic Mineral Processing (priority 14). 40 C.F.R. § 60.16.

6. The Administrator promulgated the General Provisions of 40 C.F.R. Part 60 on December 23, 1971. 36 Fed. Reg. 24877 (1971)(codified at 40 C.F.R. Part 60, Subpart A).

7. The General Provisions of 40 C.F.R. Part 60 establish requirements for owners or operators of stationary sources subject to a standard of performance for new sources. In the definitions section of the General Provisions, any apparatus to which a standard applies is termed an "affected facility." 40 C.F.R. § 60.2. Owners or operators of an affected facility are required to:

- a. Submit written notification of the following:
  - i. The date construction of an affected facility is commenced, no later than 30 days after such date. 40 C.F.R. § 60.7(a)(1).
  - ii. The actual date of initial startup of an affected facility, postmarked within 15 days after such date. 40 C.F.R. § 60.7(a)(3).
  - iii. Any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, within 60 days, or as soon as practicable, before the change is commenced. 40 C.F.R. § 60.7(a)(4).
- b. Conduct performance test(s) and furnish to the Administrator a written report of the results of such performance test(s) within 60 days after achieving the maximum production rate at which an affected facility will be operated, but not later than 180 days after initial startup of such facility. 40 C.F.R. § 60.8(a).

8. The General Provisions of Part 60 also provide the Administrator authority to review and approve alternative monitoring requests submitted by owners or operators of affected facilities. 40 C.F.R. § 60.13(i).

9. The Administrator of EPA promulgated the Standards of Performance for Calciners and Dryers in Mineral Industries on September 28, 1992. 57 Fed. Reg. 44503 (1992) (codified at 40 C.F.R. Part 60, Subpart UUU). This Standard imposes the following requirements on affected facilities subject to Subpart UUU:

- a. Each owner and operator of an affected facility must comply with the emission limitation of 0.057 gram per dry standard cubic meter (g/dscm) [0.025 grain per dry standard cubic foot (gr/dscf)] for dryers installed on and after the date on which the initial performance test required by § 60.8 is completed, but not later than 180 days after the initial startup, whichever date comes first. 40 C.F.R. § 60.732(a).
- b. No emissions discharged into the atmosphere from any affected facility may exhibit greater than 10 percent opacity. 40 C.F.R. § 60.732(b).
- c. The owner or operator of an affected facility who uses a dry control device must meet the requirements for monitoring of emissions and operations set forth in 40 C.F.R. §§ 60.73(a-c).
- d. The owner or operator of an affected facility must maintain records and submit reports. 40 C.F.R. §§ 60.7 and 60.735.

10. Section 113(a)(3) of the Act, 42 U.S.C. § 7413(a)(3), states whenever, on the basis of any information available to the Administrator of EPA, the Administrator finds that any person has violated or is in violation of any requirement or prohibition of a rule

promulgated under Section 111 of the Act, the Administrator may issue an order requiring such person to comply with such requirement or prohibition. This authority has been delegated to the Director of the Air and Radiation Division. EPA Delegation 7-6-A, 8/9/94; Region 5 Delegation 7-6-A, 2/4/00.

### **Findings**

11. Cristal owns and operates a facility with two titanium dioxide manufacturing processes in Ashtabula, Ohio (the facility). The first process unit is located at 2900 Middle Road, Ashtabula, Ohio (Cristal Plant #1). The second process unit is located at 2426 Middle Road, Ashtabula, Ohio (Cristal Plant #2).

12. The facility is a Stationary Source as that term is defined in the Clean Air Act, 42 U.S.C. § 7602(z).

13. The facility is, among other things, a mineral processing plant as defined at 40 C.F.R. § 60.731.

14. Cristal commenced construction and/or modified two spray dryers (P007-Spray Dryer B at Cristal Plant #1 and P013-Spray Dryer #2 at Cristal Plant #2) at its mineral processing plant after April 23, 1986.

15. The most recent Permits to Install (PTIs) for Cristal Plant #1 (Permit Number P0108818, April 16, 2012) and MIC Plant #2 (Permit Number 02-14024, September 16, 2008) include language incorporating certain requirements of 40 C.F.R. Part 60, Subpart UUU “on the basis that USEPA has tentatively determined that the rule is applicable to this emissions unit”

16. These PTIs include the following language regarding the requirement to monitor under 40 C.F.R. Part 60, Subpart UUU: “This emissions unit has potential PM emissions less than 11 tons per year. Therefore, unless and until USEPA makes a final determination

otherwise, this emission unit is exempt from any monitoring requirements under 40 C.F.R. 60.734, consistent with 57 Fed. Reg. 44501 (Sept. 28, 1992).”

17. Cristal believes that it is exempt from monitoring requirements of 40 C.F.R. Part 60, Subpart UUU, as cited in the permit language, based on preamble language in the rulemaking at 57 Fed. Reg. 44501 (September 28, 1992) as well as EPA applicability determinations and a 1995 memorandum from John Rasnic to EPA Regional Counsels which can be found on EPA’s Applicability Determination Index at <http://cfpub.epa.gov/adi/>.

18. EPA has determined that P007 at Cristal Plant #1 and P013 at Cristal Plant #2 are subject to all requirements of 40 C.F.R. Part 60, Subpart UUU, including the monitoring requirements at 40 C.F.R. § 60.734(b). Based on discussions with Cristal, Cristal’s current monitoring practices for these units, current Title V operating permit terms and conditions, consideration of other factors, and the authority of EPA to approve alternative monitoring under 40 C.F.R. § 60.13(i), EPA approves pursuant to 40 C.F.R. § 60.13(i) the alternative monitoring method described in the “Compliance Program” Section of this Order, below, as appropriate in lieu of conducting visible emission readings using EPA Reference Method 9.

19. The titanium dioxide spray dryers at the facilities use dry control.

20. EPA conducted an inspection at the facility on October 3-5, 2006.

21. EPA issued a Notice of Violation and Finding of Violation (NOV/FOV) to Cristal June 8, 2007 alleging, among other things, that the facility failed to comply with certain requirements of the General Provisions of 40 C.F.R. Part 60 and 40 C.F.R. Part 60 Subpart UUU.

22. Representatives of Cristal and EPA met or held calls on several occasions since June 8, 2007 to discuss the findings of the NOV/FOV.

23. EPA conducted another inspection at the facility on January 31-February 1, 2012.

24. Cristal and EPA have agreed that the following compliance program for the facility is appropriate under the circumstances of the matter.

**Compliance Program**

25. Because Cristal operates an affected facility utilizing a dry control device, its spray dryers ( P007 and P013) must comply with the requirements of the General Provisions of 40 C.F.R. Part 60 and the Standards of Performance for Calciners and Dryers in Mineral Industries, 40 C.F.R. Part 60, Subpart UUU.

26. After considering and evaluating the available information, the authorities provided to the Administrator by Sections 111, 113 and 114 of the Clean Air Act as well as 40 C.F.R. Part 60, EPA has determined that the following compliance program must be implemented by Cristal to comply with the General Provisions of 40 C.F.R. Part 60 and the requirements of 40 C.F.R. Part 60, Subpart UUU.

27. Cristal must submit written notifications identifying any physical or operational change(s) to the facility's spray dryers which occurred since installation and may have increased the emission rate of any air pollutant to which a standard applies. The notices must include information describing the precise nature of the change(s), present emission control systems, productive capacity of the facility before and after the change, and completion date of the change. These notifications must be submitted to EPA within 60 days after the effective date of this Order.

28. Cristal must conduct performance testing of P007 at MIC Plant #1 and P013 at MIC Plant #2 in accordance with the requirements of 40 C.F.R. §§ 60.8, 60.732, and 60.736. In summary, the performance testing must include EPA Reference Method 5 for particulate matter (three runs at least two hours each run and a sample volume of at least 1.70 dscm) and Method 9

for opacity. This testing must be completed within 360 days after the effective date of this Order. If Cristal has conducted performance testing of the spray dryers for PM, subsequent to the most recent modifications of each unit, and if that testing meets the testing requirements at 40 C.F.R. §§ 60.8, 60.732 and 60.736, Cristal may use that test in lieu of conducting a new performance test for purposes of meeting the testing requirement of this Order.

29. Cristal must submit a complete report of the above performance test results to EPA and the Ohio Environmental Protection Agency (OEPA) within 60 days after completing the performance testing (or within 30 days of the effective date of this Order, if the testing has already been completed). If the testing has already been conducted Cristal must submit the results with a letter referencing the specific stack test it elects to use for purposes of meeting this requirement.

30. Cristal must continue performing daily visible emission readings using EPA Reference Method 22 once per day for every day the affected facility spray dryers (P007 and P013) are operating. These visible emission readings must be performed on each spray dryer baghouse stack at a time when the respective spray dryer is operating.

31. Cristal must maintain a written record at the facility of the results of each daily visible emission reading using Method 22. The record must document the results of each daily visible emission reading as follows: "Yes, there were visible emissions observed" or "No, there were no visible emissions observed." These records must be maintained at the facility for a minimum of two years and must be readily available for review by either EPA or OEPA.

32. Whenever visible emissions are observed from spray dryer P007 or P013 Cristal must investigate and document the root cause(s), corrective actions taken and preventative measures taken, as appropriate, for assuring ongoing compliance with the requirements for

visible emissions set forth at 40 C.F.R. §§ 60.11 and 60.732. Records of such causes and corrective actions must be maintained at the facility for a minimum of two years and must be readily available for review by either EPA or OEPA.

33. Cristal must submit reports to EPA summarizing the daily visible emissions readings, date and time of such readings, any periods of observed visible emissions, the cause of any observed visible emissions (i.e. the results of the root cause analyses), any corrective actions taken and any preventative measures implemented. For purposes of complying with this Order, these reports must be submitted on a semi-annual basis for four six-month periods. The first report will be due no later than July 31, 2013, followed by additional reports no later than January 31, 2014, July 31, 2014, and January 31, 2015.

34. Within 120 days of the effective date of this Order, Cristal must apply to OEPA for revisions to its existing Permits to Install and its Title V permits to incorporate the requirements of this ACO, including the applicability and requirements of 40 C.F.R. Part 60, General Provisions and Subpart UUU, consistent with the compliance program set forth in this Order. The application must request these requirements be incorporated into the respective permits as federally enforceable conditions.

35. The applications for the permit revisions to incorporate the requirements of this ACO into the respective permits must be submitted to OEPA no later than 120 days after the date this Order is issued.

36. A copy of the application referenced above, as submitted, must be sent to:

Attn: Compliance Tracker, AE-17J  
Air Enforcement and Compliance Assurance Branch  
U.S. EPA, Region 5  
77 W. Jackson Boulevard  
Chicago, Illinois 60604

### General Provisions

37. This Order does not affect Cristal's responsibility to comply with other local, state and federal laws and regulations.

38. This Order does not restrict EPA's authority to enforce any section of the Act.

39. Nothing in this Order limits EPA's authority to seek appropriate relief, including penalties under Section 113 of the Act, 42 U.S.C. § 7413, for Cristal's violation of the General Provisions of 40 C.F.R. Part 60 and 40 C.F.R. Part 60, Subpart UUU.

40. Failure to comply with this Order may subject Cristal to penalties of up to \$37,500 per day for each violation under Section 113 of the Act, 42 U.S.C. § 7413, and 74 Fed. Reg. 626 (2009) (amending 40 C.F.R. Part 19).

41. Failure to comply with the requirements of the General Provisions to 40 C.F.R. Part 60 and 40 C.F.R. Part 60, Subpart UUU following the issuance of this Order and completion of the Compliance Program above may subject Cristal to penalties of up to \$37,500 per day for each violation under Section 113 of the Act, 42 U.S.C. 7413 and 74 Fed. Reg. 626 (2009) (amending 40 C.F.R. Part 19). Non-compliance under this paragraph may include violation of the emission limits established at 40 C.F.R. Part 60, Subpart UUU as found by the performance testing required by this Order.

42. The terms of this Order are binding on Cristal, its assignees and successors. Cristal must give notice of this Order, if still in effect, to any successors-in interest, prior to transferring ownership and must simultaneously verify to EPA, at the above address, that Cristal has given the notice.

43. Cristal may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B, for any portion of the information it submits to EPA, except emissions data.

Information subject to a business confidentiality claim is available to the public only to the extent allowed by 40 C.F.R. Part 2, Subpart B. If Cristal fails to assert a business confidentiality claim, EPA may make all submitted information available, without further notice, to any member of the public who requests it. Emission data provided under Section 114 of the Act, 42 U.S.C. § 7414, (including emissions data from the performance testing required by this ACO) is not entitled to confidential treatment under 40 C.F.R. Part 2, Subpart B. "Emission data" is defined at 40 C.F.R. § 2.301.

44. This Order is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 et seq., because it seeks information by an agency from specific individuals or entities as part of an administrative action or investigation.

45. All notifications, reports, and other documents required by this Order shall be submitted without staples, if possible. Notifications, reports and other documents required by this Order may be submitted using paper clips or binder clips, and, if acceptable to both parties, may be submitted electronically.

46. EPA may use any information submitted under this Order in an administrative, civil or criminal action.

47. Cristal agrees to comply with the terms of this Order, but does not concede, and reserves its right to contest in any subsequent proceeding, the applicability of 40 C.F.R. Part 60, Subpart UUU opacity monitoring requirements to its spray dryers.

48. Cristal neither admits nor denies the factual allegations and conclusions of law set forth above in this order.

49. This Order is effective on the date of signature by the Director of the Air and Radiation Division.

50. Cristal must achieve compliance with all requirements of this Order, except the semi-annual reporting requirements, as expeditiously as practicable, but in no event longer than one year after the date the Order is issued. Cristal must achieve compliance with the semi-annual reporting requirements of this Order in accordance with paragraph 33.

51. Cristal may request EPA to terminate this Order after Cristal achieves compliance with all requirements of this Order. To request termination of the Order, Cristal shall submit to EPA a "final notification" which describes Cristal's compliance actions and basis for believing that such actions have met the requirements of this Order. The notification will be reviewed by EPA and, if EPA agrees with Cristal's assessment, the Order will be terminated through a letter from EPA to Cristal.

**Cristal U.S.A., Inc.**

7-9-2013  
Date

Scott Strayer  
Scott Strayer, Site Director, Ashtabula  
Complex

**United States Environmental Protection Agency**

8/20/13  
Date

George T. Czerniak  
George T. Czerniak  
Director  
Air and Radiation Division  
U.S. Environmental Protection Agency  
Region 5

**CERTIFICATE OF MAILING**

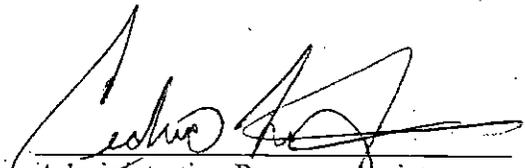
I, GERRIC L JONES, certify that I sent the Administrative Consent Order, EPA Order No. EPA-5-12-113(a)-OH-05, by Certified Mail, Return Receipt Requested, to:

Scott Strayer, Site Director  
Ashtabula Complex  
Cristal U.S.A. Inc.  
2900 Middle Road  
P.O. Box 310  
Ashtabula, Ohio 44005

I also certify that I sent a copy of the Administrative Consent Order, EPA Order No. EPA-5-12-113(a)-OH-05, by First-Class Mail to:

Robert Hodanbosi, OEPA  
Ed Fasko, NEDO  
Amy O'Reilly, NEDO

On the 21<sup>st</sup> day of AUGUST 2013.

  
Administrative Program Assistant  
AECAB [Planning and  
Administration Section]

CERTIFIED MAIL RECEIPT NUMBER:

7009 1680 0000 7676 1031