

Standard Agenda Item Cover Sheet

SM SM		Agenda Iter	m N ^{o.}
		Meeting Date:	
\square Consent Section \square Re	gular Section	Public Hearing	
Requires Chair Signature? [Yes	No	Includes a Technology Compo	onent? []Yes []No
Subject: Phosphate Annual Clay	V Settling Area	Summary 2023-2024	
Department Name: Public Utili	ties Departmen	t, Environmental Services Divisi	ion
Contact Person: Kim Cruz		Contact Phone:	(813) 276-8370
Sign-Off Approvals:			
George B. Cassady	05/05/2025	Kevin S. Moran	04/24/2025
Assistant County Administrator	Date	Department Director	Date
N/A		Nancy Takemori	04/28/2025
Management and Budget - Approved as to Financial Impact Accuracy	Date	County Attorney - Approved as to Legal Sufficiency	Date

Staff's Recommended Board Motion:

Accept phosphate clay settling area 2023-2024 annual report submitted by Mosaic Fertilizer, L.L.C., as required by Resolution R23-095. Based on the provided data, Mosaic appears to be in compliance with Resolution R23-095. This staff report is for informational purposes.

Financial Impact Statement: No County funds are required for this item.

Background:

On November 7, 2023, Resolution R23-095 was approved at the BOCC Land Use Meeting amending DRI #263 Composite Development Order and Operating Permit to provide that specific designated Clay Settling Areas within Hillsborough County may accept clays mined by Mosaic Fertilizer, L.L.C. within Hardee County, until such time as the clay settling areas are utilized to their full design storage capacity, and before November 15, 2028 unless expressly extended. Resolution R23-095 requires Mosaic Fertilizer, L.L.C. to provide an annual summary associated with the clays deposited in Hillsborough County.

List Attachments:

County Staff Review Report, Attachment 1: Mosaic Fertilizer, L.C.C. 2023-2024 Annual Clay Settling Area Report, and Attachment 2: Additional Information.

County Staff Review Report



A Report Presented to the Board of County Commissioners on DATE from Public Utilities Department Environmental Services Division regarding Resolution R23-095 2023/2024 Annual Report for Hillsborough County DRI#263 Clay Settling Area Utilization for Hardee County Waste Clay Disposal Analysis Phosphate Reference No.: 1124.05P

STAFF REPORT Resolution R23-095 2023/2024 Annual Report for Hillsborough County DRI#263 Clay Settling Area Utilization for Hardee County Waste Clay Disposal Analysis

Background

On July 10, 2018, Mosaic Fertilizer, L.L.C. (Mosaic) proposed and submitted an application to amend Hillsborough County Mines Development of Regional Impact DRI #263 Composite Development Order and Operating Permit to amend a Developer Commitment (ADA, 38A-11) set forth in Composite Attachment A, Section VI. MINING that would enable waste clays originating from other counties to be disposed in specific existing Hillsborough County Clay Settling Areas (CSA). On September 26, 2018, the Phosphate Mining Hearing Master reviewed the request for amendment and filed a recommendation with the Hillsborough Board of County Commissioners. On November 14, 2018, at the BOCC Land Use Meeting the BOCC approved amending the DRI #263 Composite Development Order and Operating Permit as resolved in Resolution R18-129, subject to the terms and conditions set forth therein. Under Resolution R18-129, waste clays originating from other counties could be disposed of in existing Hillsborough County Clay Settling Areas through November 14, 2023.

On June 27, 2023, Mosaic Fertilizer, L.L.C. (Mosaic) proposed and submitted an application to amend Hillsborough County Mines Development of Regional Impact DRI #263 Composite Development Order and Operating Permit Developer Commitment (ADA, 38A-11) set forth in Composite Attachment A, Section VI. MINING that would enable waste clays originating from Hardee county to continue to be disposed in specific existing Hillsborough County Clay Settling Areas. On September 13, 2023, the Phosphate Mining Hearing Master reviewed the request for amendment and filed a recommendation with the Hillsborough Board of County Commissioners. On November 7, 2023, at the BOCC Land Use Meeting the BOCC approved amending the DRI #263 Composite Development Order and Operating Permit as resolved in Resolution R23-095, subject to the terms and conditions set forth therein.

Resolution R23-095 provides that certain designated clay settling areas within Hillsborough County (L-1, L-2, L-3, F-4, F-5 and F-7) may accept clays mined by Mosaic within Hardee County, until such time as the clay settling areas are utilized to their full design storage capacity, and before November 15, 2028 unless expressly extended. The Resolution contains annual reporting requirements to monitor compliance with this condition. Section 2 Condition C. of Resolution R23-095 provides: *On each anniversary of this Resolution, Mosaic shall report to the County's Development Services Department the amount of clay from outside Hillsborough County deposited in Hillsborough County clay settling areas in the previous year. This information shall be*

reported to the Hillsborough County Board of County Commissioners annually as part of the report referenced in Section 2.E. below., and Condition 2.E. of Resolution R23-095 provides: At a minimum, the annual reports shall include the following clay balance information in a table with the report signed and sealed by a licensed professional engineer: total volume of clay processed in Hillsborough County, the volume of clay deposited in the Hillsborough County CSAs, the remaining available volume for clay disposal in the Hillsborough County CSAs, the volume of clays mined from Hillsborough County and deposited in the Hillsborough County CSAs, the volume of clays mined from Hardee County and deposited in the Hillsborough County, clays deposited in each clay settling area in tons, and the remaining available volume in acre-feet and tons. In addition, the annual reports shall include any correspondence and/or data related to compliance with FDEP's Phosphate Management Facility Permit (PMFP) and any modification or change to the CSAs.

This report is for 2023/2024, the first annual reporting period since the BOCC approval of Resolution 23-095 and the fifth annual reporting period since the initial BOCC approval of Resolution R18-129 for importing an amount of clays determined to be from Hardee County into Hillsborough County clay settling areas L-1, L-2, L-3, F-4, F-5 and F-7.

<u>Analysis</u>

The Public Utilities Environmental Services Division reviewed the Clay Settling Pond Utilization Data provided by Mosaic staff in a submittal dated November 18, 2024. Mosaic reported for the period November 1, 2023, through October 31, 2024, approximately 1.77 million tons of clays were deposited in Hillsborough County Clay Settling Areas (CSAs) F-2D, F-5 and F-7, where CSA F-2D is utilized as a staging area prior to transporting clays to other CSAs for final deposition. Hillsborough County clays production for the same period was approximately 0.03 million tons. Accordingly, 6.11 million tons of clays were imported into Hillsborough County during the period November 1, 2023, through October 31, 2024. Approximately 1.74 million tons were deposited into Hillsborough County CSAs under Resolution R23-095; the remainder, 4.37 million tons were returned to Hardee County.

Mosaic Fertilizer, L.L.C. reports there were no FDEP Phosphate Management Facility Permit modifications or compliance issues with clay settling areas L-1, L-2, L-3, F-4, F-5 and F-7 during the 2023-2024 reporting year.

Conclusion

Based on Mosaic's provided data, Mosaic appears to be in compliance with Resolution R23-095 enabling existing clay settling areas L-1, L-2, L-3, F-4, F-5 and F-7 within DRI #263 to accept clays from Hardee County until such time as each clay settling area is utilized to the full design storage capacity.

Attachment 1: 2023-2024 Annual Clay Settling Area Report



Mosaic Fertilizer, L.L.C. 13830 Circa Crossing Drive Lithia, Florida 33547 Tel 813.500.6300 www.mosaicco.com

Via Electronic Delivery

November 18, 2024

Mr. Jeffry Greenwell Section Manager Public Utilities Department 332 N. Falkenburg Road Tampa, Florida 33619

RE: Hillsborough County DRI 263 Clay Summary Report Resolution R23-095, Section 2. Conditions B-E Four Corners / Lonesome Mines

Dear Mr. Greenwell:

In accordance with the requirements of Hillsborough County Resolution R23-095, Section 2. Conditions B – E for the Four Corners / Lonesome Mine in southeast Hillsborough County, please find attached a Clay Summary Report for the reporting period of 11/1/2023 through 10/31/2024. Based on my review of production data for the year and the latest available survey data for the applicable clay settling areas, the attached report summarizes the clay storage in Hillsborough County as of October 31, 2024.

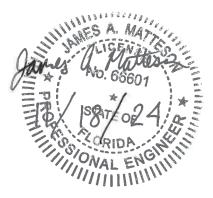
If you have any additional questions or require additional information, please feel free to contact me at (813) 267-6343.

Sincerely,

James a. Mattern

James A. Matteson, P.E. Florida Registration 66601 Geotechnical Engineer Lead

Cc: Tony Alhomsi – Hillsborough County Ed Coppock – Hillsborough County Mike Carter – Hillsborough County Sam Elrabi – Hillsborough County Adam Gormly – Hillsborough County Kevin Moran – Hillsborough County Kim Cruz – Hillsborough County Nancy Takemori – Hillsborough County Mike Thompson – Hillsborough County Shelley Thorton – Mosaic Jake Dotson – Mosaic Laura Morris – Mosaic Lorelei Duke – Mosaic



Hillsborough County Clay Summary for Reporting Period of 11/01/2023 - 10/31/2024

1)	1) The total volume of clay processed in Hillsborough County;	32,361 tons	tons
2)	2) The volume of clay deposited in the Hillsborough County CSAs;	see below	
3)	3) The remaining available volume for clay disposal in the Hillsborough County CSAs;	see below	
4)	4) The volume of clays mined from Hillsborough County and deposited in the Hillsborough County CSAs;	32,361 tons	tons
5)	5) The volume of clays mined from Hardee County and deposited in the Hillsborough County CSAs;	1,739,050 tons	tons
(9	6) The volume of clays mined from Hardee County and returned to Hardee County;	4,366,726 tons	tons
Ŕ	7) Provide any correspondence and/or data related to compliance with FDEP's PMFP and relating to any modification or change related to the CSAs;	N/A	

Question 3	Remaining Available Volume (as of 10/31/2024)	Tons (Assumes 11/15/28 Disposal End Date*)	1,160,825	1,288,280	1,316,525	2,245,040	2,790,533	1,860,578	2,529,487	13,191,269	
		Acre - Feet	3,458	3,838	3,922	6,688	8,313	5,542	7,535	39,295	
Question 2	Clay Tons Deposited 11/1/23 to	10/31/24	0	0	0	1,551,586	0	8,771	211,053	1,771,411	
	CSA		L-1	L-2	L-3	F-2D	F-4	F-5	F-7	Totals	

* Per Condition Section 2.A. of R23-095, regardless of whether each CSA is utilized to its full design storage capacity, this authorization to deposit clays from Hardee County in Hillsoborough County shall expire on November 15, 2028

Attachment 2: Additional Information

From:	Matteson, James
То:	Cruz, Kimberly
Subject:	RE: Mosaic Four Corners / Lonesome Mines DRI 263 Resolution R23-095 - Clay Summary Report
Date:	Monday, January 13, 2025 2:10:04 PM
Attachments:	image002.png
	image003.png
	image004.png
	<u>FL0036412-036-Mosaic Four Corners Mine DCI - F-2A Staff Gauge.msg</u>
	FL0036412-036-Mosaic Four Corners Mine.pdf
	FL0033332-019-Mosaic Lonesome Mine.pdf
Attachments:	image003.png image004.png FL0036412-036-Mosaic Four Corners Mine DCI - F-2A Staff Gauge.msg FL0036412-036-Mosaic Four Corners Mine.pdf

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Good afternoon Kim,

We did not have any permit modifications or compliance issues related to Hillsborough clay settling areas during the reporting year.

We did have a Dam Compliance Inspection with the FDEP on July 22 at the Four Corners Mine (includes F-2A, F-2B, F-2C, F-2D, F-4, F-5, and F-7 CSAs).

An action item from the inspection was to install a staff gauge in the F-2A CSA.

Cindy Zang-Torres with the Hillsborough County Environmental Protection Commission attended the inspection and was copied on the correspondence with the FDEP.

We also had a Dam Compliance Inspection with the FDEP on June 26 at the Lonesome Mine (includes L-1, L-2, and L-3 CSAs).

Ed Coppock with the Hillsborough County Environmental Protection Commission attended the inspection and was copied on the correspondence with the FDEP.

For reference, I've included the inspection reports and any follow-up correspondence with the FDEP from these inspections.

Please let me know if you have any additional questions.

Jay

Jay Matteson, P.E. Geotechnical Engineer Lead *Mosaic Fertilizer, LLC* Cell: 813-267-6343 Email: James.Matteson@mosaicco.com

From: Cruz, Kimberly <CruzKi@hcfl.gov>
Sent: Monday, January 13, 2025 1:31 PM
To: Matteson, Jay - South Pasture Mine <James.Matteson@mosaicco.com>
Subject: RE: Mosaic Four Corners / Lonesome Mines DRI 263 Resolution R23-095 - Clay Summary Report

CAUTION-EXTERNAL EMAIL: Do not click links or attachments unless you know the content is safe. If unsure, click the Phish Alert button or contact the Global Service Desk.

Good afternoon,

I hope this email finds you well. Currently Hillsborough County has one question. Resolution R23-095 states the following: *In addition, the annual reports shall include any correspondence and/or data related to compliance with FDEP's Phosphate Management Facility Permit (PMFP) and any modification or change to the CSAs.* Was there any clay settling area FDEP permit modifications or compliance issues with the clay settling areas L-1, L-2, L-3, F-4, F-5, and/or F-7 during the reporting year?

Thank you,

Kim Cruz Environmental Supervisor Environmental Services Division

E: <u>CruzKi@hcfl.gov</u> P: (813) 276-8370

332 N. Falkenburg Rd. Tampa, FL 33619 HCFL.gov

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Hillsborough County Florida

Please note: All correspondence to or from this office is subject to Florida's Public Records law.

From: Cruz, Kimberly

Sent: Tuesday, November 19, 2024 3:33 PM

To: Matteson, James < James. Matteson@mosaicco.com >

Cc: Coppock, Ed <<u>CoppockE@epchc.org</u>>; Carter, Kevin (Mike) <<u>CarterK@hcfl.gov</u>>; Elrabi, Sam <<u>Elrabi@epchc.org</u>>; Gormly, Adam <<u>GormlyA@hcfl.gov</u>>; Moran, Kevin <<u>MoranK@hcfl.gov</u>>; Takemori, Nancy <<u>TakemoriN@hcfl.gov</u>>; Thompson, Michael <<u>Thompson@epchc.org</u>>; Shelley.Thornton <<u>Shelley.Thornton@mosaicco.com</u>>; Jake.Dotson <<u>Jake.Dotson@mosaicco.com</u>>; Morris, Laura - FishHawk <<u>laura.morris@mosaicco.com</u>>; Duke, Lorelei <<u>Lorelei.Duke@mosaicco.com</u>>; Adams, Sandy - FishHawk <<u>sandy.adams@mosaicco.com</u>>; Greenwell, Jeffry <<u>GreenwellJ@hcfl.gov</u>>

Subject: RE: Mosaic Four Corners / Lonesome Mines DRI 263 Resolution R23-095 - Clay Summary Report

Good afternoon,

This correspondence serves as notification the Hillsborough County Environmental Services has

received the Clay Settling Area Annual Summary Report.

Thank you,

Kim Cruz Environmental Supervisor

Environmental Services Division

E: <u>CruzKi@HCFL.gov</u> P: (813) 276-8370

332 N. Falkenburg Rd., Tampa, FL 33619 HCFL.gov

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Hillsborough County Florida

Please note: All correspondence to or from this office is subject to Florida's Public Records law.

From: Matteson, James < James.Matteson@mosaicco.com >

Sent: Monday, November 18, 2024 11:34 AM

To: Greenwell, Jeffry <<u>GreenwellJ@hcfl.gov</u>>

Cc: Coppock, Ed <<u>CoppockE@epchc.org</u>>; Carter, Kevin (Mike) <<u>CarterK@hcfl.gov</u>>; Elrabi, Sam <<u>Elrabi@epchc.org</u>>; Gormly, Adam <<u>GormlyA@hcfl.gov</u>>; Moran, Kevin <<u>MoranK@hcfl.gov</u>>; Cruz, Kimberly <<u>CruzKi@hcfl.gov</u>>; Takemori, Nancy <<u>TakemoriN@hcfl.gov</u>>; Thompson, Michael <<u>Thompson@epchc.org</u>>; Shelley.Thornton <<u>Shelley.Thornton@mosaicco.com</u>>; Jake.Dotson <<u>Jake.Dotson@mosaicco.com</u>>; Morris, Laura - FishHawk <<u>laura.morris@mosaicco.com</u>>; Duke, Lorelei <<u>Lorelei.Duke@mosaicco.com</u>>; Adams, Sandy - FishHawk <<u>sandy.adams@mosaicco.com</u>> Subject: Mosaic Four Corners / Lonesome Mines DRI 263 Resolution R23-095 - Clay Summary Report

External email: Use caution when clicking on links, opening attachments or replying to this email.

Jeffry:

Pursuant to Hillsborough County Resolution R23-095, Section 2, Conditions B – E, attached, please find the Hillsborough County Clay Summary Report for Mosaic's Four Corners and Lonesome Mines for the reporting period of 11/01/23 - 10/31/24.

Please let me know if you have any questions.



Jay Matteson, P.E. | Geotechnical Engineer Lead Mosaic Fertilizer, LLC Mailing Address: 13830 Circa Crossing Drive, Lithia, FL 33547 Physical Address: North Pasture Office, 6209 N. County Road 663, Bowling Green, FL 33834 Cell: 813.267.6343 | Email: james.matteson@mosaicco.com www.mosaicco.com | Responsibility & Sustainability | Awards & Recognition

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FLORIDA DEPARTMENT OF Environmental Protection

Division of Water Resource Management Phosphate Management Program 13051 North Telecom Parkway, Suite 101 Temple Terrace, FL 33637 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

July 2, 2024

SENT BY EMAIL TO: (Santino.Provenzano@mosaicco.com)

Mosaic Fertilizer, L.L.C.

13830 Circa Crossing Drive Lithia, Florida, FL 33547-3953

- Attn: Mr. Santino A. Provenzano Director-Environmental
- RE: Lonesome Mine Permit No. FL0033332 PA No.: FL0033332-019-IW1S/NR Dam Compliance Inspection

Dear Mr. Provenzano:

On June 26, 2024, Department personnel conducted a Dam Compliance Inspection (DCI) at Lonesome Mine. Based on the information provided during the inspection, the facility was determined to be in-compliance. A copy of the inspection report is attached for your records.

Should you have any questions or comments, please contact Derrick Hudson at (813) 470-5915 or via electronic mail at <u>Derrick.S.Hudson@FloridaDEP.gov</u>.

Sincerely,

Lance Kautz Environmental Administrator Florida Department of Environmental Protection Phosphate Management Program Division of Water Resource Management Mosaic Fertilizer, L.L.C.- Lonesome Mine Dam Compliance Inspection (DCI) Permit No.: FL0033332

COPY SENT BY EMAIL TO:

Alan Lulf, Mosaic (<u>Alan.Lulf@mosaicco.com</u>) James Matteson, Mosaic Fertilizer (<u>James.Matteson@mosaicco.com</u>) Robert Bennett, Mosaic (<u>Robert.Bennett@mosaicco.com</u>) Scott Wuitschick, Mosaic (<u>Scott.Wuitschick@mosaicco.com</u>) Edward G. Coppock, P.E. Hillsborough County (<u>coppocke@epchc.org</u>) Lance Kautz, FDEP (<u>Lance.Kautz@FloridaDEP.gov</u>)

Enclosure: Dam Compliance Inspection (DCI)

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION **WASTEWATER** COMPLIANCE INSPECTION REPORT

Facility Name and Physical Address					WAFR ID			County Entry				Entry Time
	Fertilizer, LL	.C –		FL0033332				sboroug	h 6	/26/2024		9:40 AM
	me Mine	D 1										
	Lonesome Mir FL 33547	ne Rd.		Facili	y Phon	e #			E	xit Date		Exit Time
Litilita,	12 555 17				289-07				6	/26/2024		12:00 PM
LAT	27	0	44		0	4.35 "						
LONG	82	0	7			2.67 "						
Name(s) o	f Field Represen	tatives(s	s) and T	Title (or Certification #		Email				Phone
James M	latteson				Superi	ntendent Geotech	1	James.N	Matteson@mosaic	co.com		813-267-6343
Robert B	Bennet				1				Bennet@mosaicco			
Name & A	Address of Permi	ittee / De	esignate	ed Rep.	Ti	tle		Emai	1		Pł	hone
Santino I	Provenzano				Dir	ector, Environme	ental	Santi	no.Provenzano@mc	saicco.com	ı 8	813-500-6853
						1						
Inspection	а Туре	D	С	Ι		Samples Taken(Y	//N): N	Sample	ID#: NA		Sam	ples Split (Y/N): N
🗆 Dom	estic X I	ndust	rial									
IC =	= In Compliance:	MC = M	linor O	ut of Con		FACILITY COMPL NC = Out of Compl				$\cdot NA = Not$	Applic	able; NE = Not Evaluated
	Signi	ficant No			riteria S	hould be Reviewed w		of Complia	ance Ratings Are Give	n in Areas N		by a "♦ "
	PERMITS/OR	DERS				F MONITORING GRAM		FACILITY OPERA		ATIONS		EFFLUENT/DISPOSAL
IC	1. ♦ Permit]	NE		aboratory	IC	C 6. Facility Site Re		Review NE		9. ♦ Effluent Quality
IC	2. Complia	ance]	NE	4. Sampling		NE	7. Flow Measuremen		urement NI		10. ♦ Effluent Disposal
	Schedule	s										
]	IC		Records & Reports	IC		Operation & NA Maintenance			11. Biosolids
										N	E	12. • Groundwater
NA	14. Other									N	A	13. ♦ SSO Survey
F 114			C.			~ !!					~	
Facility a	nd/or Order C	Complia	ince St	atus:	X In	-Compliance		Out-O	f -Compliance	Signi	ficant	t-Out-Of-Compliance
Recomme	nded Actions: P	lease	reviev	w the f	ollow	ing report.						
Name(s) and Signature(s) of Inspector(s)								District Office/Pho	ne Number		Date	
Derrick Hudson									SWPM/ 813-470-5915			7/1/2024
Derric	6 Hidam											
- Secure	R Muadon											
Name and Signature of Reviewer							District Office/Phone Number		ne Number		Date	
Lance K	autz								SWPM/ 813-470)-5909		7/2/2024
Lamada	the second se											

Single Event Violations (*SNC SEVs)										
Check for Yes	Evaluation Area	Description	Finding Description	Finding ID						
	Permit	Effluent Violations - Unapproved Bypass	Wastewater was diverted from a portion of the treatment process without department approval.	UNBY						
	*Permit	Permit Violations - Discharge Without a Valid Permit	The facility was operating without a permit or with an expired permit.	UPHI						
	Permit	Permit Violations - Failure to Submit Timely Permit Renewal Application	The permittee failed to submit an application to renew the existing permit at least 180 days prior to expiration.	PFSA						
	Laboratory	Management Practice Violations - Laboratory Not Certified	The laboratory was not certified by the Florida Department of Health and therefore is not certified to meet NELAC standards.	LNCE						
	Sampling	Monitoring Violations - Analysis not Conducted	The facility failed to collect and/or analyze samples as required by permit or enforcement action.	ANCV						
	Sampling	Monitoring Violations - Failure to Monitor for Toxicity Requirements	The facility failed to collect and/or analyze routine or follow-up toxicity samples.	FTOX						
	Records and Reports	Management Practice Violations - Failure to Develop Adequate SPCC Plan	The facility failed to develop or maintain their Spill Prevention Control and Countermeasures (SPCC) plan.	FSPC						
	Records and Reports	Management Practice Violations - Failure to Maintain Records	The facility failed to maintain records for the required retention period.	FMRR						
	Records and Reports	Reporting Violations - Failure to Notify	The permittee failed to notify the department of any event or activity that requires notification as required by permit or rule.	RSWP						
	Records and Reports	Reporting Violations - Failure to Submit DMRs	The permittee failed to submit any DMR required by rule, permit, or enforcement action in a timely manner.	FDMR						
	Records and Reports	Reporting Violations - Failure to submit required report (non-DMR, non-pretreatment)	The facility failed to submit any report required by rule, permit, enforcement action or inspection activity except for DMRs.	FRPT						
	Facility Site Review	Management Practice Violations - Improper Land Application (non-503, non-CAFO)	The land application system was not being maintained.	LASN						
	Flow Measurement	Monitoring Violations - No Flow Measurement Device	The facility failed to install a flow measurement device, an approved flow measurement device, or a working flow measurement device.	NOFL						
	Operation and Maintenance	Management Practice Violations - Improper Operation and Maintenance	The facility failed to follow their operation and maintenance plan/manual or their Biosolids Nutrient Management Plan.	IONM						
	Operation and Maintenance	Management Practice Violations - Inflow/Infiltration (I/I)	The facility had an inflow and infiltration problem causing collection system issues and/or operational issues.	ININ						
	Operation and Maintenance	Management Practice Violations - No Licensed/Certified Operator	The facility was being operated without a certified operator or by an operator that is not licensed for the size of plant.	ONCO						
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute toxicity has been documented through follow-up tests.	EATX						
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent chronic toxicity has been documented through follow- up tests.	ЕСТХ						
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute or chronic toxicity has been documented in the effluent through the use of routine and follow-up tests.	ЕТОХ						
	Effluent Quality	Effluent Violations - Narrative Effluent Violation	The facility violated a permit or enforcement narrative effluent limit.	XNEV						
	*Effluent Quality	Effluent Violations - Reported Fish Kill	The facility had a discharge of wastewater that resulted in a fish kill.	XFSH						
	Sanitary Sewer Overflow Survey	WW SSO - Discharge to Waters	A sewage spill from any components of a collection/transmission system or from a treatment plant reached surface waters including stormwater conveyance system or drainage ditch.	SSO1						
	Sanitary Sewer Overflow Survey	WW SSO - Failure to Maintain Records or Meet Record Keeping Requirements	The facility failed to keep routine documentation and reporting records of spills, and/or operation and maintenance activities on the collection/transmission system.	SSO2						
	Sanitary Sewer Overflow Survey	WW SSO - Failure to monitor	The facility failed to collect and/or analyze bacteriological samples for sewage spills that reached surface waters.	SSO3						
	Sanitary Sewer Overflow Survey	WW SSO - Failure to report violation that may endanger public health 122.41(1)(7)	The facility failed to report a sewage spill within 24 hours of discovery.	SSO4						
	Sanitary Sewer Overflow Survey	WW SSO - Improper Operation and Maintenance	The facility failed to perform routine preventative maintenance to keep the collection/transmission system in good working order.	SSO5						
	Sanitary Sewer Overflow Survey	WW SSO - Overflow to Dry Land	A sewage spill from any part of a collection/transmission system or treatment plant that did not make it to surface waters, i.e., stormwater collection system, drainage ditch, stream, pond, or lake.							

Facility Treatment Summary: Mosaic Fertilizer, L.L.C.'s (Mosaic's) Fort Lonesome Mine operations include phosphate mining, phosphatic clay settling areas, sand tailings disposal areas/reclamation related activities and a mine water recirculation system. The mined ore is slurried within dragline associated pits and pumped via pipeline to the beneficiation plant at the Four Corners Mine [FL0036412] where the sand is separated from the phosphate rock (product) by washing, screening and double flotation. Clays from the Four Corners Beneficiation plant are pumped to Clay Settling Areas (CSAs) across the Four Corners and Fort Lonesome (CSAs L-1, L-2, and L-3) sites. A hydrological connection exists between the Fort Lonesome Mine and the Four Corners Mine (FL0036412). This permit authorizes the transfer of surplus water for environmental safeguard and management purposes between the above referenced mine facilities and recognizes boundary overlaps including mining, reclamation, and stormwater management activity in the footprint of these mines. Decanted water from the clay settling area is discharged into the mine recirculation ditch system for reuse and discharged, as necessary, through outfalls (see Table 1) authorized by this permit. Sand tailings are pumped as slurry to mined areas for use as reclamation backfill. The monitoring requirements for ground water discharges from sand tailings areas are also covered under this permit.

<u>1.</u> •**<u>Permit:</u>** In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	12/13/2018
Date Permit Expires	12/12/2023
Permit Renewal Application due by	06/15/2023
Administrative or Judicial Orders?	N/A

1.1 <u>Observation</u>: The current permit was available for review. The permit renewal application was submitted June 15, 2023, and is still under review by the department.

2. • Compliance Schedules: In-Compliance

Compliance Schedule in Permit met?	Yes
Compliance Schedules in Order are being met?	Not Applicable

2.1 <u>Observation</u>: The compliance schedules and BMP3 were available for review and all documents were up to date. The permit contains the following compliance schedule items (**Table 1**), which have been met:

Table 1: Schedule Items

Item No.	Description	Due	Most Recent Received			
1	Continue implementing the existing BMP3 Plan	Effective date of permit	December 13, 2018			
2	BMP3 Progress/Update Reports	Effective date of permit plus 1 year, and continuing annually	Updated on June 11, 2024			
3	Submit In-Stream Biological Monitoring Stations	Within 90 days of permit issuance. (permit Condition VI.2)	Completed on March 11, 2019			

- 3. Laboratory: Not Evaluated
- 4. Sampling: Not Evaluated
- 5. Records and Reports: In-Compliance
 - 5.1 <u>Observation</u>: All records were available and up to date (**Table 2**).

 Table 2: Records and Reports

Documents/Records reviewed	Time frame
Annual Dam Inspection [Rule 672.770 (5),	Inspection completed by Tom Leto,
FAC]	P.E., of Ardaman. The report was
	submitted on July 21, 2023.
Annual Dam Training [Rule 672.800, FAC]	Training completed by Tom Leto,
	P.E., and Brian D. Runkles, P.E. of
	Ardaman on Aug. 3, 10, 17, & 24,
	2023 also Nov. 1 & 11, 2023. Twenty-
	Four Mosaic employees attended.
BMP3 Plan [Permit Condition VI1]	BMP3 Plan was updated on June 11,
	2024 by Alan Lulf. The contacts and
	reporting programs were updated
Contingency Plan [Rule 62-627.550, FAC]	Plan revised May of 2017 for L1, L2
	and L3. The contact sheet was updated
	September 2023.
Hurricane Plan	Plan Updated May 14, 2024 signed by
	Alan Lulf. There were various
	formatting changes made.

6. Facility Site Review: In-Compliance

6.1 <u>Observation</u>: Facility was secured and appeared to be well maintained. The grass was trimmed to an appropriate level. All staff gauges were readable and appropriately installed.

7. Flow Measurement: Not Evaluated

8. • Operation and Maintenance: In-Compliance

- 8.1 <u>Observation</u>: The facility was operating in accordance with the description on the permit.
- 8.2 <u>Observation</u>: Toe and Crest roads drains were being repaired as permitted.
- 8.3 <u>Observation</u>: The following recommendations (shown in *italics* below) were made by Tom Leto P.E. of Ardaman during the 2022 Annual Dam Inspection Report Mosaic's response is shown in **bold**.

- 1. L1
 - a. Lower the hydraulic ditch water level to Elevation 115 feet (NGVD). Operationally, the hydraulic ditch needs to be operated at 116 NGVD due to a layer of clay build up.
 - b. Continue to monitor the high-level seepage band on the south wall.
 The clay level in the CSA rose and sealed the inside of the seepage, thus the seepage has stopped. A tech monitors the area once a month by foot.
- 2. L2
 - a. No maintenance requirements were noted.
- 3. L3
 - a. *Repair a washout on the southwest corner of the west stormwater channel.* **Repaired (photograph 1).**

Ponds	Minimum Dam Crest Elevations (Feet NGVD)	MaximumWeeklyDesignPondPondElevationElevationon 6/06/24(Feet(FeetNGVD)NGVD		Weekly Pond Elevation on 6/14/24 (Feet NGVD	Pond Elevations on 6/20/24 (Feet NGVD)	Pond Elevation on Day of Inspection (Feet NGVD)
L-1	160	155	149.5	149.5	149.7	150.4
L-2	145	140	<136.0	<136.0	<136.0	<136.0
L-3	145	140	131.1	131.1	131.4	132.0

9. • Effluent Quality: Not Evaluated

<u>10.</u> • **<u>Effluent Disposal:</u>** Not Evaluated

- 11. Biosolids: Not Applicable
- **<u>12.</u>** Groundwater Quality: Not Evaluated
- 13. SSO Survey: Not Applicable
- 14. Other: Not Applicable

DIGITAL PHOTOGRAPHIC LOG

- 1. Type of Camera Used: Kodak Easy share
- 2. Were the photos altered? NO YES X Explain yes: Resized
- 3. Photographer: Derrick Hudson



Photograph 1: Repaired southwest corner of the west stormwater channel.



FLORIDA DEPARTMENT OF Environmental Protection

Division of Water Resource Management Phosphate Management Program 13051 North Telecom Parkway, Suite 101 Temple Terrace, FL 33637 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

August 1, 2024

SENT BY EMAIL TO:

(Santino.Provenzano@mosaicco.com)

Mosaic Fertilizer, L.L.C.

13830 Circa Crossing Drive Lithia, Florida, FL 33547-3953

- Attn: Mr. Santino A. Provenzano Director-Environmental
- RE: Four Corners Mine Permit No. FL0036412 PA No.: FL0036412-036-IW1S/RA Dam Compliance Inspection

Dear Mr. Provenzano:

On July 22, 2024, Department personnel conducted a Dam Compliance Inspection (DCI) at the above reference facility. Based on the information provided during the inspection, the facility was determined to be in-compliance. However, please refer to *Section 5.1 and 5.2* of the report regarding water elevation measurement methodology. A copy of the inspection report is attached for your records.

Should you have any questions or comments, please contact Evelyn Sardinas at (813) 470-5914 or via electronic mail at <u>Evelyn.Sardinas@FloridaDEP.gov</u>.

Sincerely,

Lance Kautz Environmental Administrator Florida Department of Environmental Protection Phosphate Management Program Division of Water Resource Management

COPY SENT BY EMAIL TO:

Amy Young, Mosaic Fertilizer (<u>Amy.Young@mosaicco.com</u>) Scott Wuitschick, P.E., Mosaic Fertilizer (<u>Scott.Wuitschick@mosaicco.com</u>) Jay Matteson, P.E., Mosaic Fertilizer (<u>James.Matteson@mosaicco.com</u>) Robert (Bobby) Bennett, Mosaic Fertilizer (<u>Robert.Bennett@mosaicco.com</u>) Lance Kautz, FDEP (<u>Lance.Kautz@FloridaDEP.gov</u>) Evelyn Sardinas, FDEP (<u>Evelyn.Sardinas@FloridaDEP.gov</u>) Cindy Zang-Torres, P.E., EPC (<u>Torresc@epchc.org</u>)

Enclosure: Dam Compliance Inspection (DCI) Report

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION **WASTEWATER** COMPLIANCE INSPECTION REPORT

5 5			.FR ID .00364	0036412 Man			nty Entry Date natee, Hillsborough, 7/22/2024 c, Hardee					Entry Time 9:45 AM	
				ility Pho 3-581-3						Exit Da 7/22/2			Exit Time 1:00 PM
LAT	27	0	38		45.96								
LONG	02		05	۰	13.92	"							
	of Field Represent: latteson, P.E	atives(s) ar	nd Title	-	erator Cert otechnical			Email	s.Matteson@mo				Phone (813) 267-6343
Bobby E	-			Suj	perintendo m Inspect	ent of BN			ert.Bennett@mo				(863) 781-0167
Name & A	Address of Permitt	ee / Desigr	nated Rep		Title			Email				1	Phone
)r.			Directo	r-Enviror	nmental	Santino	o.Provenzano@n	nosaicc	o.com	(813) 267-6343
Inspection	1 Туре	DC	C I		Sample	es Taken(Y	//N): N	Sample ID#:					ples Split (Y/N): N
🗆 Dom	estic X In	dustria	1										
IC -		cant Non-C		e Criteria SE	ce; NC = Ou	it of Compl Reviewed v	liance; SC =	= Signific f Complia	ALUATED ant out of Compliar ance Ratings Are Gi ILITY OPERATIO	iven in A		rked b	ble; NE = Not Evaluated y a "♦ " EFFLUENT/DISPOSAL
IC	1. ♦ Permit		NE		Laborator	у	IC		acility Site Review	112		1	9. • Effluent Quality
IC	2. ♦ Complian Schedules	ice	NE	4.	Sampling		NE	7. Fl	7. Flow Measurement NI				10. ♦ Effluent Disposal
			IC	5.	 Records Reports 	s &	IC		Operation & Maintenance		NA		11. Biosolids
											NE		12. • Groundwater
NE	14. Other										NA		13. ♦ SSO Survey
Facility a	and/or Order Co	mpliance	Status:	X	In-Compl	iance		Out-O	Of -Compliance Significant-Out-Of-Compliance				-Out-Of-Compliance
Recomme	nded Actions: Ple	ase refe	r to sect	ions 5.	.1 and 5.2	•							
Name(s) a	and Signature(s) of	Inspector	(s)						District Office/P	hone Nu	mber		Date
Evelyn Sardinas Environmental Specialist III									SWPM/(813) 470-5914		014		7/31/2024
Entra													
Name and Signature of Reviewer								District Office/Phone Number			mber		Date
Lance K Environi	autz mental Adminis	strator							SWPM/(813) 470-5909				8/1/2024
Lamada													

	Single Event Violations (*SNC SEVs)						
Check for Yes	Evaluation Area	Description	Finding Description	Finding ID			
	Permit	Effluent Violations - Unapproved Bypass	Wastewater was diverted from a portion of the treatment process without department approval.	UNBY			
	*Permit	Permit Violations - Discharge Without a Valid Permit	The facility was operating without a permit or with an expired permit.	UPHI			
	Permit	Permit Violations - Failure to Submit Timely Permit Renewal Application	The permittee failed to submit an application to renew the existing permit at least 180 days prior to expiration.	PFSA			
	Laboratory	Management Practice Violations - Laboratory Not Certified	The laboratory was not certified by the Florida Department of Health and therefore is not certified to meet NELAC standards.	LNCE			
	Sampling	Monitoring Violations - Analysis not Conducted	The facility failed to collect and/or analyze samples as required by permit or enforcement action.	ANCV			
	Sampling	Monitoring Violations - Failure to Monitor for Toxicity Requirements	The facility failed to collect and/or analyze routine or follow-up toxicity samples.	FTOX			
	Records and Reports	Management Practice Violations - Failure to Develop Adequate SPCC Plan	The facility failed to develop or maintain their Spill Prevention Control and Countermeasures (SPCC) plan.	FSPC			
	Records and Reports	Management Practice Violations - Failure to Maintain Records	The facility failed to maintain records for the required retention period.	FMRR			
	Records and Reports	Reporting Violations - Failure to Notify	The permittee failed to notify the department of any event or activity that requires notification as required by permit or rule.	RSWP			
	Records and Reports	Reporting Violations - Failure to Submit DMRs	The permittee failed to submit any DMR required by rule, permit, or enforcement action in a timely manner.	FDMR			
	Records and Reports	Reporting Violations - Failure to submit required report (non-DMR, non-pretreatment)	The facility failed to submit any report required by rule, permit, enforcement action or inspection activity except for DMRs.	FRPT			
	Facility Site Review	Management Practice Violations - Improper Land Application (non-503, non-CAFO)	The land application system was not being maintained.	LASN			
	Flow Measurement	Monitoring Violations - No Flow Measurement Device	The facility failed to install a flow measurement device, an approved flow measurement device, or a working flow measurement device.	NOFL			
	Operation and Maintenance	Management Practice Violations - Improper Operation and Maintenance	The facility failed to follow their operation and maintenance plan/manual or their Biosolids Nutrient Management Plan.	IONM			
	Operation and Maintenance	Management Practice Violations - Inflow/Infiltration (I/I)	The facility had an inflow and infiltration problem causing collection system issues and/or operational issues.	ININ			
	Operation and Maintenance	Management Practice Violations - No Licensed/Certified Operator	The facility was being operated without a certified operator or by an operator that is not licensed for the size of plant.	ONCO			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute toxicity has been documented through follow-up tests.	EATX			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent chronic toxicity has been documented through follow- up tests.	ЕСТХ			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute or chronic toxicity has been documented in the effluent through the use of routine and follow-up tests.	ЕТОХ			
	Effluent Quality	Effluent Violations - Narrative Effluent Violation	The facility violated a permit or enforcement narrative effluent limit.	XNEV			
	*Effluent Quality	Effluent Violations - Reported Fish Kill	The facility had a discharge of wastewater that resulted in a fish kill.	XFSH			
	Sanitary Sewer Overflow Survey	WW SSO - Discharge to Waters	A sewage spill from any components of a collection/transmission system or from a treatment plant reached surface waters including stormwater conveyance system or drainage ditch.	SSO1			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to Maintain Records or Meet Record Keeping Requirements	The facility failed to keep routine documentation and reporting records of spills, and/or operation and maintenance activities on the collection/transmission system.	SSO2			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to monitor	The facility failed to collect and/or analyze bacteriological samples for sewage spills that reached surface waters.	SSO3			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to report violation that may endanger public health 122.41(l)(7)	The facility failed to report a sewage spill within 24 hours of discovery.	SSO4			
	Sanitary Sewer Overflow Survey	WW SSO - Improper Operation and Maintenance	The facility failed to perform routine preventative maintenance to keep the collection/transmission system in good working order.	SSO5			
	Sanitary Sewer Overflow Survey	WW SSO - Overflow to Dry Land	A sewage spill from any part of a collection/transmission system or treatment plant that did not make it to surface waters, i.e., stormwater collection system, drainage ditch, stream, pond, or lake.	SSO6			

Facility Treatment Summary:

Mosaic Fertilizer, LLC (Mosaic) operates the Four Corners Mine (Figure 1), which includes a phosphate mine and beneficiation plant. Features at the site include clay settling areas, sand tailings disposal areas, reclamation activities in mined areas, and a mine water recirculation system. The mined ore is pumped as slurry to the beneficiation plant where the sand and clays are separated from the phosphate rock (product) by washing, screening and double flotation. The generated wet phosphate rock from the beneficiation process is transported to a chemical plant for further processing or sold as a product. Decanted water from the clay settling areas is discharged into the mine recirculation ditch system for reuse. Discharges from the system are the result of rainfall contributions in excess of the available storage capacity. Sand tailings are pumped as slurry to mined areas for use as reclamation fill. The monitoring requirements for ground water discharges from sand tailings areas are also covered under this permit. A hydrological connection exists between the Four Corners Mine and the Mosaic Fort Green/Payne Creek (FL0027600) and Wingate Creek (FL0032522), Hardee South Pasture (FL0040177) and Lonesome (FL0033332) Mines. This permit authorizes the transfer of surplus water for environmental safeguard and management purposes between the above referenced mine facilities and recognizes boundary overlaps including mining, reclamation, and stormwater management activity in the footprint(s) of the mines. Furthermore, property from Mosaic Hardee South Pasture Mine (FL0040177) (about 1,110.9 acres) and property previously associated with the planned Ona Mine (about 5.477 acres) was transferred to Mosaic's Four Corners Mine. Matrix and associated mine water will be transferred across the Wingate and Fort Green properties to the Four Corners beneficiation plant for processing. This property addition brings the total Four Corners Mine footprint to approximately 47,361 acres.

Wastewater Treatment

Treatment of mine recirculation water discharged through Outfalls D-001, D-002 and D-003 primarily includes settling of solids. The possible additional treatment methodologies are addressed in the facility's BMP3 plan and include aeration, CO2 addition, sulfuric acid treatment, application of algal growth blocking dye, flocculant addition, dilution, and aluminum sulfate (Alum) treatment.

<u>1.</u> • **<u>Permit:</u>** In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	November 5, 2020
Date Permit Expires	November 4, 2025
Permit Renewal Application due by	May 8, 2025
Administrative or Judicial Orders?	N/A

1.1 <u>Observation</u>: A copy of the permit was available for review during the inspection.

2. • Compliance Schedules: In-Compliance

Compliance Schedule in Permit met?	Yes
Compliance Schedules in Order are being met?	Yes

2.1 <u>Observation</u>: The following table (**Table 1**) contains Schedule Action Items from the permit and has been modified to reflect completion dates:

Schedules	Action Item	Scheduled Completion Date	Completion Date
1.	Continue Implementing Existing BMP3 Plan.	Effective Date of Permit	Completed. Updated by Amy Young on December 5, 2022. Signed by Kenny Miller, Plant Manager, on December 12, 2022.
2.	Update new BMP3 Plan.	By January 28th of each year.	Refer to Schedule item 1 , above.
VI.2.	Submittal of Completed Form 2CS.	January 4, 2021	Completed. Submitted on January 10, 2021.
VI.3.	Submit In-Stream Biological Monitoring Stations.	Within 90 days of permit issuance, the permittee shall submit a proposal to the Department to identify appropriate locations, with geographical coordinates, for appropriate biological monitoring stations downstream of Outfalls D-001, D- 002 and D-003. The permittee shall comply with Conditions I.A.19 and I.A.20 above, only upon receipt of Department approval.	Initially submitted on February 3, 2021. Completed. Proposal for the monitoring sites was sent to FDEP on December 14, 2020. Completed. FDEP's approval letter for biological monitoring stations was sent on March 2, 2021.

 Table 1. Permit Compliance Scheduled Items.

3. Laboratory: Not Evaluated

4. Sampling: Not Evaluated

5. • Records and Reports: In-Compliance

Records/ Reports	Status
BMP3 and SPCC Plan & Training .	No updates or revisions. Approved by Alan Lulf, Facility Manager, and Amy Young, Environmental Lead, on December 6, 2023. Training was assigned on September 27, October 12, October 18, and November 8, 2023. One re-training from December 1, 2022, was also assigned. A total of 44 (hourly paid) Mosaic
	employees completed the trainings in February, March, April,

	May, July, September, October, November, and December of 2023.
Contingency Plan / Emergency Action Plan	Updated between September 2023 – December 2023; internal contact list was updated in June of 2024. Plan is reviewed annually. Emergency Action Plan (EAP) records for the following CSA's were provided for review: F-2A, F-2B, F-2C, and F-2D. Approved by Alan Lulf, General Manager, on July 23, 2024.
Annual Dam Training	Completed and submitted to FDEP on January 26, 2024. Online training was conducted by Tom Leto, P.E., & Brian Runkles, P.E., from <i>Ardaman & Associates, Inc.</i> on the following dates: August 3, 10, 17, 24 and November 1 and 11, 2023. A total of 95 Mosaic employees completed the training.
2023 Hurricane Plan	Effective May 14, 2024. Reviewed on June 7, 2024. No updates. The official name of the facilities hurricane plan is the <i>"Minerals Hurricane Procedures."</i>
Annual Third-Party Dam Inspection	Completed and submitted to FDEP on February 13, 2024. Inspection was completed on February 2, 2023, by Tom Leto, P.E., from <i>Ardaman and Associates, Inc.</i> The report was submitted to the facility on January 23, 2024. No critical conditions. The 2024 Annual Dam Inspection is currently underway.
Inspection Logs;	Weekly inspection logs were available for review. Inspections done by John Spears, Sr. Geotech Inspector II.
Weekly inspection report for week-ending July	However, daily inspection logs were not available at the time
	of the inspection; submitted via email to the Department after
18, 2024.	the inspection. Inspections done by Robert Livingston, Waste Systems Operator.

 Table 2. Records and Reports.

	Height	Water Elevation (Feet NGVD)	Week ending on 7/5/2024	ending on 7/12/2024 Water Elevation (Feet	W.E Week ending on 7/19/2024 Water Elevation (Feet NGVD)	W.E. on Inspection Date 7/22/2024 Water Elevation (Feet NGVD)	Spillway discharge (Y/N)
*F-2A	175.0	170.0	LBGB	LBGB	LBGB	168.5	Y
F-2B	190.0	185.0	Monthly	Monthly	<174.0	<174.0	N
F-2C	190.0	185.0	<179.3	<179.3	<179.3	<179.3	N
F-2D	190.0	185.0	183.4	183.7	183.7	183.5	Y

CSA	Min.	Max.	W.E.	W.E. Week	W.E Week	W.E. on	Spillway discharge
	Dam	Water	Week	ending on	ending on	Inspection	(Y/N)
	Crest	Elevation	ending	7/12/2024	7/19/2024	Date	
	Height	(Feet	on	Water	Water	7/22/2024	
	(Feet	NGVD)	7/5/2024	Elevation	Elevation	Water	
	NGVD)		Water	(Feet	(Feet	Elevation	
			Elevation	NGVD)	NGVD)	(Feet	
			(Feet			NGVD)	
			NGVD)				

F-3A	190.0	185.0	179.7	179.8	179.8	179.1	Y
F-3B	190.0	185.0	181.9	182.0	181.7	181.5	Y
F-4	175.0	170.0	<166.4	<167.0	<167.0	<167.0	N
F-5	150.0	145.0	136.7	137.0	137.0	137.0	N
F-7	154.0	149.0	142.7	142.7	142.5	143.0	Ν
F-9	154.0	149.0	145.0	145.3	145.4	145.5	Ν

Table 3. Water elevation (W.E.) measured in National Geodetic Vertical Datum (feet NGVD) for the various Clay Settling Areas (CSA).

- 5.1 <u>Observation:</u> Per facility representatives; the F-2A CSA does not have a staff gauge due to water being "dirty." In place of a staff gauge, the facility utilizes a "can" in which they drop a tape measure into, in order to acquire water elevation in Feet (NGVD).
- 5.2 <u>Observation:</u> Per Rule 62-672.780(6), F.A.C., the facility is required to have a staff gauge in place. However, if a staff gauge is unable to be installed then the facility must set an elevation for the "can" that is being utilized to acquire water elevation.

<u>Additional Comment:</u> If unable to install a staff gauge at the F-2A CSA, please provide an explanation and a proposed alternative plan in writing, to the Department.

- 6. Facility Site Review: In-Compliance
 - 6.1 <u>Observation</u>: Refer to **Figure 1** for aerial map of the Four Corners Mine. Refer to **Sections 1, 2., 5.,** above and **Section 8.,** below. The areas inspected were clean and well maintained.
- 7. Flow Measurement: Not Evaluated

8. • Operation and Maintenance: In-Compliance

8.1 <u>Observation</u>: List and statuses for recommendations made by *Ardaman & Associates, Inc.* for individual CSA impoundments from the 2024 Annual Dam Inspection. Refer to **Table 4**, below.

CSA	Recommendations	Status
F-2C	The perimeter dam enclosing Area F-2C was generally observed to be in a satisfactory condition. The spillway intake structures are in very poor condition and should continue to be monitored for weir board and internal frame distress.	Monitoring is ongoing.
	Stormwater runoff should continue to be diverted away from the southeast spillway. Crustal formation and ditching toward the north end is ongoing.	Crustal development and ditching is still ongoing.
	Continued monitoring of the two subsidence features is recommended.	Monitoring is ongoing.
F-2D	Reduction of vegetation height along the abandoned pipelines and old equipment	Completed on October 4, 2023.

	adjacent to the west toe road area of the F-	
	2D wall should be repeated as required.	
	Monitor the upper slope surfaces where	Monitoring is ongoing.
	abandoned steel pipes pass through the	
	freeboard section of the west wall near to	
	the clay slurry discharge lines. The fluid	
	level shall be maintained below the invert	
	of any pipeline that penetrates the	
	freeboard of the dam.	
	Ditch or dredge the sediment build-up at	"Cookie Cutter" dredge cutting channel on April 16,
	the northwest corner area to avoid excess	2024.
	fluid build-up at the pipeline discharge	
	areas.	
	The intake structures of the high-level	Camera inspection completed in October of 2023.
	auxiliary spillways should be monitored	Working with 3 rd party engineer to install cofferdam in
	for advancement of steel corrosion of	front of emergency spillway.
	structural members that actuate the gates	
	and corrosion in the side walls of the	
	tower barrels. The outfall pipes were	
	inspected with a CCTV camera during Q4	
	2023, and no unusual conditions noted.	
F-4	The dam enclosing Area F-4 was	Completed in September of 2023.
	generally observed to be in a satisfactory	1 1
	condition. Recommended maintenance	
	includes cutting of vegetation on the lower	
	outside slope of the north wall. High	
	Cogon grass and myrtle trees on the lower	
	outside slope near the northeast corner	
	scheduled for 04 2023.	
F-5	Replace deteriorated boards in spillways	Completed in March of 2024.
	as needed.	-
F-7	The upper parts of the return hydraulic	Monitoring is ongoing.
- /	ditch banks have experienced sloughing.	
	The cause of soil material loss on the	
	upper inside slopes may be related to	
	overbuild of the crest to form the	
	delineation berms. Monitoring only is	
	ongoing.	
F-9	The dam enclosing Area F-9 was	Toe drains completed on October 5, 2023.
- /	generally observed to be in a	
	satisfactory condition. Two toe drain	
	outlet pipes located near the northwest	
	corner require replacement. Moderate	
	erosion of the lower inside slope along	
	the west end of the north wall should be	
	monitored.	
	1 Status of the 2024 Annual Inspection Rec	<u> </u>

 Table 4. Status of the 2024 Annual Inspection Recommendations

<u>9.</u> • Effluent Quality: Not Evaluated

<u>10.</u> • **<u>Effluent Disposal:</u>** Not Evaluated

<u>11.</u> Biosolids: Not Applicable

<u>12.</u> • Groundwater Quality: Not Evaluated

13. • SSO Survey: Not Applicable

14. Other: Not Applicable

DIGITAL PHOTOGRAPHIC LOG

- 1. Type of Camera Used: iPhone 11
- 2. Digital Recording Media: iPhone 11
- 3. Were the photos altered? NO _ YES X Explain yes: Resized.
- 4. Photographer: Evelyn Sardinas

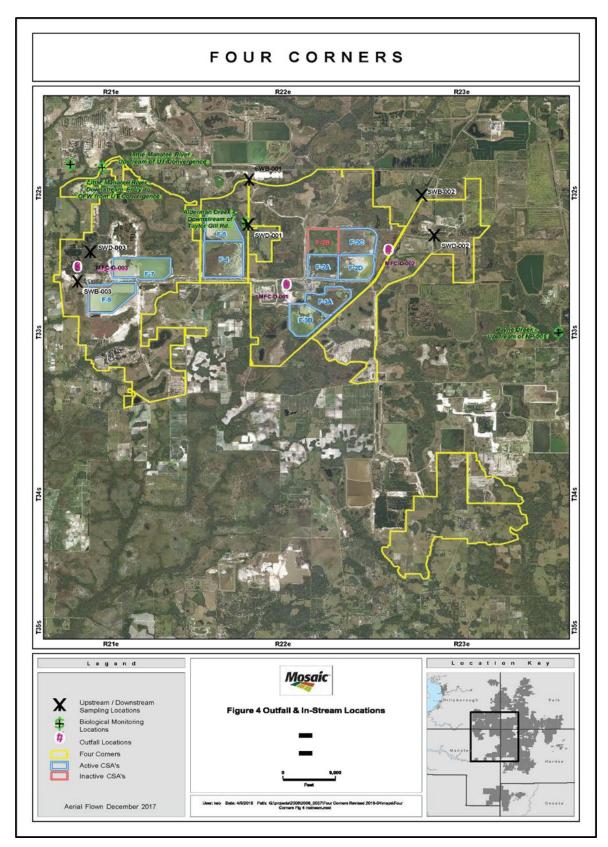


Figure 1. Outfall and In-Stream Location Figure from Permit FL0036412.

From:	Matteson, James
То:	<u>"Sardinas, Evelyn"</u>
Cc:	Zhang-Torres, Cindy; Bennett, Bobby; Young, Amy
Subject:	FL0036412-036-Mosaic Four Corners Mine DCI - F-2A Staff Gauge
Attachments:	image001.gif
	image002.png
	image003.png
	image004.png
	F-2A Staff Gauge.jpg
	FL0036412-036-Mosaic Four Corners Mine.pdf

Evelyn:

As requested in Section 5.2 of the Inspection Report from the Four Corners Mine Dam Compliance Inspection on July 22 (attached for reference), a staff gauge has been installed in the F-2A CSA. For your files, a picture of the staff gauge is attached to this email.

Please let me know if you have any questions or need anything else with regards to the inspection. Thanks,

Jay



Jay Matteson, P.E. | Geotechnical Engineer Lead Mosaic Fertilizer, LLC Mailing Address: 13830 Circa Crossing Drive, Lithia, FL 33547 Physical Address: North Pasture Office, 6209 N. County Road 663, Bowling Green, FL 33834 Cell: 813.267.6343 | Email: james.matteson@mosaicco.com www.mosaicco.com | Responsibility & Sustainability | Awards & Recognition

We help the world grow the food it needs.



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FLORIDA DEPARTMENT OF Environmental Protection

Division of Water Resource Management Phosphate Management Program 13051 North Telecom Parkway, Suite 101 Temple Terrace, FL 33637 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Shawn Hamilton Secretary

August 1, 2024

SENT BY EMAIL TO:

(Santino.Provenzano@mosaicco.com)

Mosaic Fertilizer, L.L.C.

13830 Circa Crossing Drive Lithia, Florida, FL 33547-3953

- Attn: Mr. Santino A. Provenzano Director-Environmental
- RE: Four Corners Mine Permit No. FL0036412 PA No.: FL0036412-036-IW1S/RA Dam Compliance Inspection

Dear Mr. Provenzano:

On July 22, 2024, Department personnel conducted a Dam Compliance Inspection (DCI) at the above reference facility. Based on the information provided during the inspection, the facility was determined to be in-compliance. However, please refer to *Section 5.1 and 5.2* of the report regarding water elevation measurement methodology. A copy of the inspection report is attached for your records.

Should you have any questions or comments, please contact Evelyn Sardinas at (813) 470-5914 or via electronic mail at <u>Evelyn.Sardinas@FloridaDEP.gov</u>.

Sincerely,

Lance Kautz Environmental Administrator Florida Department of Environmental Protection Phosphate Management Program Division of Water Resource Management

COPY SENT BY EMAIL TO:

Amy Young, Mosaic Fertilizer (<u>Amy.Young@mosaicco.com</u>) Scott Wuitschick, P.E., Mosaic Fertilizer (<u>Scott.Wuitschick@mosaicco.com</u>) Jay Matteson, P.E., Mosaic Fertilizer (<u>James.Matteson@mosaicco.com</u>) Robert (Bobby) Bennett, Mosaic Fertilizer (<u>Robert.Bennett@mosaicco.com</u>) Lance Kautz, FDEP (<u>Lance.Kautz@FloridaDEP.gov</u>) Evelyn Sardinas, FDEP (<u>Evelyn.Sardinas@FloridaDEP.gov</u>) Cindy Zang-Torres, P.E., EPC (<u>Torresc@epchc.org</u>)

Enclosure: Dam Compliance Inspection (DCI) Report

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION **WASTEWATER** COMPLIANCE INSPECTION REPORT

		FL0036412 Ma			unty unatee, Hillsborough, lk, Hardee		Entry 1 7/22/2			Entry Time 9:45 AM				
				ility Pho 3-581-3						Exit Da 7/22/2			Exit Time 1:00 PM	
LAT	27	0	38		45.96									
LONG	02		05	۰	13.92	"								
	of Field Represent: latteson, P.E	atives(s) ar	nd Title	-	erator Cert otechnical			Email	s.Matteson@mo				Phone (813) 267-6343	
Bobby E	-			Suj	perintendo m Inspect	ent of BN			ert.Bennett@mo				(863) 781-0167	
Name & A	Address of Permitt	ee / Desigr	nated Rep		Title			Email				1	Phone	
Santino A. Provenzano 13830 Circa Crossing Dr. Lithia, Florida 33547-3953				Directo	r-Enviror	nmental	Santino	o.Provenzano@n	nosaicc	o.com	(813) 267-6343		
Inspection	1 Туре	DC	C I		Samples Taken(Y/N): N Sam				Sample ID#: Sample ID#:			Samp	Samples Split (Y/N): N	
🗆 Dom	estic X In	dustria	1											
IC -		cant Non-C		e Criteria SE	ce; NC = Ou	it of Compl Reviewed v	liance; SC =	= Signific f Complia	ALUATED ant out of Compliar ance Ratings Are Gi ILITY OPERATIO	iven in A		rked b	ble; NE = Not Evaluated y a "♦ " EFFLUENT/DISPOSAL	
IC	1. ♦ Permit		NE		3. Laboratory		IC	6. Facility Site Revie			NE	1	9. • Effluent Quality	
IC	2. ♦ Complian Schedules	ice	NE	4.	4. Sampling		NE	E 7. Flow Measureme			NE		10. ♦ Effluent Disposal	
			IC	5.	5. ♦ Records & Reports		IC	8.♦ Operation & Maintenance			NA		11. Biosolids	
											NE		12. • Groundwater	
NE	14. Other										NA		13. ♦ SSO Survey	
Facility a	and/or Order Co	mpliance	Status:	X	In-Compl	iance		Out-O	f -Compliance		Signifi	icant-	-Out-Of-Compliance	
Recomme	nded Actions: Ple	ase refe	r to sect	ions 5.	.1 and 5.2	•								
Name(s) a	and Signature(s) of	Inspector	(s)						District Office/P	hone Nu	mber		Date	
Evelyn Sardinas Environmental Specialist III						SWPM/(813)	470-59	014		7/31/2024				
2	han													
Name and Signature of Reviewer							District Office/P	hone Nu	mber		Date			
Lance Kautz Environmental Administrator						SWPM/(813)	470-59	09		8/1/2024				
Lamada														

Single Event Violations (*SNC SEVs)							
Check for Yes	Evaluation Area	Description	Finding Description	Finding ID			
	Permit	Effluent Violations - Unapproved Bypass	Wastewater was diverted from a portion of the treatment process without department approval.	UNBY			
	*Permit	Permit Violations - Discharge Without a Valid Permit	The facility was operating without a permit or with an expired permit.	UPHI			
	Permit	Permit Violations - Failure to Submit Timely Permit Renewal Application	The permittee failed to submit an application to renew the existing permit at least 180 days prior to expiration.	PFSA			
	Laboratory	Management Practice Violations - Laboratory Not Certified	The laboratory was not certified by the Florida Department of Health and therefore is not certified to meet NELAC standards.	LNCE			
	Sampling	Monitoring Violations - Analysis not Conducted	The facility failed to collect and/or analyze samples as required by permit or enforcement action.	ANCV			
	Sampling	Monitoring Violations - Failure to Monitor for Toxicity Requirements	The facility failed to collect and/or analyze routine or follow-up toxicity samples.	FTOX			
	Records and Reports	Management Practice Violations - Failure to Develop Adequate SPCC Plan	The facility failed to develop or maintain their Spill Prevention Control and Countermeasures (SPCC) plan.	FSPC			
	Records and Reports	Management Practice Violations - Failure to Maintain Records	The facility failed to maintain records for the required retention period.	FMRR			
	Records and Reports	Reporting Violations - Failure to Notify	The permittee failed to notify the department of any event or activity that requires notification as required by permit or rule.	RSWP			
	Records and Reports	Reporting Violations - Failure to Submit DMRs	The permittee failed to submit any DMR required by rule, permit, or enforcement action in a timely manner.	FDMR			
	Records and Reports	Reporting Violations - Failure to submit required report (non-DMR, non-pretreatment)	The facility failed to submit any report required by rule, permit, enforcement action or inspection activity except for DMRs.	FRPT			
	Facility Site Review	Management Practice Violations - Improper Land Application (non-503, non-CAFO)	The land application system was not being maintained.	LASN			
	Flow Measurement	Monitoring Violations - No Flow Measurement Device	The facility failed to install a flow measurement device, an approved flow measurement device, or a working flow measurement device.	NOFL			
	Operation and Maintenance	Management Practice Violations - Improper Operation and Maintenance	The facility failed to follow their operation and maintenance plan/manual or their Biosolids Nutrient Management Plan.	IONM			
	Operation and Maintenance	Management Practice Violations - Inflow/Infiltration (I/I)	The facility had an inflow and infiltration problem causing collection system issues and/or operational issues.	ININ			
	Operation and Maintenance	Management Practice Violations - No Licensed/Certified Operator	The facility was being operated without a certified operator or by an operator that is not licensed for the size of plant.	ONCO			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute toxicity has been documented through follow-up tests.	EATX			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent chronic toxicity has been documented through follow- up tests.	ЕСТХ			
	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute or chronic toxicity has been documented in the effluent through the use of routine and follow-up tests.	ΕΤΟΧ			
	Effluent Quality	Effluent Violations - Narrative Effluent Violation	The facility violated a permit or enforcement narrative effluent limit.	XNEV			
	*Effluent Quality	Effluent Violations - Reported Fish Kill	The facility had a discharge of wastewater that resulted in a fish kill.	XFSH			
	Sanitary Sewer Overflow Survey	WW SSO - Discharge to Waters	A sewage spill from any components of a collection/transmission system or from a treatment plant reached surface waters including stormwater conveyance system or drainage ditch.	SSO1			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to Maintain Records or Meet Record Keeping Requirements	The facility failed to keep routine documentation and reporting records of spills, and/or operation and maintenance activities on the collection/transmission system.	SSO2			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to monitor	The facility failed to collect and/or analyze bacteriological samples for sewage spills that reached surface waters.	SSO3			
	Sanitary Sewer Overflow Survey	WW SSO - Failure to report violation that may endanger public health 122.41(l)(7)	The facility failed to report a sewage spill within 24 hours of discovery.	SSO4			
	Sanitary Sewer Overflow Survey	WW SSO - Improper Operation and Maintenance	The facility failed to perform routine preventative maintenance to keep the collection/transmission system in good working order.	SSO5			
	Sanitary Sewer Overflow Survey	WW SSO - Overflow to Dry Land	A sewage spill from any part of a collection/transmission system or treatment plant that did not make it to surface waters, i.e., stormwater collection system, drainage ditch, stream, pond, or lake.	SSO6			

Facility Treatment Summary:

Mosaic Fertilizer, LLC (Mosaic) operates the Four Corners Mine (Figure 1), which includes a phosphate mine and beneficiation plant. Features at the site include clay settling areas, sand tailings disposal areas, reclamation activities in mined areas, and a mine water recirculation system. The mined ore is pumped as slurry to the beneficiation plant where the sand and clays are separated from the phosphate rock (product) by washing, screening and double flotation. The generated wet phosphate rock from the beneficiation process is transported to a chemical plant for further processing or sold as a product. Decanted water from the clay settling areas is discharged into the mine recirculation ditch system for reuse. Discharges from the system are the result of rainfall contributions in excess of the available storage capacity. Sand tailings are pumped as slurry to mined areas for use as reclamation fill. The monitoring requirements for ground water discharges from sand tailings areas are also covered under this permit. A hydrological connection exists between the Four Corners Mine and the Mosaic Fort Green/Payne Creek (FL0027600) and Wingate Creek (FL0032522), Hardee South Pasture (FL0040177) and Lonesome (FL0033332) Mines. This permit authorizes the transfer of surplus water for environmental safeguard and management purposes between the above referenced mine facilities and recognizes boundary overlaps including mining, reclamation, and stormwater management activity in the footprint(s) of the mines. Furthermore, property from Mosaic Hardee South Pasture Mine (FL0040177) (about 1,110.9 acres) and property previously associated with the planned Ona Mine (about 5.477 acres) was transferred to Mosaic's Four Corners Mine. Matrix and associated mine water will be transferred across the Wingate and Fort Green properties to the Four Corners beneficiation plant for processing. This property addition brings the total Four Corners Mine footprint to approximately 47,361 acres.

Wastewater Treatment

Treatment of mine recirculation water discharged through Outfalls D-001, D-002 and D-003 primarily includes settling of solids. The possible additional treatment methodologies are addressed in the facility's BMP3 plan and include aeration, CO2 addition, sulfuric acid treatment, application of algal growth blocking dye, flocculant addition, dilution, and aluminum sulfate (Alum) treatment.

<u>1.</u> • **<u>Permit:</u>** In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	November 5, 2020
Date Permit Expires	November 4, 2025
Permit Renewal Application due by	May 8, 2025
Administrative or Judicial Orders?	N/A

1.1 <u>Observation</u>: A copy of the permit was available for review during the inspection.

2. • Compliance Schedules: In-Compliance

Compliance Schedule in Permit met?	Yes
Compliance Schedules in Order are being met?	Yes

2.1 <u>Observation</u>: The following table (**Table 1**) contains Schedule Action Items from the permit and has been modified to reflect completion dates:

Schedules	Action Item	Scheduled Completion Date	Completion Date
1.	Continue Implementing Existing BMP3 Plan.	Effective Date of Permit	Completed. Updated by Amy Young on December 5, 2022. Signed by Kenny Miller, Plant Manager, on December 12, 2022.
2.	Update new BMP3 Plan.	By January 28th of each year.	Refer to Schedule item 1 , above.
VI.2.	Submittal of Completed Form 2CS.	January 4, 2021	Completed. Submitted on January 10, 2021.
VI.3.	Submit In-Stream Biological Monitoring Stations.	Within 90 days of permit issuance, the permittee shall submit a proposal to the Department to identify appropriate locations, with geographical coordinates, for appropriate biological monitoring stations downstream of Outfalls D-001, D- 002 and D-003. The permittee shall comply with Conditions I.A.19 and I.A.20 above, only upon receipt of Department approval.	Initially submitted on February 3, 2021. Completed. Proposal for the monitoring sites was sent to FDEP on December 14, 2020. Completed. FDEP's approval letter for biological monitoring stations was sent on March 2, 2021.

 Table 1. Permit Compliance Scheduled Items.

3. Laboratory: Not Evaluated

4. Sampling: Not Evaluated

5. • Records and Reports: In-Compliance

Records/ Reports	Status
BMP3 and SPCC Plan & Training .	No updates or revisions. Approved by Alan Lulf, Facility Manager, and Amy Young, Environmental Lead, on December 6, 2023. Training was assigned on September 27, October 12, October 18, and November 8, 2023. One re-training from December 1, 2022, was also assigned. A total of 44 (hourly paid) Mosaic
	employees completed the trainings in February, March, April,

	May, July, September, October, November, and December of 2023.
Contingency Plan / Emergency Action Plan	Updated between September 2023 – December 2023; internal contact list was updated in June of 2024. Plan is reviewed annually. Emergency Action Plan (EAP) records for the following CSA's were provided for review: F-2A, F-2B, F-2C, and F-2D. Approved by Alan Lulf, General Manager, on July 23, 2024.
Annual Dam Training	Completed and submitted to FDEP on January 26, 2024. Online training was conducted by Tom Leto, P.E., & Brian Runkles, P.E., from <i>Ardaman & Associates, Inc.</i> on the following dates: August 3, 10, 17, 24 and November 1 and 11, 2023. A total of 95 Mosaic employees completed the training.
2023 Hurricane Plan	Effective May 14, 2024. Reviewed on June 7, 2024. No updates. The official name of the facilities hurricane plan is the <i>"Minerals Hurricane Procedures."</i>
Annual Third-Party Dam Inspection	Completed and submitted to FDEP on February 13, 2024. Inspection was completed on February 2, 2023, by Tom Leto, P.E., from <i>Ardaman and Associates, Inc.</i> The report was submitted to the facility on January 23, 2024. No critical conditions. The 2024 Annual Dam Inspection is currently underway.
Inspection Logs;	Weekly inspection logs were available for review. Inspections done by John Spears, Sr. Geotech Inspector II.
Weekly inspection report for week-ending July	However, daily inspection logs were not available at the time
	of the inspection; submitted via email to the Department after
18, 2024.	the inspection. Inspections done by Robert Livingston, Waste Systems Operator.

 Table 2. Records and Reports.

	Height	Water Elevation (Feet NGVD)	Week ending on 7/5/2024	ending on 7/12/2024 Water Elevation (Feet	W.E Week ending on 7/19/2024 Water Elevation (Feet NGVD)	W.E. on Inspection Date 7/22/2024 Water Elevation (Feet NGVD)	Spillway discharge (Y/N)
*F-2A	175.0	170.0	LBGB	LBGB	LBGB	168.5	Y
F-2B	190.0	185.0	Monthly	Monthly	<174.0	<174.0	N
F-2C	190.0	185.0	<179.3	<179.3	<179.3	<179.3	N
F-2D	190.0	185.0	183.4	183.7	183.7	183.5	Y

CSA	Min.	Max.	W.E.	W.E. Week	W.E Week	W.E. on	Spillway discharge
	Dam	Water	Week	ending on	ending on	Inspection	(Y/N)
	Crest	Elevation	ending	7/12/2024	7/19/2024	Date	
	Height	(Feet	on	Water	Water	7/22/2024	
	(Feet	NGVD)	7/5/2024	Elevation	Elevation	Water	
	NGVD)		Water	(Feet	(Feet	Elevation	
			Elevation	NGVD)	NGVD)	(Feet	
			(Feet			NGVD)	
			NGVD)				

F-3A	190.0	185.0	179.7	179.8	179.8	179.1	Y
F-3B	190.0	185.0	181.9	182.0	181.7	181.5	Y
F-4	175.0	170.0	<166.4	<167.0	<167.0	<167.0	N
F-5	150.0	145.0	136.7	137.0	137.0	137.0	Ν
F-7	154.0	149.0	142.7	142.7	142.5	143.0	Ν
F-9	154.0	149.0	145.0	145.3	145.4	145.5	Ν

Table 3. Water elevation (W.E.) measured in National Geodetic Vertical Datum (feet NGVD) for the various Clay Settling Areas (CSA).

- 5.1 <u>Observation:</u> Per facility representatives; the F-2A CSA does not have a staff gauge due to water being "dirty." In place of a staff gauge, the facility utilizes a "can" in which they drop a tape measure into, in order to acquire water elevation in Feet (NGVD).
- 5.2 <u>Observation:</u> Per Rule 62-672.780(6), F.A.C., the facility is required to have a staff gauge in place. However, if a staff gauge is unable to be installed then the facility must set an elevation for the "can" that is being utilized to acquire water elevation.

<u>Additional Comment:</u> If unable to install a staff gauge at the F-2A CSA, please provide an explanation and a proposed alternative plan in writing, to the Department.

- 6. Facility Site Review: In-Compliance
 - 6.1 <u>Observation</u>: Refer to **Figure 1** for aerial map of the Four Corners Mine. Refer to **Sections 1, 2., 5.,** above and **Section 8.,** below. The areas inspected were clean and well maintained.
- 7. Flow Measurement: Not Evaluated

8. • Operation and Maintenance: In-Compliance

8.1 <u>Observation</u>: List and statuses for recommendations made by *Ardaman & Associates, Inc.* for individual CSA impoundments from the 2024 Annual Dam Inspection. Refer to **Table 4**, below.

CSA	Recommendations	Status
F-2C	The perimeter dam enclosing Area F-2C was generally observed to be in a satisfactory condition. The spillway intake structures are in very poor condition and should continue to be monitored for weir board and internal frame distress.	Monitoring is ongoing.
	Stormwater runoff should continue to be diverted away from the southeast spillway. Crustal formation and ditching toward the north end is ongoing.	Crustal development and ditching is still ongoing.
	Continued monitoring of the two subsidence features is recommended.	Monitoring is ongoing.
F-2D	Reduction of vegetation height along the abandoned pipelines and old equipment	Completed on October 4, 2023.

	adjacent to the west toe road area of the F-	
	2D wall should be repeated as required.	
	Monitor the upper slope surfaces where	Monitoring is ongoing.
	abandoned steel pipes pass through the	
	freeboard section of the west wall near to	
	the clay slurry discharge lines. The fluid	
	level shall be maintained below the invert	
	of any pipeline that penetrates the	
	freeboard of the dam.	
	Ditch or dredge the sediment build-up at	"Cookie Cutter" dredge cutting channel on April 16,
	the northwest corner area to avoid excess	2024.
	fluid build-up at the pipeline discharge	
	areas.	
	The intake structures of the high-level	Camera inspection completed in October of 2023.
	auxiliary spillways should be monitored	Working with 3 rd party engineer to install cofferdam in
	for advancement of steel corrosion of	front of emergency spillway.
	structural members that actuate the gates	
	and corrosion in the side walls of the	
	tower barrels. The outfall pipes were	
	inspected with a CCTV camera during Q4	
	2023, and no unusual conditions noted.	
F-4	The dam enclosing Area F-4 was	Completed in September of 2023.
	generally observed to be in a satisfactory	1 1
	condition. Recommended maintenance	
	includes cutting of vegetation on the lower	
	outside slope of the north wall. High	
	Cogon grass and myrtle trees on the lower	
	outside slope near the northeast corner	
	scheduled for 04 2023.	
F-5	Replace deteriorated boards in spillways	Completed in March of 2024.
	as needed.	-
F-7	The upper parts of the return hydraulic	Monitoring is ongoing.
- /	ditch banks have experienced sloughing.	
	The cause of soil material loss on the	
	upper inside slopes may be related to	
	overbuild of the crest to form the	
	delineation berms. Monitoring only is	
	ongoing.	
F-9	The dam enclosing Area F-9 was	Toe drains completed on October 5, 2023.
- /	generally observed to be in a	
	satisfactory condition. Two toe drain	
	outlet pipes located near the northwest	
	corner require replacement. Moderate	
	erosion of the lower inside slope along	
	the west end of the north wall should be	
	monitored.	
	1 Status of the 2024 Annual Inspection Rec	<u> </u>

 Table 4. Status of the 2024 Annual Inspection Recommendations

<u>9.</u> • Effluent Quality: Not Evaluated

<u>10.</u> • **<u>Effluent Disposal:</u>** Not Evaluated

<u>11.</u> Biosolids: Not Applicable

<u>12.</u> • Groundwater Quality: Not Evaluated

13. • SSO Survey: Not Applicable

14. Other: Not Applicable

DIGITAL PHOTOGRAPHIC LOG

- 1. Type of Camera Used: iPhone 11
- 2. Digital Recording Media: iPhone 11
- 3. Were the photos altered? NO _ YES X Explain yes: Resized.
- 4. Photographer: Evelyn Sardinas

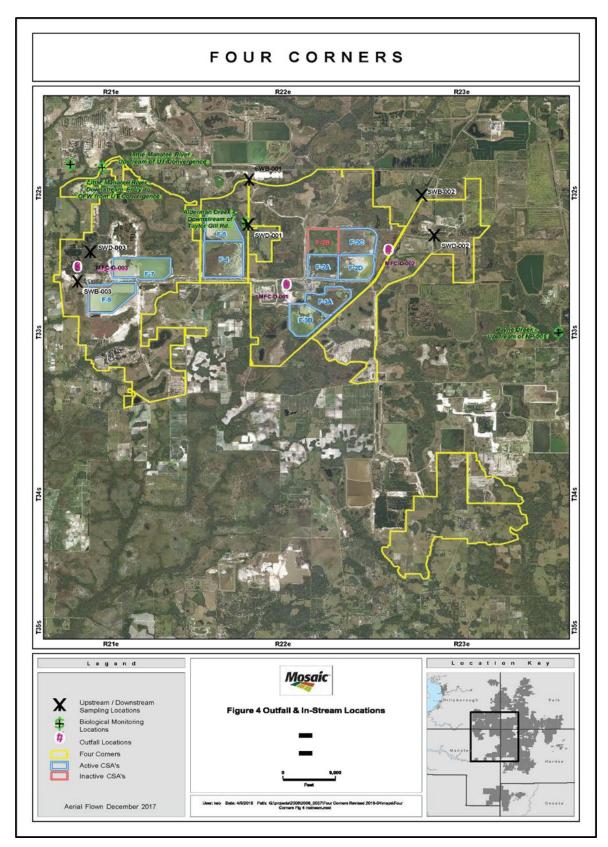


Figure 1. Outfall and In-Stream Location Figure from Permit FL0036412.

