

“This is a basic problem, to feed 6.6 billion people. Without chemical fertilizer, forget it. The game is over.”

Norman Borlaug, Ph.D. (Recipient of the 1970 Nobel Peace Prize, 1977 Presidential Medal of Freedom, and 2007 Congressional Gold Medal)

**Section
6**

CRP FORMS





**Department of
Environmental Protection
Bureau of Mine Reclamation
2051 East Dirac Drive
Tallahassee, FL 32310-3760**

Application for a Conceptual Reclamation Plan or Modification

General Instructions: This form shall be used to comply with the requirements of Chapter 62C-16, F.A.C., for filing conceptual reclamation plans. Guidance in filling out the application may be obtained by contacting the Bureau of Mine Reclamation at the above address or by telephone at (850) 488-8217. Complete and submit this form as follows:

1. Fill in the blanks on pages 2, 3, 4, and 5 of this form and provide the appropriate signature.
2. Respond to each item in Parts III through VIII, using additional pages, as needed. Identify all responses by part and item number. Repeat the appropriate question or request and follow it with your response. All additional pages of text shall be in the standard format, include the heading ATTACHMENT in the upper right corner, and be numbered.
3. Provide the maps and aerial photographs requested in Part IX.
4. All maps, aerial photographs, drawings, cross sections, and additional pages of text shall comply with the application standards in section 62C-16.0036, F.A.C.. In addition, the standard format shall be 8½ X 11 with a 1” margin on all sides. Single spacing is preferred for text with double spacing between paragraphs and items.
5. Submit the original and four copies of pages 2, 3, 4, and 5 only of this form and all attachments to the Bureau of Mine Reclamation as follows:
 - a. The original shall be unbound, be of reproducible quality, and bear an original signature.
 - b. All maps, cross sections, or drawings that are larger than 8½” X 11” shall be submitted rolled rather than folded.
 - c. If any of the maps, cross sections, or drawings is larger than the standard format, provide at least one, good, reproducible copy at the standard format.
6. Use the Florida Land Use, Cover and Forms Classification System, Level II (DOT 1999) when identifying vegetation and land uses.
7. Provide a community assessment in accordance with the 26 Ecological Communities of Florida, Soil Conservation Service (February 1981).



**Department of
Environmental Protection
Bureau of Mine Reclamation
2051 East Dirac Drive
Tallahassee, FL 32310-3760**

Application for a Conceptual Reclamation Plan or Modification

Part I. General Information

1. Operator

a. Name:	<u>Mosaic Fertilizer, LLC</u>
b. Mine:	<u>DeSoto Mine</u>
c. Business Address:	<u>13830 Circa Crossing Drive</u>
d. Mailing Address:	<u>13830 Circa Crossing Drive</u>
e. City, State, Zip:	<u>Lithia, FL 33547</u>
f. Telephone Number:	<u>813-500-6300</u>

2. Applicant (Authorized Agent)

a. Name:	<u>Diana M. Jagiella</u>
b. Title/ Position:	<u>Senior Director Mine Permitting and Regulatory Affairs</u>
c. Business Address:	<u>13830 Circa Crossing Drive</u>
d. Mailing Address:	<u>13830 Circa Crossing Drive</u>
e. City, State, Zip:	<u>Lithia, FL 33547</u>
f. Telephone Number:	<u>813-500-6820</u>

3. Person to Contact Regarding Contents of Application

a. Name:	<u>Bartley Arrington</u>
b. Title/Position:	<u>Mine Permitting Manager</u>
c. Business Address:	<u>13830 Circa Crossing Drive</u>
d. Mailing Address:	<u>13830 Circa Crossing Drive</u>
e. City, State, Zip:	<u>Lithia, FL 33547</u>
f. Telephone Number:	<u>813-500-6891</u>

Part II. Application Summary

Provide the following information for the conceptual reclamation plan area.

1. Location and Acreage

a. County:	<u>DeSoto County</u>
b. Acres:	<u>18,287 acres</u>
c. Total Acres:	<u>18,287 acres</u>

2. Mining Operation Acreage

a. Mined before 7/1/75	<u>0</u>
b. Mined from 6/30/75 to present	<u>0</u>
c. To be mined	<u>11,402</u>
d. Disturbed before 7/1/75	<u>0</u>
e. Disturbed from 6/30/75 to present	<u>0</u>
f. To be disturbed	<u>4,778</u>
g. To remain undisturbed	<u>2,107</u>
h. Total	<u>18,287</u>

3. Status of Lands (in acres) Mined or Disturbed Before 7/1/75

	In Use*	Unreclaimed	Reclaimed
a. Mined only	<u>NA</u>	<u></u>	<u></u>
b. Mined - waste disposal use	<u>NA</u>	<u></u>	<u></u>
c. Disturbed only	<u>NA</u>	<u></u>	<u></u>
d. Disturbed by waste disposal	<u>NA</u>	<u></u>	<u></u>
f. Total	<u>NA</u>	<u></u>	<u></u>

*For mining operations

4. Estimated Quantities Considered in Planning Reclamation

a. Dry tons of sand tailings to dispose of	<u>316,000,000</u>
b. Dry tons of clay to dispose of	<u>99,000,000</u>
c. Dry tons of other waste to dispose of	<u>427 (million cubic yards)</u>

5. Estimate the following for each waste disposal site

Please refer to the attached ERP Table 3-4-A and the Life of Mine Waste Disposal Plan (Appendix 3-4-A) for the following information.

Waste Clay Disposal Site Designation		Site 1	Site 2	Site 3	Site 4
Disposal Acres					
Dam Height Above Grade (ft.)	Minimum Maximum Average				
Type of Disposal					
Cap Thickness (ft.)					
Average Storage Depth (ft.)					
Storage Acre-feet					
Infill Rate (Dry Tons/Yr.)					
% of Solids* in Fill					
Immediate+ % Solids					

* At entry into CSA +Point at which self-weight consolidation begins

6. Drainage*

	<u>Premining</u>		<u>Postreclamation</u>	
	<u>Qty.</u>	<u>Acres</u>	<u>Qty.</u>	<u>Acres</u>
a. 1st order drainage basins	<u>1</u>	<u>6</u>	<u>0</u>	<u>0</u>
b. 2nd order drainage basins	<u>2</u>	<u>9,585</u>	<u>2</u>	<u>9,522</u>
c. 3rd order drainage basins	<u>3</u>	<u>8,697</u>	<u>3</u>	<u>8,766</u>
d. Wetland under 20 acres	<u>1,066</u>	<u>2,290</u>	<u>516</u>	<u>1,585</u>
e. Wetlands 20 acres and over	<u>39</u>	<u>1,805</u>	<u>66</u>	<u>2,873</u>
f. Lakes (water bodies**)	<u>139**</u>	<u>36**</u>	<u>9</u>	<u>340</u>

* Based upon the Florida Land Use Cover and Forms Classification System, Level II, (DOT 1999)

** Cattle ponds

7. Threatened or Endangered Species Identified Prior to Mining

a. Number of plant species	<u>5</u>
b. Number of animal species	<u>15</u>

8. Permits

- a. Is this mine subject to DRI-ADA approval? No
- b. Is any area subject to a Wetland Resource or Environmental Resource Permit? Yes
- c. Will any state or federal lands be mined/disturbed? No

9. Land Coverage Acreage

Please refer to the attached CRP Table CRP-1 for the Site Land Use Summary.

	Premining	Postreclamation
I. Uplands	14,049	13,390
A. Nonforested	12,075	7,979
B. Forested	1,974	5,411
1. Coniferous	466	708
2. Hardwood	956	1,538
3. Mixed	552	3,165
II. Lakes (Water Bodies)	36	420
A. Fluctuating Zone		
1. Forested		
2. Herbaceous		
B. Low Water		
1. Shallow Water (Cattle Ponds)	36	81
2. Deep Water	0	339
III. Streams (Only includes 513 and 514 ditches)	106	19
IV. Wetlands	4,096	4,458
A. Forested	2,362	2,641
B. Herbaceous	1,734	1,817
V. Other Surface Waters		
Total	18,287	18,287

10. Time Schedule (mine-years)

	Begins	Ends
a. Mining	1*(2021)	15 (2035)
b. Waste Disposal	1 (2021)	22 (2042)
c. Reclamation	4 (2024)	22 (2042)

*Mine years do not include plant and infrastructure construction (i.e., access corridor, initial CSA, NPDES Outfalls, railroad, water supply pipeline ≥ 54 months (estimated construction to begin 2018

Parts III. - IX. See additional attached pages.

Date Submitted

Signature of Applicant

Part III. Ownership, Leases, and Permits

1. List the names and addresses of all persons having fee simple or lessee estate in the application area.

The applicant, Mosaic Fertilizer, LLC, holds sufficient ownership interest to conduct the activities for which approval is requested and to authorize access for FDEP inspections.

2. Has the State of Florida, if not included in item 1 above, claimed ownership of any area within the application area? If yes, discuss.

No. For additional information, please refer to SID Section 1.6.3 and Appendix 2-8-B.

3. If any part of the application area is subject to DRI-ADA approval under section 380.06, Florida Statutes, provide the status of the approval process, including approval dates and the approving agencies when known.

NA. The DeSoto Mine is not subject to DRI-ADA approval.

4. Identify those areas where a jurisdictional determination has been completed by the Department of Environmental Protection.

Please refer to SID Section 1.4.1 for the status of the jurisdictional determination.

5. List all other permits related to reclamation activities that have been obtained or are known to be needed for the application area. Provide the identification number (if applicable), type, agency filed with or to be filed with, and status of each permit.

Please refer to SID Section 2.13 for a list of other permits required for the DeSoto Mine.

Part IV. Description of Application Area

Describe the application area in a list format. Headings for the list shall be township, range, and section. Include the acreage for each section and partial section.

Please refer to the attached ERP Table 1-2.

Parts V - VII. Respond to the following parts by providing enough information to evaluate compliance with the standards in 62C-16.0051 and 62C-16.0053, F.A.C.:

Part V. Premining Conditions

1. Describe the geology, topography, drainage, vegetation, and land uses within the mine prior to mining operations.

Please refer to SID Sections 1.2 through 1.6.

2. Describe and list, as existing immediately prior to mining operations and site preparation, the presence and habitat location of plant and animal species listed as threatened or endangered by the Florida Fish and Wildlife Conservation or the U.S. Fish and Wildlife Service.

Please refer to SID Section 1.8 and ERP Table 2-6-A.

Part VI. Reclamation Considerations

1. Describe the mining, waste disposal, and reclamation and restoration plans.

Please refer to SID Section 2.

2. Describe the methods and assumptions used in determining quantities, by weight and volume, of earth materials to be considered in planning the reclamation and restoration activities as described in Part II, Item 4 and 5.

The amount of material was determined by the prospecting data, and processed in GIS using the site boundaries. GIS calculates the areas and volumes to more than 6 decimal places, and the values are then rounded to the appropriate significant figures based on source data.

Please refer to SID Sections 2.3.3, 2.8, and 3.1.4 for additional information.

Part VII. Postreclamation Conditions

1. Describe postreclamation and restoration stratigraphy, topography, drainage, vegetation, and land uses.

Please refer to the following SID Sections:

- **Section 2.9 – Post Reclamation Stratigraphy and Soils**
- **Section 2.10 – Reclamation and Revegetation (Includes Post Reclamation Topography in Section 2.10.1)**
- **Section 5.4 – Streams and Drainage (Conditions Upon Completion or Reclamation and Mitigation)**

2. Describe the threatened or endangered species habitat expected to be present following reclamation.

Please refer to SID Section 5.6.

Part VIII. Variances

For each variance requested provide a completed variance application. If no variance is requested, state: No Variance Requested.

No variance requested.

Part IX. Maps and Aerial Photographs

Provide the following maps and aerial photograph(s). Do not combine maps. Identify each map and aerial photograph by number, title, operator's name, and mine name.

1. Location

Please Refer to Map CRP-1.

2. Mined, Disturbed and Permit Areas

Please refer to Map CRP-2.

3. Waste Disposal Sites

Please refer to Map CRP-3.

4. Premining Topography and Drainage

Please refer to Maps CRP-4A and CRP-4B.

5. Premining Vegetation and Premining Land Use

Please refer to Map CRP-5.

6. Premining Habitat of Threatened or Endangered Species

Please refer to Map CRP-6.

7. Postreclamation Topography and Drainage

Please refer to Maps CRP-7A and CRP-7B.

8. Postreclamation Vegetation and Postreclamation Land Use

Please refer to Map CRP-8.

9. Aerial Photograph(s)

Please refer to Map CRP-9.

Please Note – the following Maps are also attached to this CRP Application.

- **Map CRP-10 – Reclamation Parcels**
- **Map CRP-11 – Existing Streams**
- **Map CRP-12 – Post Reclamation Streams**