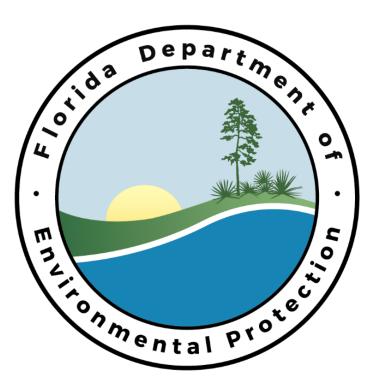
# Financial Responsibility Report



2015



# Florida Department of Environmental Protection

Division of Water Resource Management Mining and Mitigation Program 2600 Blair Stone Road, MS 3577 Tallahassee, Florida 32399-2400 Rick Scott Governor

Carlos Lopez-Cantera Lt. Governor

> Ryan E. Matthews Interim Secretary

### **2015 Financial Responsibility Report for the Phosphate Mines** April 6, 2017

The Department of Environmental Protection is the state's lead agency in the regulation of mine reclamation. Currently, all mining in Florida is subject to reclamation requirements. Reclamation standards are set forth in Chapter 378, Florida Statutes (F.S.).

Of the commodities mined in Florida, phosphate mining is the most land intensive. During 2015, 3,107 acres of land were mined. All lands mined for phosphate since July 1, 1975 are subject to a mandatory reclamation requirement. Reclamation standards specific to phosphate lands are detailed in Chapter 62C-16, Florida Administrative Code (F.A.C.).

Pursuant to Chapter 378, Part II, F.S. and Chapter 62C-16, F.A.C., operators of phosphate mineral extraction (mines) must meet the rate of reclamation established in Subsection 378.209(1)(b), F.S., and specifically Subsections 62C-16.0075(5)(a) through (e), F.A.C., which reads:

(5) For the purpose of Rule 62C-16.0075, F.A.C., the reclamation shall be accomplished in accordance with the following criteria:

(a) For the period July 1, 1975, to December 31, 1980, for existing mines, or the first five-year period of mining for new mines, no reclamation shall be required and any reclamation which is completed shall be credited forward.

(b) For the period January 1, 1981, to December 31, 1985, for existing mines, or the second five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 15 percent of the acres mined during the period July 1, 1975, to December 31, 1980, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.

(c) For the period January 1, 1986, to December 31, 1990, for existing mines, or the third five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 60 percent of the acres mined during the period January 1, 1981, to December 31, 1985, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.

(d) For the period January 1, 1991, to December 31, 1995, for existing mines, or the fourth five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 75 percent of the acres mined during the period January 1, 1986, to December 31, 1990, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.

(e) For the period January 1, 1996, to December 31, 2000, for existing mines, or the fifth five-year period of mining for new mines, and each five-year period thereafter, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 100 percent of the acres mined during the immediately preceding five-year period. Reclamation in excess of the required percentage shall be credited forward.

Reclamation (for the purpose of financial responsibility) is defined as reclaimed through the initial revegetation as described in paragraph 62C-16.0075(5)(f), F.A.C., which states, "For the purposes of this subsection, completed shall mean reclaimed through the initial revegetation and not through final release of the reclaimed area."

This document shall be considered the eighteenth Financial Responsibility Report and gives the status of financial responsibility for existing mines as of December 31, 2015. Failure to meet the Financial Responsibility requirements will result in the imposition of Financial Security, pursuant to Subsection 62C-16.0075, F.A.C.

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Data used to generate the Financial Responsibility Report is compiled from the Annual Reports required by Chapter 62C-16, F.A.C. and deemed complete by Department staff for the year ending December 31, 2015.

For general information concerning the financial responsibility requirements for phosphate reclamation, please contact:

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#### Acknowledgements

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#### **TABLE 1 - Five Year Blocks**

Five Year Block	Chapter 62C-16, F.A.C.	Percentage of Required Reclamation	Mine(s) in Five Year Block
1st 5-Year Block	For the period July 1, 1975, to December 31, 1980, for existing mines, or the first five-year period of mining for new mines, no reclamation shall be required and any reclamation which is completed shall be credited forward.	0% Reclamation Required	None
2nd 5-Year Block	For the period January 1, 1981, to December 31, 1985, for existing mines, or the second five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 15 percent of the acres mined during the period July 1, 1975, to December 31, 1980, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.	15% Required Reclamation of acres mined from previous 5-Year Block must be reclaimed	Mosaic Fertilizer's South Ft. Meade Hardee County Mine
3rd 5-Year Block	For the period January 1, 1986, to December 31, 1990, for existing mines, or the third five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 60 percent of the acres mined during the period January 1, 1981, to December 31, 1985, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.	60% Required Reclamation of acres mined from previous 5-Year Block must be reclaimed	None
4th 5-Year Block	For the period January 1, 1991, to December 31, 1995, for existing mines, or the fourth five-year period of mining for new mines, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 75 percent of the acres mined during the period January 1, 1986, to December 31, 1990, or the immediately preceding five-year period, as appropriate. Reclamation in excess of the required percentage shall be credited forward.	75% Required Reclamation of acres mined from previous 5-Year Block must be reclaimed	None
5th 5-Year Block and Subsequent 5-Year Blocks	For the period January 1, 1996, to December 31, 2000, for existing mines, or the fifth five-year period of mining for new mines, and each five-year period thereafter, reclamation of acres mined shall be completed at the rate of an acreage equivalent of 100 percent of the acres mined during the immediately preceding five-year period. Reclamation in excess of the required percentage shall be credited forward.	100% Required Reclamation of acres mined from previous 5-Year Block must be reclaimed	Agrifos' Nichols Mine; Mosaic Fertilizer's Big Four Mine, Clear Springs Mine, Four Corners/Lonesome Mine, Ft. Green Mine, Ft. Meade Mine, Hookers Prairie Mine, Hopewell Mine, Noralyn Mine, Payne Creek Mine, South Ft. Meade Polk Mine, South Pasture Mine, Wingate Creek Mine; PCS' Phosphate's Hamilton County Mine

#### TABLE 2 - Year In Which Individual Mine Five Year Block Ends

Year	Mines
2015	Agrifos' Nichols Mine; Mosaic Fertilizer's Ft. Meade, Clear Springs, Ft. Green, Noralyn, and Payne Creek Mines; and PCS Phosphate's Hamilton County Mine
2016	Mosaic Fertilizer's Hookers Prairie and Wingate Creek Mines
2017	Mosaic Fertilizer's Big Four Mine
2018	None
2019	Mosaic Fertilizer's South Ft. Meade Hardee Co., South Ft. Meade Polk Co., Hopewell, Four Corners/Lonesome, and South Pasture Mines

NOTE: Individual mines may have its Five Year Block end on different dates within the same year. This date is dependent upon the date when mining started for each individual mine.

Company	Mine(s)	Operating Status	Mandatory Acres Mined from 07/15/75 to 12/31/2015	Mandatory Acres of Reclamation Completed from 07/15/75 to 12/31/2015	Mandatory Acres Mined from 01/01/06 to 12/31/2010	Mandatory Acres of Reclamation Completed from 01/01/11 to 12/31/2015	Mandatory Acres of Required Reclamation 100% of Previous 5- Year Block	Over or Under Required Reclamation (current block)	Acres to be Credited Forward from Previous 5-Year Block	Acres Forward to Subsequent 5-Year Block
Agrifos Mining	Nichols (1,11)	Under Final Reclamation	4,951	4,232	0	648	0	648	162	810
	Clear Springs (3)	Under Final Reclamation	5,276	5,276	0	1,144	0	1,144	953	2,097
	Fort Green (16)	Operating	22,849	18,092	470	2,877	470	2,407	-1,549	858
Mosaic Fertilizer, LLC	Fort Meade (9, 15)	Operating	9,590	8,116	13	1,688	13	1,675	4	1,679
(5)	Noralyn (3)	Under Final Reclamation	7,076	6,336	0	0	0	0	2,287	2,287
	Payne Creek (15)	Operating	9,808	9,999	169	1,414	169	1,245	-1,018	227
PCS Phosphate (8, 13)	Hamilton County Mine	Operating	28,772	20,206	3,187	4,054	3,187	867	345	1,212

# TABLE 3 - Financial Responsibility 5-Year Block Ending in 2015

Figures above indicate that the mines listed in this chart are in the financial responsibility 5-Year Block that ends on December 31, 2015. Figures provided are an assessment of performance through December 31, 2015.

#### TABLE 4 - Financial Responsibility 5-Year Block Ending in 2016

Company	Mine(s)	Operating Status	Mandatory Acres Mined from 11/01/81 to 10/31/15	Mandatory Acres Reclaimed from 11/01/81 to 10/31/15	Mandatory Acres Mined from 11/1/06 to 10/31/11	Mandatory Acres of Reclamation Completed as of 11/01/11 to 10/31/16	Mandatory Acres of Required Reclamation (100% of Previous 5- Year Block)	Over or Under Requirement	Acres Credited Forward from Previous 5-Year Blocks	Acres Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	Wingate Creek (12)	Operating	1,386	609	343	121	343	-222	163	-59

Figures above indicate that Mosaic Fertilizer's Wingate Creek Mine is in the financial responsibility 5-Year Block that ends on October 31, 2016. Figures provided are an assessment of performance through October 31, 2016.

Company	Mine(s)	Operating Status	Mandatory Acres Mined from 1977 to 2015	Mandatory Acres Reclaimed from 1977 to 2015	Mandatory Acres Mined from 2007 to 2011	Mandatory Acres of Reclamation Completed as of 01/01/12 to 12/31/16	Mandatory Acres of Required Reclamation (100% of Previous 5- Year Block)	Over or Under Requirement	Acres Credited Forward from Previous 5-Year Blocks	Acres Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	Hookers Prairie (10, 15)	Operating	11,373	9,608	1,008	1,697	1,008	689	1,271	1,960

Figures above indicate that Mosaic Fertilizer's Hookers Prairie Mine is in the financial responsibility 5-Year Block that ends on December 31, 2016. Figures provided are an assessment of performance through December 31, 2016.

TABLE 5 - Financia	Responsibility 5-	Year Block Ending in 2017
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Company	Mine(s)	Operating Status	Mandatory Acres Mined from 1977 to 12/31/2015	Mandatory Acres of Reclamation Completed from 1977 to 12/31/2015	Mandatory Acres Mined from 1/1/08 to 12/31/12	Mandatory Acres of Reclamation Completed from 01/01/13 to 12/31/17	Mandatory Acres of Required Reclamation 100% of Previous 5- Year Block	Over or Under The Requirement	Acres to be Credited Forward from Previous 5- Year Block	Acres Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	Big Four (7)	Under Final Reclamation	3,697	3,697	0	-571	0	-571	931	360

Figures listed above indicate that Mosaic Fertilizer's Big Four Mine are in the financial responsibility block that ends on December 31, 2017. Figures provided are an assessment of performance through December 31, 2015.

# TABLE 6 - Financial Responsibility 5-Year Block Ending in 2018

There are no mines required to meet the reclamation requirements as specified in Chapter 378, F.S. and Chapter 62C-16, F.A.C., for the block that ends on December 31, 2018.

#### TABLE 7 - Financial Responsibility 5-Year Block Ending in 2019

Company	Mine(s)	Operating Status	Mandatory Acres Mined from 01/01/85 to 12/31/15	Mandatory Acres Reclaimed from 01/01/85 to 12/31/15	Mandatory Acres Mined from 1/1/10 to 12/31/14	Mandatory Acres of Reclamation Completed from 1/1/15 to 12/31/19	Mandatory Acres of Required Reclamation (100% of Previous 5- Year Block)	Over or Under The Requirement	Acres to be Credited Forward from Previous 5- Year Block	Acres Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	Four Corners / Lonesome (2, 14)	Operating	30,913	15,479	6,278	732	6,278	-5546	-4,157	-9,703
Mosaic Fertilizer, LLC (5)	South Ft. Meade Polk County Mine (4, 15)	Operating	11,141	6,603	980	445	980	-535	531	-4
Mosaic Fertilizer, LLC (5)	South Pasture	Operating	8,770	3,372	2,138	344	2,138	-1794	251	-1543

Figures above indicate that Mosaic Fertilizer's Four Corners / Lonesome Mine, South Fort Meade Mine and CF Industries' South Pasture Mine are in the financial responsibility 5-Year Block that ends on December 31, 2019. Figures provided are an assessment of performance through December 31, 2015.

Company	Mine	Operating Status	Mandatory Acres Mined from 10/89 to 9/30/15	Mandatory Acres Reclaimed from 10/89 to 9/30/15	Mandatory Acres Mined from 10/09 to 9/30/14	Mandatory Acres of Reclamation Completed from 10/14 to 9/30/15	Mandatory Acres of Required Reclamation (100% of Previous 5- Year Block)	Over or Under Requirement	Acres Credited Forward from Previous 5- Year Block	Acres Credited Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	Hopewell (6)	Operating	2,597	2,043	181	-2	181	-183	1,046	863

Figures above indicate that Mosaic Fertilizer's Hopewell Mine is in the financial responsibility 5-Year Block that ends on September 30, 2019. Figures provided are an assessment of performance through September 30, 2015.

Company	Mine	Operating Status	Mandatory Acres Mined from 1/1/10 to 12/31/2015	Mandatory Acres Reclaimed from 1/1/2010 to 12/31/2015	Mandatory Acres Mined from 1/1/2010 to 12/31/2014	Mandatory Acres of Reclamation Completed from 1/1/2015 to 12/31/2015	Mandatory Acres of Required Reclamation (15% of Previous 5- Year Block)	Over or Under Requirement	Acres Credited Forward from Previous 5- Year Block	Acres Credited Forward to Subsequent 5-Year Block
Mosaic Fertilizer, LLC (5)	South Ft. Meade Hardee County Mine	Operating	2,541	367	1,884	146	0	146	221	367

Figures above indicate that Mosaic Fertilizer's South Ft. Meade Hardee Co. Mine is in the financial responsibility 5-Year Block that ends on December 31, 2019. Figures provided are an assessment of performance through December 31, 2015.

#### NOTES

(1) The Mobil Nichols Mine was sold to Agrifos Mining, LLC, on April 8, 1996. Agrifos assumed the reclamation responsibility and continued mining the unmined property and debris areas. On December 3, 2002, IMC Phosphates Company, Agrifos Mining, LLC, and The Mims Group entered into an agreement to document their respective reclamation obligations for the Nichols Mine. In 2004, IMC Phosphates Company changed its name to Mosaic Phosphates Company. On July 29, 2005, Mosaic Phosphates Company changed its name to Mosaic Fertilizer, LLC.

(2) On June 12, 1991, the Governor and the Cabinet approved a request by IMC Fertilizer, Inc., (now known as Mosaic Fertilizer, LLC) and Brewster Phosphates (now known as Cytec Industries) to consolidate their mines. Currently, the Kingsford Complex includes the Kingsford Mine, Haynsworth Mine, and portions of the Brewster Lonesome Mine which lies north of the South Prong of the Alafia River. The Four Corners/Lonesome Mine now includes the Four Corners Mine and portions of the Brewster Lonesome Mine lying below the South Prong of the Alafia River.

(3) This mine is shut down and final reclamation is ongoing or complete.

(4) The Mobil South Fort Meade Mine was sold to Cargill Fertilizer, Inc., on December 15, 1995. In 2004, Cargill Fertilizer, Inc., transferred its obligations to Cargill Fertilizer, LLC, and subsequently changed its name to Mosaic Fertilizer, LLC.

(5) IMC Fertilizer, Inc., and Agrico Mining Company (Agrico) merged on July 1, 1993. The new company, IMC Agrico, assumed the reclamation responsibility for lands mined by both IMC and Agrico. On August 7, 2000, IMC Agrico became IMC Phosphates Company and assumed reclamation responsibility for the mines listed under IMC Phosphates Company. In 2004, IMC Phosphates Company changed its name to Mosaic Phosphates Company. On July 29, 2005, Mosaic Phosphates Company changed its name to Mosaic Fertilizer, LLC.

(6) The Hopewell Mine was owned and operated by the Hopewell Land Corporation. However, in October 1989, mining operations and the reclamation responsibility was transferred to IMC Fertilizer, Inc. In 2000, IMC Agrico changed its name to IMC Phosphates Company. In 2004, IMC Phosphates Company changed its name to Mosaic Phosphates Company. On July 29, 2005, Mosaic Phosphates Company changed its name to Mosaic Fertilizer, LLC.

(7) The Mobil Big Four Mine was sold to IMC Agrico on June 28, 1996. IMC Agrico (now known as Mosaic Fertilizer, LLC) is now completing the mining and reclamation of the mine site.

(8) Occidental Chemical Company (Oxy) was sold to PCS Phosphate on October 31, 1995. On January 18, 1996, PCS Phosphate combined their two mines (Suwannee River Mine and Swift Creek Mine) at their site into one mine named the Hamilton County Mine.

(9) Ownership of the Gardinier Fort Meade Mine was transferred to Cargill Fertilizer, Inc., on March 4, 1991. In 2004, Cargill Fertilizer, Inc., transferred its obligations to Cargill Fertilizer, LLC, and subsequently changed its name to Mosaic Fertilizer, LLC.

#### NOTES

(10) Ownership of the Bonnie Lake and Hookers Prairie Mines was with W.R. Grace and Company until November 1, 1988 when Seminole Fertilizer Corporation took over operation of the these mines. On May 4, 1993, Seminole Fertilizer Corporation transferred ownership of the Bonnie Lake and Hookers Prairie Mines to Cargill Fertilizer, Inc. In 2004, Cargill Fertilizer, Inc., transferred its obligations to Cargill Fertilizer, LLC, and subsequently changed its name to Mosaic Fertilizer, LLC.

(11) On December 3, 2002, a Four-Party Agreement was signed between Agrifos Mining, LLC, IMC Phosphates, Mims Group, and the Department as to the reclamation responsibilities of lands within the Nichols Mine.

(12) NuGulf's Wingate Creek Mine was purchased by Cargill Fertilizer, Inc., in 2004. Later that year, Cargill Fertilizer, Inc., transferred its reclamation obligations to Cargill Fertilizer, LLC. This company subsequently changed its name to Mosaic Fertilizer, LLC.

(13) PCS Phosphate's Hamilton County Mine carries over a reclamation deficit from the previous 5-year block and is required to reclaim those acres in addition to their current requirement by December 31, 2010. The Department has determined that PCS is not in compliance with the rate of reclamation for the 2001-2005 five year period. PCS has posted financial security to cover the number of acres that the operator is delinquent in reclaiming in the required time (2001-2005). On June 2, 2008, PCS was granted a variance from the requirement to post security on the number of acres it must reclaim during the current (2006-2010) five year period. This variance is currently under review.

(14) The Department has determined that Mosaic Fertilizer, LLC's Four Corners/Lonesome mine is not in compliance with the rate of reclamation for the 2005-2009 five year period. Mosaic has posted financial security to cover the number of acres that the operator is delinquent in reclaiming in the required time (2005-2009). On September 15, 2010, Mosaic was granted a variance from the requirement to post security on the number of acres it must reclaim during the current (2010-2014) five year period.

(15) Some 5-year block acres have been updated due to improvements in mapping techniques and GIS capabilities.

(16) The Department has determined that Mosaic Fertilizer, LLC's Ft. Green mine is not in compliance with the rate of reclamation for the 2006-2010 five year period. Mosaic has posted financial security to cover the number of acres that the operator is delinquent in reclaiming in the required time (2006-2010).

#### **COMMENTS FOR MINES NOT LISTED IN THIS REPORT**

Brewster Phosphates' Haynsworth and Lonesome Mines, Estech's Silver City and Watson Mines, Mosaic Fertilizer's Bonnie Lake, Kingsford and Pebbledale Mines, Exxon/Mobil's Ft. Meade Mine, CF Industries' North Pasture Mine, US Agri-Chemical's Rockland Mine, and The William's Company Saddle Creek Mine were not listed in this report because the mines are now 100 percent reclaimed and meet the criteria for financial responsibility.

Florida Power Corporation's Hines Energy Complex, Tampa Electric Company's Polk Power Station and IMC Phosphate Company's New Wales Chemical Complex have been or are being reclaimed as industrial sites and are currently in compliance with Section 62C-16.0075, F.A.C., regarding financial responsibility.

The Polk County North Central Landfill is located on land that was mined for phosphate in the former Saddle Creek Mine. The last remaining reclamation requirements in the Saddle Creek Mine for parcel AGR-SC-84(3) were released to allow for expansion of the landfill. Due to the industrial nature of the landfill expansion, the Department issued a variance on April 19, 2005 for the reclamation requirements and determined that the site should be under the oversight of the Southwest Florida Water Management District and the Department's Solid Waste Section for management as a solid waste facility. There are no other outstanding mandatory reclamation requirements in the former Saddle Creek Mine.