## Memorandum

## Florida Department of Environmental Protection

To:

Trina Vielhauer, Bureau of Air Regulation

Through:

Jeff Koerner, New Source Review Section

From:

Marilyn Koletzke, New Source Review Section

Date:

March 11, 2011

Subject:

Project No. 1050059-066-AC

Draft Air Construction Permit Package NOx CEMS, Dump Chute and Air Intake

Multifos Plant Kiln C

Mosaic Fertilizer, LLC, New Wales Facility

Attached for your review is a draft air construction permit package for the existing Mosaic Fertilizer, LLC New Wales facility, which is located in Polk County at 3095 Highway 640, Mulberry, Florida. For the existing Multifos Plant Kiln C, the applicant proposes to install a continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx), recognize the existing kiln dump chute and authorize the use of intake air during startup. The NOx CEMS will be installed on the Multifos Kiln C stack and will be used to guide the proper operation of the process. The existing dump chute was installed as part of the original project. It is located at the end of the kiln and is used for separating the off-specification product. During startup of the Multifos Kiln C, intake air is used to maintain a proper operating flow rate to the scrubbing system. The project is not considered a new source review reform project. Day 90 of the permitting time clock is June 9, 2011. I recommend your approval of the attached draft permit package.

Attachments

TLV/jfk/mk

#### P.E. CERTIFICATION STATEMENT

#### PERMITTEE

Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Draft Permit No. 1050059-066-AC Mosaic Fertilizer, LLC, New Wales Polk County, Florida

#### PROJECT DESCRIPTION

The Mosaic Fertilizer, LLC, New Wales Kiln C Multifos Plant is installing a Nitrous Oxide (NO), Nitrogen Dioxide (NO<sub>2</sub>), and Oxides of Nitrogen (NOx), analyzer that operates by Chemiluminescence to quantify nitrogen species.

Kiln C is equipped with a dump chute that is used to expel product that is regarded as out of specification. According to records provided by Mosaic, LLC, the dump chute is operated approximately 2% of the year and production is often suspended or reduced when the chute is being used.

No significant gas emissions appear to be emitting from the dump chute as evident by an operator standing within close proximity to the open chute. As such, emissions from the dump chute and expelled product are considered to be minimal. Out of specification product emitted from the dump chute appears to be significantly oxidized or ashen. Emissions from the dump chute are not considered to be an emissions source and can be included in Emissions Unit 072 (E.U. 072) Fugitive & Unregulated Emissions. Emissions of NOx during normal and dump chute operation are quantified as follows:

NOx, Dump Chute Operation	3.8 TPY
NOx, Normal Operation	36.1 TPY
Total NOx = $(3.8 + 36.1)$ TPY	39.9 TPY

Mosaic, LLC requests that during start up, when the kiln is not under normal operating conditions, additional ambient air be introduced into the scrubbing system. The introduction of additional ambient air is required to maintain proper operating flow rate into the scrubbing system and to comply with the CAM permit.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (F.A.C.) and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical structural; hydrological, geological, and meteorological features).

Marilyn Koletzke, P.E. Registration Number 5061

Florida Department of Environmental Protection



# Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Jennifer Carroll Lt. Governor

Herschel T. Vinyard Jr. Secretary

March 11, 2011

Sent by Electronic Mail - Received Receipt Requested

Mr. Ron Yasurek, Plant Manager Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Re:

Project No. 1050059-066-AC

Mosaic Fertilizer, LLC, New Wales Facility

Multifos Plant Kiln C

NOx CEMS, Dump Chute and Intake Air

#### Dear Mr. Yasurek:

You submitted an application requesting the installation of a continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx), the use of a dump chute, and the use of excess air intake to maintain proper operation of the Multifos Plant Kiln C. The existing facility is located in Polk County at 3095 Highway 640 in Mulberry, Florida 33806. Enclosed are the following documents: the Written Notice of Intent to Issue Air Permit; the Public Notice of Intent to Issue Air Permit; the Technical Evaluation and Preliminary Determination; and the Draft Permit with Appendices. The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the project engineer, Marilyn Koletzke, at 850/717-9112.

Sincerely,

Trina Vielhauer, Chief Bureau of Air Regulation

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**Enclosures** 

TLV/jfk/mk

#### WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an Application for Air Permit by:

Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Authorized Representative:

Mr. Ron Yasurek, Plant Manager

Project No. 1050059-066-AC Mosaic Fertilizer, LLC, New Wales Plant Multifos Plant Kiln C NOx CEMS, Dump Chute and Intake Air

Polk County, Florida

**Facility Location**: Mosaic Fertilizer, LLC operates the existing Multifos Plant Kiln C at the New Wales facility, which is located in Polk County at 3095 Highway 640 in Mulberry, Florida 33806.

**Project**: For the existing Multifos Plant Kiln C, the applicant proposes to install a continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx), recognize the existing kiln dump chute and authorize the use of intake air during startup. The NOx CEMS will be installed on the Multifos Kiln C stack and will be used to guide the proper operation of the process. The existing dump chute was installed as part of the original project. It is located at the end of the kiln and is used for separating the off-specification product. During startup of the Multifos Kiln C, intake air is used to maintain a proper operating flow rate to the scrubbing system. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File**: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Public Notice**: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at

#### WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation**: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina Vielhauer, Chief

Bureau of Air Regulation

## **CERTIFICATE OF SERVICE**

Mr. Ron Yasurek, Mosaic Fertilizer, LLC (ronald.yasurek@mosaicco.com)

Mr. Rama Iyer, Mosaic Fertilizer, LLC (<u>rama.iyer@mosaicco.com</u>)

Ms. Mara Nasca, DEP-SWD (mara.nasca@dep.state.fl.us)

Mr. Pradeep Raval, Koogler & Associates, Inc. (praval@kooglerassociates.com)

Ms. Cindy Zang-Torres, DEP Southwest District Office (cindy.zhang-torres@dep.state.fl.us)

Mr. Mike Halpin, DEP Siting Office (mike.halpin@dep.state.fl.us)

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)

Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Elish Walker 3/11/11
(Clerk)

#### PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Construction Permit
Project No. 1050059-066-AC
Mosaic Fertilizer, LLC, New Wales Facility
Polk County, Florida

**Applicant**: The applicant for this project is Mosaic Fertilizer, LLC. The applicant's authorized representative and mailing address is: Mr. Ron Yasurek, Plant Manager, Mosaic Fertilizer, LLC, New Wales Facility, 3095 Highway 640, Mulberry, Florida 33806.

**Facility Location**: Mosaic Fertilizer, LLC operates the existing Multifos Plant Kiln C in Polk County at 3095 Highway 640, in Mulberry, Florida.

**Project**: For the existing Multifos Plant Kiln C, the applicant proposes to install a continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx), recognize the existing kiln dump chute and authorize the use of intake air during startup. The NOx CEMS will be installed on the Multifos Kiln C stack and will be used to guide the proper operation of the process. The existing dump chute was installed as part of the original project. It is located at the end of the kiln and is used for separating the off-specification product. During startup of the Multifos Kiln C, intake air is used to maintain a proper operating flow rate to the scrubbing system. The project is not expected to increase emissions.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Bureau of Air Regulation in the Department of Environmental Protection's Division of Air Resource Management. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File**: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the physical address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and information submitted by the applicant (exclusive of confidential records under Section 403.111, F.S.). Interested persons may contact the Permitting Authority's project engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site by entering draft permit number: <a href="http://www.dep.state.fl.us/air/emission/apds/default.asp">http://www.dep.state.fl.us/air/emission/apds/default.asp</a>.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of this Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for

public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/717-9000). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.



## TECHNICAL EVALUATION & PRELIMINARY DETERMINATION

## APPLICANT

Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

New Wales Facility Facility ID No. 1050059

## **PROJECT**

Project No. 1050059-066-AC
Draft Air Construction Permit
Multifos Plant Kiln C
NOx CEMS, Dump Chute and Air Intake

## **COUNTY**

Polk County, Florida

## PERMITTING AUTHORITY

Florida Department of Environmental Protection Division of Air Resource Management Bureau of Air Regulation New Source Review Section 2600 Blair Stone Road, MS#5505 Tallahassee, Florida 32399-2400

March 11, 2011

#### 1. GENERAL PROJECT INFORMATION

#### Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

## **Glossary of Common Terms**

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

## **Facility Description and Location**

Mosaic Fertilizer, LLC operates an existing Multifos animal feed ingredient plant, which is categorized under Standard Industrial Classification (SIC) No. 2874. The Multifos plant is part of the existing New Wales Facility, which is located in Polk County at 3095 Highway 640 in Mulberry, Florida. The UTM Coordinates are Zone 17; 396.6 km East; 3078.9 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

### **Facility Regulatory Categories**

- The facility is a major source of hazardous air pollutants (HAP).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

## **Project Description**

The existing Multifos Plant Kiln C was constructed in accordance with Permit No. 1050059-044-AC, which included emissions standards that avoided PSD preconstruction review (synthetic minor project). For the existing Multifos Plant Kiln C, the applicant proposes the following work.

- A continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx) will be installed to guide the proper operation of the process and provide reasonable assurance of compliance with the NOx emissions standards. The analyzer will operate by chemiluminescence to quantify nitrogen species.
- The applicant requests recognition of the existing kiln dump chute, which was installed as part of the original project. The dump chute is located at the end of the kiln and is used for separating the off-specification product. According to plant records, the dump chute is operated approximately 2% of the year and production is often suspended or reduced when the chute is used. Annual emissions of NOx during normal and dump chute operation are estimated as follows:

NOx, Dump Chute Operation	3.8 tons/year (TPY)
NOx, Normal Operation	36.1 TPY
Total NOx = $(3.8 + 36.1)$ TPY	39.9 TPY

• The applicant requests recognition that the intake of ambient air into the scrubbing system is used to maintain a proper operating flow rate to the control device during startup of the Multifos Kiln C. This operating practice is used to maintain the scrubbing system within the parametric indictors in the Compliance Assurance Monitoring (CAM) plan.

#### **Processing Schedule**

- 10/27/09 Received the application for an air construction permit for the existing Multifos Plant Kiln C; request included a waiver of the 30-day review clock to 02/26/10, which was later extended to 03/31/10.
- 03/30/10 Additional information requested.
- 06/28/10 Received additional information.
- 07/23/10 Requested additional information.
- 01/18/11 Received all additional information to complete the application.

#### 2. PSD APPLICABILITY

This air construction permit is for the Multifos Plant Kiln C, which was constructed as a synthetic minor source. The project will not increase emissions; therefore, the project is not subject to PSD preconstruction review.

#### 3. DEPARTMENT REVIEW

## **NOX CEMS**

The draft permit requires installation of a NOx CEMS on the stack of the Multifos Plant Kiln C, which will guide the proper operation of the process and provide reasonable assurance of compliance with the NOx emissions standards including the avoidance of PSD preconstruction review. The analyzer will operate by chemiluminescence to quantify nitrogen species. Since the NOx CEMS will provide continuous data, the NOx standards in Permit No. 1050059-044-AC will be revised to:

Based on data collected by the CEMS, NOx emissions from the Multifos Plant Kiln C shall not exceed 9.11 lb/hour based on a 24-hour block average and 36.10 tons per consecutive 12 months, rolling total. These emissions standards supersede the NOx standards in Condition 2 of Section III of Permit No. 1050059-044-AC. The applicants estimated quantity of 3.8 TPY from the dump-chute reduces NOx emissions from the Multifos Plant Kiln C CEMS to 36.1 TPY.

#### **Dump Chute**

The Multifos Plant Kiln C includes an existing kiln dump chute, which was installed as part of the original project. The dump chute is located at the end of the kiln and is used for separating the off-specification product. According to plant records, the dump chute is operated approximately 2% of the year and production is often suspended or reduced when the chute is used. Based on a video provided by the plant, no significant gas or fugitive dust emissions appear to be emitted from the dump chute as evident by an operator standing within close proximity to the open chute. As such, emissions from the dump chute and expelled product are considered to be minimal and unquantifiable. The off-specification material appears to be significantly oxidized or ashen. The dump chute operation will be recognized as part of existing Emissions Unit No. 072, which is for fugitive and unregulated emissions. The draft permit recognizes operation of the kiln dump chute.

#### TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

## Air Intake During Startup

During startup of the Multifos Kiln C, the plant introduces ambient air into the scrubbing system to maintain a proper operating flow rate to the control device. The air intake occurs downstream of the kiln and combustion process. This operating practice is used to maintain the scrubbing system within the parametric indictors in the Compliance Assurance Monitoring (CAM) plan. The draft permit acknowledges this practice.

#### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Marilyn Koletzke is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

## DRAFT PERMIT

#### **PERMITTEE**

Mosaic Fertilizer, LLC 13830 Circa Crossing Drive Lithia, Florida 33547

Authorized Representative:
Mr. Ron Yasurek, Plant Manager

Air Permit No. 1050059-066-AC Mosaic Fertilizer, LLC New Wales Facility, Multifos Plant Kiln C NOx CEMS, Dump Chute and Intake Air Expires: March 11, 2012

#### PROJECT AND LOCATION

This is the final air construction permit, which authorizes the installation of a continuous emission monitoring system for oxides of nitrogen, recognizes the existing kiln dump chute and authorizes the use of intake air during startup for the Multifos Plant Kiln C. This plant is at the existing New Wales Facility (SIC No. 2874), which is located in Polk County at 3095 Highway 640 in Mulberry, Florida 33806. The UTM Coordinates are Zone 17, 396.6 km East and 3078.9 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida	
(DRAFT)	
Trina Vielhauer, Acting Director	(Date)
Division of Air Resource Management	•

## **CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby	y certifies that this Final	Air Permit package
(including the Final Determination and Final Permit with Ap	ppendices) was sent by 6	electronic mail, or a link to
these documents made available electronically on a publicly	accessible server, with	received receipt requested
before the close of business on to	the persons listed below	√.
Mr. Ron Yasurek, Mosaic Fertilizer, LLC (ronald.yasurek@	<u>,                                      </u>	
Mr. Rama Iyer, Mosaic Fertilizer, LLC ( <u>rama.iyer@mosaicc</u>	o.com)	
Ms. Mara Nasca, DEP-SWD (mara.nasca@dep.state.fl.us)	Dl l : - 4	)
Mr. Pradeep Raval, Koogler & Associates, Inc. (praval@	, -	
Ms. Cindy Zang-Torres, DEP Southwest District Office (cin		ate.fi.us)
Mr. Mike Halpin, DEP Siting Office (mike.halpin@dep.state		
Ms. Kathleen Forney, EPA Region 4 (forney kathleen@epa.		
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.g Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson		
Clerk Stam	p	
pursuant to	Section 120.52(7), Floragency clerk, receipt of	
	(DRAFT)	
	(Clerk)	(Date)

#### **FACILITY DESCRIPTION**

The existing Multifos animal feed ingredient facility consists of a common mixed feed preparation section for feeding, phosphate-containing material to three rotary defluorination kilns and associated processing and handling equipment. This permit supplements all previously issued air construction and operation permits for the Multifos Plant Kiln C.

#### PROJECT DESCRIPTION

For the existing Multifos Plant Kiln C, the applicant proposes to install a continuous emission monitoring system (CEMS) for oxides of nitrogen (NOx), recognize the existing kiln dump chute, and authorize the use of intake air during startup. The NOx CEMS will be installed on the Multifos Kiln C stack and will be used to guide the proper operation of the process. The existing dump chute was installed as part of the original project. It is located at the end of the kiln and is used for separating the off-specification product. During startup of the Multifos Kiln C, intake air is used to maintain a proper operating flow rate to the scrubbing system.

#### **EMISSION UNITS**

This project potentially affects the following existing emissions units.

EU No.	Emissions Units Description
074	Kiln C Scrubber Stack
075	Kiln C Cooler Baghouse
076	Kiln C Milling and Sizing Baghouse

#### REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

## **APPENDICES**

The following Appendices are attached as part of this permit.

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. CEMS Requirements

## SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

- 1. <u>Permitting Authority</u>: The permitting authority for this project is the Bureau of Air Regulation, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The Bureau of Air Regulation's mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.
- 3. <u>Appendices</u>: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); and Appendix C (CEMS Requirements).
- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. Application for Title V Permit: This permit authorizes installation of a NOx CEMS analyzer, the use of the existing dump chute and the intake of ambient air during startup of the Multifos Plant Kiln C. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

## A. Multifos Plant Kiln C

This section of the permit addresses the following emissions units (EU).

EU No.	Emissions Units Description
074	Kiln C Scrubber Stack
075	Kiln C Cooler Baghouse
076	Kiln C Milling & Sizing Baghouse

#### PREVIOUS PERMITS

1. <u>Permit Scope</u>: Conditions of this permit supplement all previously issued air construction and operation permits for the affected emissions units. These conditions are in addition to all other applicable permit conditions and regulatory requirements. Unless otherwise specified by this permit, the permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

## **NEW EQUIPMENT**

2. NOx CEMS: The permittee shall install, calibrate, certify, operate and maintain a NOx CEMS to demonstrate compliance with the specified NOx emissions standards. No later than 180 calendar days after the issuance date of this permit, the NOx CEMS shall be installed and the appropriate performance specification test conducted. The NOx CEMS shall also be used to guide proper operation of the process and provide reasonable assurance that the Multifos Plant Kiln C remains a synthetic minor source. Annual NOx compliance tests are no longer required since compliance with the NOx standards will be continuously demonstrated by CEMS data. Validation of the NOx CEMS data by a relative accuracy test audit (RATA) that is required once every four calendar quarters and as listed in Appendix C of this permit. [Application No. 1050059-066-AC, Rule 62-4.070, F.A.C., and 40 CFR Part 60 Appendix F]

## EMISSION AND PERFORMANCE REQUIREMENTS

NOx Standard: Based on data collected by the CEMS, NOx emissions from the Multifos Plant Kiln C shall not exceed: 9.11 pounds/hour based on a 24-hour block average; and 36.1 tons per consecutive 12 months, rolling total. These emissions standards supersede the NOx standards in Condition 2 of Permit No. 1050059-044-AC. The applicants estimated quantity of 3.8 TPY from the dump chute reduces NOx emissions from the Multifos Plant Kiln C CEMS to 36.1 TPY. {Permitting Note: These limits ensure proper operation of the Multifos Plant Kiln C and that the original project remains a synthetic minor source with respect to PSD preconstruction review. Emissions of the NOx consecutive 12 months rolling total is lowered from 39.9 TPY to the estimated maximum of 36.1 TPY to accommodate the fugitive NOx Emissions from the dump chute.}
[Rules 62-4.070, 62-212.400(12), and 62-204.800 FAC (Source Obligation), F.A.C.]

- 3. <u>Dump Chute</u>: The permittee is authorized to operate a dump chute for separating off-specification material from the Multifos Plant Kiln C. Such operation is expected to be intermittent and infrequent. To the extent practicable, the permittee shall minimize use of the dump chute. [Plant Design and Rule 62-4.070, F.A.C.]
- 4. <u>Scrubber Intake Air</u>: During startup of the Multifos Plant Kiln C, the permittee is authorized to introduce ambient air into the scrubber system to maintain the flow rate necessary to operate within the parametric ranges specified in the Compliance Assurance Monitoring (CAM) plan. [Design and Rule 62-4.070, F.A.C.]

#### MONITORING

5. <u>CEMS Requirements</u>: The permittee shall comply with the applicable requirements in Appendix C of Section 4 of this permit (CEMS Requirements). [Rule 62-4.070, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

## A. Multifos Plant Kiln C

## RECORDKEEPING

6.	Operational Records: The permittee shall maintain the following records in written operational logs: date
	time and duration of dump chute operation; date, time and duration of ambient air intake to the scrubber
	system during kiln startup. [Rule 62-4.070(3), F.A.C.]

## SECTION 4. APPENDICES (DRAFT)

## Contents

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. CEMS Requirements

### SECTION 4. APPENDIX A (DRAFT)

## Citation Formats and Glossary of Common Terms

#### CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

#### **Old Permit Numbers**

Example:

Permit No. AC50-123456 or Permit No. AO50-123456

Where:

"AC" identifies the permit as an Air Construction Permit

"AO" identifies the permit as an Air Operation Permit

"123456" identifies the specific permit project number

#### **New Permit Numbers**

Example:

Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where:

"099" represents the specific county ID number in which the project is located

"2222" represents the specific facility ID number for that county

"001" identifies the specific permit project number

"AC" identifies the permit as an air construction permit

"AF" identifies the permit as a minor source federally enforceable state operation permit

"AO" identifies the permit as a minor source air operation permit

"AV" identifies the permit as a major Title V air operation permit

#### **PSD Permit Numbers**

Example:

Permit No. PSD-FL-317

Where:

"PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant

Deterioration of Air Quality

"FL" means that the permit was issued by the State of Florida

"317" identifies the specific permit project number

#### Florida Administrative Code (F.A.C.)

Example:

[Rule 62-213.205, F.A.C.]

Means:

Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

## Code of Federal Regulations (CFR)

Example:

[40 CRF 60.7]

Means:

Title 40, Part 60, Section 7

## **GLOSSARY OF COMMON TERMS**

° F: degrees Fahrenheit

**BACT**: best available control technology

μg: microgram

**bhp**: brake horsepower

AAQS: Ambient Air Quality Standard

Btu: British thermal units

acf: actual cubic feet

CAM: compliance assurance monitoring

acfm: actual cubic feet per minute

CEMS: continuous emissions monitoring system

.

cfm: cubic feet per minute

**ARMS**: Àir Resource Management System (Department's database)

CFR: Code of Federal Regulations

Mosaic Fertilizer, LLC, New Wales Facility Multifos Plant Kiln C

Air Permit No. 1050059-066-AC NOx CEMS, Dump Chute and Intake Air

## SECTION 4. APPENDIX A (DRAFT)

## Citation Formats and Glossary of Common Terms

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide CO<sub>2</sub>: carbon dioxide

COMS: continuous opacity monitoring system DARM: Division of Air Resource Management DEP: Department of Environmental Protection

**Department:** Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for

reducing particulate matter)

EU: emissions unit

F: fluoride

**F.A.C.**: Florida Administrative Code **F.A.W.**: Florida Administrative Weekly

**F.D.**: forced draft **F.S.**: Florida Statutes

**FGD**: flue gas desulfurization **FGR**: flue gas recirculation

ft<sup>2</sup>: square feet ft<sup>3</sup>: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury
I.D.: induced draft
ID: identification
kPa: kilopascals
lb: pound

MACT: maximum achievable technology MMBtu: million British thermal units MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous

Air Pollutants

NO<sub>X</sub>: nitrogen oxides

**NSPS**: New Source Performance Standards

O&M: operation and maintenance

O<sub>2</sub>: oxygen Pb: lead

PM: particulate matter

PM<sub>10</sub>: particulate matter with a mean aerodynamic

diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: quality assurance QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inchPTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

**SAM**: sulfuric acid mist **scf**: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system

used for reducing emissions of nitrogen oxides)

SO<sub>2</sub>: sulfur dioxide TPD: tons/day TPH: tons per hour TPY: tons per year TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

#### SECTION 4. APPENDIX B (DRAFT)

#### **General Conditions**

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

- 1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permitconditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiateenforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approveddrawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditionsof this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Departmentrules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, uponpresentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - a. Have access to and copy any records that must be kept under conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition orimitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of noncompliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time thenoncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject toenforcement action by the Department for penalties or for revocation of this permit.
- 9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data andother information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted sourcearising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

#### SECTION 4. APPENDIX B (DRAFT)

#### **General Conditions**

- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, otherthan those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
- 11. This permit is transferable only upon Department approval in accordance with Rules 624.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (NA);
  - b. Determination of Prevention of Significant Deterioration (NA); and
  - c. Compliance with New Source Performance Standards (NA).
- 14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - (a) The date, exact place, and time of sampling or measurements;
    - (b) The person responsible for performing the sampling or measurements;
    - (c) The dates analyses were performed;
    - (d) The person responsible for performing the analyses;
    - (e) The analytical techniques or methods used;
    - (f) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware therelevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

### SECTION 4. APPENDIX C (DRAFT)

#### **CEMS** Requirements

#### **CEMS OPERATION PLAN**

1. <u>CEMS Operation Plan</u>: The owner or operator shall create and implement a plan for the proper installation, calibration, maintenance and operation of the CEMS required by this permit. The owner or operator shall submit the CEMS Operation Plan to the Bureau of Air Monitoring and Mobile Sources for approval at least 60 days prior to CEMS installation. The CEMS Operation Plan shall become effective 60 days after submittal or upon its approval. If the CEMS Operation Plan is not approved, the owner or operator shall submit a new or revised plan for approval.

{Permitting Note: The Department maintains both guidelines for developing a CEMS Operation Plan and example language that can be used as the basis for the facility-wide plan required by this permit. Contact the Emissions Monitoring Section of the Bureau of Air Monitoring and Mobile Sources at (850)717-9000.}

#### INSTALLATION, PERFORMANCE SPECIFICATIONS AND OUALITY ASSURANCE

- 2. <u>Installation</u>: The CEMS shall be installed such that representative measurements of emissions or process parameters from the facility are obtained. The owner or operator shall locate the CEMS by following the procedures contained in the applicable performance specification of 40 CFR Part 60, Appendix B.
- 3. <u>Span Values and Dual Range Monitors</u>: The owner or operator shall set appropriate span values for the CEMS. The owner or operator shall install dual range monitors if required by and in accordance with the CEMS Operation Plan.
- 4. <u>Continuous Flow Monitor</u>. For compliance with mass emission rate standards, the owner or operator shall install a continuous flow monitor to determine the stack exhaust flow rate. The flow monitor shall be certified pursuant to 40 CFR Part 60, Appendix B, Performance Specification 6. Alternatively, the owner or operator may install a fuel flow monitor and use an appropriate F-Factor computational approach to calculate stack exhaust flow rate.
- 5. <u>Moisture Correction</u>: If necessary, the owner or operator shall determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).
- 6. <u>Performance Specifications</u>: The owner or operator shall evaluate the acceptability of the NOx CEMS by conducting Performance Specification 2 of 40 CFR Part 60, Appendix B. CEMS determined to be unacceptable shall not be considered installed for purposes of meeting the timelines of this permit.
- 7. Quality Assurance: The owner or operator shall follow the quality assurance procedures of 40 CFR Part 60, Appendix F. The required RATA tests for the NOx CEMS shall be performed using EPA Method 7E in Appendix A of 40 CFR Part 60. NO<sub>X</sub> shall be expressed "as NO<sub>2</sub>."

## **CALCULATION APPROACH**

- 8. <u>CEMS Used for Compliance</u>: Once adherence to the applicable performance specification for each CEMS is demonstrated, the owner or operator shall use the CEMS to demonstrate compliance with the applicable emission standards as specified by this permit.
- 9. CEMS Data: Each CEMS shall monitor and record emissions during all periods of operation and whenever emissions are being generated, including during episodes of startups, shutdowns, and malfunctions. All data shall be used, except for invalid measurements taken during monitor system breakdowns, repairs, calibration checks, zero adjustments and span adjustments.
- 10. Operating Hours and Operating Days: For purposes of this appendix, the following definitions shall apply. An hour is the 60-minute period beginning at the top of each hour. Any hour during which an emissions unit is in operation for more than 15 minutes is an operating hour for that emission unit. A day is the 24hour period from midnight to midnight. Unless otherwise specified by this permit, any day with at least one operating hour for an emissions unit is an operating day for that emission unit.
- 11. <u>Valid Hourly Averages</u>: Each CEMS shall be designed and operated to sample, analyze and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour.
  - a. Hours that are not operating hours are not valid hours.
  - b. For each operating hour, the 1-hour block average shall be computed from at least two data points separated by a minimum of 15 minutes. If less than two such data points are available, there is insufficient data, the 1-hour block average is not valid, and the hour is considered as "monitor unavailable."

## SECTION 4. APPENDIX C (DRAFT)

## **CEMS Requirements**

- 12. <u>Calculation Approaches</u>: The owner or operator shall implement the calculation approach specified by this permit for each CEMS, as follows:
  - a. 24-Hour Block Average. Compliance shall be determined for each 24-hour block averaging period by calculating the arithmetic average of all valid hourly averages occurring within that 24-hour block averaging period.
  - b. 12-Month Rolling Total. Compliance shall be determined by totaling the all of the hourly averages occurring within the 12-month period.

#### MONITOR AVAILABILITY

13. Monitor Availability: The quarterly excess emissions report shall identify monitor availability for each quarter in which the unit operated. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter in which the unit operated for more than 760 hours. In the event the applicable availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving the required availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit.

#### **EXCESS EMISSIONS**

#### 14. Definitions:

- a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown means the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction* means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
- 15. <u>Excess Emissions Prohibited</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
- 16. Notification Requirements: The owner or operator shall notify the Compliance Authority within one workingday of discovering any emissions that demonstrate noncompliance for a given averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. For malfunctions, notification is sufficient for the owner or operator to exclude CEMS data.

#### **ANNUAL EMISSIONS**

- 17. <u>CEMS Used for Calculating Annual Emissions</u> All valid data, as defined in this appendix, shall be used when calculating annual emissions.
  - a. Annual emissions shall include data collected during startup, shutdown and malfunction periods.
  - b. Annual emissions shall include data collected during periods when the emission unit is not operating but emissions are being generated (for example, when firing fuel towarm up a process for some period of time prior to the emission unit's startup).
  - c. Annual emissions shall not include data from periods of time where the monitor was functioning properly but was unable to collect data while conducting a mandated quality assurance/quality control activity such as calibration error tests, RATA, calibration gas audit or RAA. These periods of time shall be considered missing data for purposes of calculating annual emissions.
  - d. Annual emissions shall not include data from periods of time when emissions are in excess of the calibrated span of the CEMS. These periods of time shall be considered missing data for purposes of calculating annual emissions.
- 18. Accounting for Missing Data: All valid measurements collected during each hour shall be used to calculate a 1-hour block average. For each hour, the 1-hour block average shall be computed from at least two data points separated by a

## SECTION 4. APPENDIX C (DRAFT)

## **CEMS Requirements**

- minimum of 15 minutes. If less than two such data points are available, the owner or operator shall account for emissions during that hour using site-specific data to generate a reasonable estimate of the 1-hour block average.
- 19. <u>Emissions Calculation</u>: Hourly emissions shall be calculated for each hour as the product of the I-hour block average and the duration of pollutant emissions during that hour. Annual emissions shall be calculated as the sum of all hourly emissions occurring during the year.

## Walker, Elizabeth (AIR)

From:

Walker, Elizabeth (AIR)

Sent: To:

Friday, March 11, 2011 1:19 PM ronald.yasurek@mosaicco.com

Koletzke, Marilyn; rama.iyer@mosaicco.com; Nasca, Mara; praval@kooglerassociates.com;

Cc:

Zhang-Torres; Halpin, Mike; Forney.Kathleen@epamail.epa.gov;

Abrams. Heather@epamail.epa.gov; Gibson, Victoria

Subject:

MOSAIC FERTILIZER - NEW WALES FACILITY: 1050059-066-AC

Attachments:

1050059-066-AC Signature Pages.pdf

#### Dear Sir/ Madam:

Attached is the official Notice of Intent to Issue for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

## Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf permit zip files/1050059.066.AC.D pdf.zip

Owner/Company Name: MOSAIC FERTILIZER LLC

Facility Name: MOSAIC FERTILIZER - NEW WALES FACILITY

Project Number: 1050059-066-AC

**Permit Status: DRAFT** 

Permit Activity: CONSTRUCTION/NOx CEMS, Dump Chute and Air Intake

Facility County: POLK

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://www.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Elizabeth Walker Bureau of Air Regulation Division of Air Resource Management (DARM) (850)717-9093

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: < http://www.adobe.com/products/acrobat/readstep.html > .

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

## Walker, Elizabeth (AIR)

From:

Yasurek, Ronald - New Wales [Ronald, Yasurek@mosaicco.com]

Sent:

Friday, March 11, 2011 2:37 PM

To:

Walker, Elizabeth (AIR)

Cc:

Turley, Charles D - New Wales; Upton, John B - New Wales

Subject:

RE: MOSAIC FERTILIZER - NEW WALES FACILITY; 1050059-066-AC

## Elizabeth.

I received the permit project documents and can view them.

## Mosaic

#### Ron Yasurek | Facility Manager, New Wales & South Pierce

Mosaic Fertilizer, LLC | Location: 3095 CR 640 West, Mulberry, FL 33860 | Mail: 13830 Circa Crossing Drive,

Lithia, FL 33547

P: 863.844.5089 | C: 813-299-3367 | F: 863.844.5451 | E: <u>ronald.yasurek@mosaicco.com</u> | W:

www.mosaicco.com

From: Walker,

#### We help the world grow the food it needs!

This email and any files transmitted with it may contain confidential and/or privileged material and is intended only for the person or entity to which it is addressed. If you are not the intended recipient, any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information is prohibited. If you have received this email in error, please notify the sender immediately and delete this material from all known records.

## Please consider the environment before printing this email.

Elizabeth (AIR) [mailto:Elizabeth.Walker@dep.state.fl.us]

**Sent:** Friday, March 11, 2011 1:19 PM **To:** Yasurek, Ronald - New Wales

Cc: Koletzke, Marilyn; Iyer, Rama - FishHawk; Nasca, Mara; praval@kooglerassociates.com; Zhang-Torres; Halpin, Mike;

Forney.Kathleen@epamail.epa.gov; Abrams.Heather@epamail.epa.gov; Gibson, Victoria

Subject: MOSAIC FERTILIZER - NEW WALES FACILITY; 1050059-066-AC

## Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

## Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\_permit\_zip\_files/1050059.066.AC.D\_pdf.zip

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Elizabeth Walker
Bureau of Air Regulation
Division of Air Resource Management (DARM)
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