



# 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

March 22, 2024

**SENT BY EMAIL TO:**

([Santino.Provenzano@mosaicco.com](mailto: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:** Riverview Chemical Complex  
Permit No. FL0000761  
PA No.: FL0000761-017-IW1S/NR  
Compliance Evaluation Inspection

Dear Mr. Provenzano:

On March 5, 2024, Department personnel conducted a Compliance Evaluation Inspection (CEI) at Riverview Chemical Complex (FL0000761). Based on the information provided during the inspection and areas inspected, 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 Evelyn Sardinas at (813) 470-5914 or via electronic mail at [Evelyn.Sardinas@FloridaDEP.gov](mailto:Evelyn.Sardinas@FloridaDEP.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Lance Kautz".

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

**COPY SENT BY EMAIL TO:**

Dara Ford, Mosaic ([Dara.Ford@mosaicco.com](mailto:Dara.Ford@mosaicco.com))  
Tina Madrid, Mosaic ([Tina.Madrid@mosaicco.com](mailto:Tina.Madrid@mosaicco.com))  
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Enclosure: Compliance Evaluation Inspection (CEI) Report

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

<b>Facility Name and Physical Address</b> Mosaic Fertilizer, LLC- Riverview Chemical Complex 8813 U.S. HWY 41 Riverview, FL 33547-3953	<b>WAFR ID</b> FL0000761	<b>County</b> Hillsborough	<b>Entry Date</b> 3/5/2024	<b>Entry Time</b> 09:45 AM
<b>Facility Phone #</b> 813-767-5105		<b>Exit Date</b> 3/5/2024		<b>Exit Time</b> 12:15 PM

LAT	27	°	51	'	45.50	"
LONG	82	°	23	'	24.46	"

Name(s) of Field Representatives(s) and Title	Operator Certification #	Email	Phone
Dara Ford	Sr. Mgr. Env. Compliance	<a href="mailto:Dara.Ford@mosaicco.com">Dara.Ford@mosaicco.com</a>	(863) 860-0989
Tina Madrid	Environmental Specialist	<a href="mailto:Tina.Madrid@mosaicco.com">Tina.Madrid@mosaicco.com</a>	(813) 767-5105
Robert Werner, P.E.	Sr. Manager of Engineering	<a href="mailto:Robert.Werner@mosaicco.com">Robert.Werner@mosaicco.com</a>	(813) 283-8883
Matthew Brannon	Civil Stack Engineer	<a href="mailto:Matthew.Brannon@mosaicco.com">Matthew.Brannon@mosaicco.com</a>	(813) 557-4053

Name & Address of Permittee / Designated Rep.	Title	Email	Phone
Santino Provenzano	Director Environmental	<a href="mailto:Santino.Provenzano@mosaicco.com">Santino.Provenzano@mosaicco.com</a>	(813) 781-1185

Inspection Type	C	E	I	Samples Taken(Y/N): N	Sample ID#:	Samples Split (Y/N) : N
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☐ **Domestic**     ☒ **Industrial**

FACILITY COMPLIANCE AREAS EVALUATED							
IC = In Compliance; MC = Minor Out of Compliance; NC = Out of Compliance; SC = Significant out of Compliance; NA = Not Applicable; NE = Not Evaluated Significant Non-Compliance Criteria Should be Reviewed when Out of Compliance Ratings Are Given in Areas Marked by a "♦"							
	PERMITS/ORDERS		SELF MONITORING PROGRAM		FACILITY OPERATIONS		EFFLUENT/DISPOSAL
IC	1. ♦ Permit	NE	3. Laboratory	IC	6. Facility Site Review	IC	9. ♦ Effluent Quality
IC	2. ♦ Compliance Schedules	NE	4. Sampling	IC	7. Flow Measurement	IC	10. ♦ Effluent Disposal
		IC	5. ♦ Records & Reports	IC	8. ♦ Operation & Maintenance	NA	11. Biosolids
						IC	12. ♦ Groundwater
NE	14. Other					NA	13. ♦ SSO Survey

<b>Facility and/or Order Compliance Status:</b>	<input checked="" type="checkbox"/> In-Compliance	<input type="checkbox"/> Out-Of -Compliance	<input type="checkbox"/> Significant-Out-Of-Compliance
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**Recommended Actions: Please review the following report.**

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Evelyn Sardinias Environmental Specialist III 	SWPM/ (813) 470-5914	3/20/2024
Sadira Jenarine Engineering Specialist I 	SWPM/ (813) 470-5930	3/20/2024
Name and Signature of Reviewer	District Office/Phone Number	Date
Lance Kautz Environmental Administrator 	SWPM/ (813) 470-5909	3/22/2024

Single Event Violations (*SNC SEVs)				
Check for Yes	Evaluation Area	Description	Finding Description	Finding ID
<input type="checkbox"/>	Permit	Effluent Violations - Unapproved Bypass	Wastewater was diverted from a portion of the treatment process without department approval.	UNBY
<input type="checkbox"/>	*Permit	Permit Violations - Discharge Without a Valid Permit	The facility was operating without a permit or with an expired permit.	UPHI
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	Sampling	Monitoring Violations - Analysis not Conducted	The facility failed to collect and/or analyze samples as required by permit or enforcement action.	ANCV
<input type="checkbox"/>	Sampling	Monitoring Violations - Failure to Monitor for Toxicity Requirements	The facility failed to collect and/or analyze routine or follow-up toxicity samples.	FTOX
<input type="checkbox"/>	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
<input type="checkbox"/>	Records and Reports	Management Practice Violations - Failure to Maintain Records	The facility failed to maintain records for the required retention period.	FMRR
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	Facility Site Review	Management Practice Violations - Improper Land Application (non-503, non-CAFO)	The land application system was not being maintained.	LASN
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent acute toxicity has been documented through follow-up tests.	EATX
<input type="checkbox"/>	*Effluent Quality	Effluent Violations - Failed Toxicity Test	Persistent chronic toxicity has been documented through follow-up tests.	ECTX
<input type="checkbox"/>	*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.	ETOX
<input type="checkbox"/>	Effluent Quality	Effluent Violations - Narrative Effluent Violation	The facility violated a permit or enforcement narrative effluent limit.	XNEV
<input type="checkbox"/>	*Effluent Quality	Effluent Violations - Reported Fish Kill	The facility had a discharge of wastewater that resulted in a fish kill.	XFSH
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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
<input type="checkbox"/>	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:** Wastewater discharges from Outfalls D-001 and D-05A directly to the Alafia River and from Outfall D-05B to the barge slip adjacent to the Alafia River. All three outfalls discharge non-process wastewater, treated process wastewater, and stormwater. The Alafia River in the proximity of the outfalls is tidally influenced. Stormwater runoff from non-process areas, which report to Outfalls D-021 and D-022, is treated in detention ponds where filtration and nutrient removal takes place. The existing (north) stormwater management system routes stormwater runoff from the east, north and west grassed slopes of the north portion of the East Phosphogypsum Stack to discharge through Outfall D-025. The south stormwater management system is routed to Outfall D-026, East of Old Highway 41. Refer to **Figure 1** for the existing outfalls and instream monitoring stations and **Figure 2** for the lined impoundments and monitor wells.

**1. ♦Permit:** In-Compliance

Current Permit available on-site?	Yes
Date Permit issued	August 3, 2018
Date Permit Expires	August 21, 2023
Permit Renewal Application due by	February 22, 2023
Administrative or Judicial Orders?	N/A

- 1.1 Observation: The facility was operating as described in and under the terms and conditions of the current permits. A copy of the current permit was on file and available for review at the time of the inspection.

Additional Comments: The Department reviewed the permit renewal application and existing permit and the Scheduled Action items submittals prior to the inspection. The Department received the permit renewal application in a timely manner on February 22, 2023.

**2. ♦Compliance Schedules:** In-Compliance

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

- 2.1 Observation: 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
VI.1	Continue implementing the existing BMP3 Plan	Effective date of permit	Ongoing
VI.2	Collect samples at the edge of mixing zone for water quality analysis of parameters subject to a mixing zone.	Effective date of permit + 3 months	Completed on January 14, 2019.
VI.4	Operational level attained.	Effective date of permit renewal.	February 22, 2023.
VI.7	Submit the annual construction activities schedule & timeline for the East Phosphogypsum Stack Expansion Project.	Due on or before January 28th of each year.	Completed on January 29, 2024.

Schedules	Action Item	Scheduled Completion Date	Completion Date
VI.8-VI.12	Submit the annual dam report, et. al.	Due on or before April 30th of each year.	April 29, 2023.
VI.13	Submit the annual process water inventory reduction plan status report.	Due on or before January 28th of each year.	January 30, 2024.
VI.15	Submit annual process water report on removal potential & water balance.	Due on or before January 28th of each year.	January 30, 2024.
VI.16-VI.17	Submit annual metals & fluoride data reports.	Due on or before April 30th of each year.	April 24, 2023.
VI.18	Submit Annual Report on Effectiveness of Slurry wall.	Due on or before April 30th of each year.	April 20, 2023.

Table 1. Permit Compliance Schedules

2.2 Observation: Regarding conditions VI.6-VI.17 and VI.18, facility representatives confirmed that these submittals are in progress and will be submitted to the Department no later than April 30, 2024.

3. Laboratory: Not Evaluated

4. Sampling: Not Evaluated

5. ♦Records and Reports: In-Compliance

Records/Reports	Status/Completion Dates
Discharge Monitoring Reports (DMRs)	January 1, 2024 – January 31, 2024
BMP3 Updated	Signatures for certification of review completed on September 18, 2023, by Dara Ford and Tina Madrid and updated on September 21, 2023, by Greg Howard. No revisions made.
Waste Minimization Plan (WMP)	Updated on December 24, 2023. 3 <sup>rd</sup> party verification of Water Balance signed by Ralph E. Remmert, P.E., on December 20, 2023. No revisions made.
Spill Prevention, Control, and Countermeasure (SPCC)	Updated on August 16, 2022, by Everett Sorensen, P.E. No revisions made.
Emergency Action Plan	Revised at the end of September 2023.
Hurricane Preparedness Plan	Revised yearly. Last revised in 2023.

Table 2. Records and Reports

- 5.1 Observation: The BMP3 training records were not available during the inspection and were submitted electronically to the Department on March 20, 2024. Between the dates of January 10, 2023 – December 29, 2023, 214 Mosaic employees completed computer training regarding the overall BMP3 plan.

**6. Facility Site Review: In-Compliance**

- 6.1 Observation: Refer to **Figure 1** for aerial map of the Riverview Chemical Complex layout. All industrial wastewater activities appeared to be consistent with those described in the permit. Lined impoundments of the stacks appear to be well maintained.

**7. Flow Measurement: In-Compliance**

Flow meter present and location as per permit?	Yes
Easy access to flow meter?	Yes
Date of last flow meter calibration	February 23, 2024

- 7.1 Observation: The only outfall that was discharging during the inspection was Outfall D-05B, which discharges treated process and non-process water and stormwater through a submerged diffuser pipe, into the barge slip and then into the Alafia River. At the time of the inspection the West pH discharge point measured 7.9 while the East pH discharge point measured 7.91, respectively. The outfall was discharging at a rate of 281 gallons per minute. Per facility representative, the high discharge rate was likely due to velocity.
- 7.2 Observation: Outfall D-05B Flowmeter Model Number: 12FI001-TPA SA GRAVITY FLOW was calibrated on January 5, 2024, and again on February 23, 2024, by certified Mosaic technician James Brown III. Both calibration occurrences passed, respectively.

**8. ♦Operation and Maintenance: In-Compliance**

Facility being operated as per permit?	Yes
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- 8.1 Observation: Observation: The facility appeared to be well maintained. All Outfalls and Groundwater Monitoring Wells were easily accessible and appeared well maintained. No deficiencies were observed. Refer to sections 5., 6., and 7. above and 9.and 10., below for additional information.

**9. ♦Effluent Quality: In-Compliance**

DMRs review period	January 1, 2024 – January 31, 2024
Any exceedances?	No

- 9.1 Observation: No exceedances were noted for the aforementioned review period.
- 9.2 Observation: The chain of custody forms for random parameters; refer to **a.** below, for monthly parameters for Outfall D-05B were reviewed. All reviewed chain of custody data corresponded to the data submitted for the corresponded monthly industrial DMRs.

- a. Monthly Industrial DMR for January 2024: Values for specific parameters (Flow, Ammonia, Unionized (asNH<sub>3</sub>), and pH) corresponded to the data submitted for Outfall D-05B for the month of March.

Additional Comments: Refer to Section 7. above for the discharge and calibration information for Outfall D-05B.

**10. ♦Effluent Disposal:** In-Compliance

Facility discharging?	Yes
Discharge location(s) as per permit?	Yes

- 10.1 Observation: Outfall D-05B was the only outfall discharging at 281 gallons per minute. All remaining outfalls were not discharging -Refer to Section 7.1, above and Section 10.2, below.
- 10.2 Observation: The following Outfalls were not discharging at the time of the inspection: Outfall D-05A, Outfall D-022, Outfall D-023, Outfall D-024, Outfall D-025, and Outfall D-026.
- 10.3 Observation: All outfalls were free of odors, debris, were easily accessible and all walkways appeared to be well maintained.

**11. Biosolids:** Not Applicable

**12. ♦Groundwater Quality:** In-Compliance

DMRs review period	October 1, 2023 – December 31, 2023
Any exceedances?	No
All monitoring wells accessible, secured & locked?	Yes

- 12.1 Observation: Groundwater Monitoring for the site in the existing permit consists of 51 monitoring wells consisting of 7 background wells, 40 compliance wells, and 4 new wells. The inspected monitoring wells were easily accessible, were labelled, and the well casings were covered.
- a. Fourth Quarter Part-D for 2023: Values for specific parameters (Specific Conductance, Alpha, Gross Particle Activity, and Phosphate, Ortho (as P)) corresponded to the data submitted for MWC-22 and GWMW-22S for the fourth quarter.
- b. Compliance Monitor Well MWC-22: Located at the southeast corner of the 160-Acre Cooling Pond.
- 12.2 Observation: The facility's representatives informed Department staff that protective bollards and locks were not needed for the monitoring well, as it is located within a fenced/gated property.

**13. ♦SSO Survey:** Not Applicable

**14. Other:** Not Evaluated



- 14.1 Additional Comments: On March 4, 2024, at 15:30, a critical condition occurred on the Active Stack. During construction activities at the 160-Acre Cooling Pond, an excavator tore a section of the liner while grading the slope for fabiform installation. The facility notified the Department within 24 hours, per Rule 62-620.610(20), F.A.C.

During the inspection, facility representatives provided the Department with a status report of the active repairs that were being taken to fix the torn liner and took Department representatives to the location of the torn liner. The area was covered, and a coffer dam was constructed to isolate the tear from the process water. Per facility representatives, a repair completion report will be submitted to the Department upon receipt of third-party engineers from Ardaman and Associates, Inc.; with an estimated timeline for repair completion of two weeks from date the critical condition was reported.

- a. Photographs of the torn liner taken by the Department are provided, below:
- i. ***Photograph 1:*** Standing West, facing the overall critical condition area.
  - ii. ***Photograph 2:*** Standing West, facing the area of the torn liner.
  - iii. ***Photograph 3:*** Standing SW, facing the coffer dam that was installed around the critical condition area.
  - iv. ***Photograph 4:*** Standing SW, facing dry gypsum that was used as a barrier to segregate the wet muddy central area where the critical condition occurred.
  - v. ***Photograph 5:*** Standing North, facing excavator used for cleanup of the area and mud to expose the area where the torn liner was found.

## DIGITAL PHOTOGRAPHIC LOG

1. Type of Camera Used: Canon
2. Digital Recording Media: Canon Power Shot A1300
3. Were the photos altered? NO ☐ YES ☒  
Explain yes: Resized
4. Photographer: Sadira Jenarine

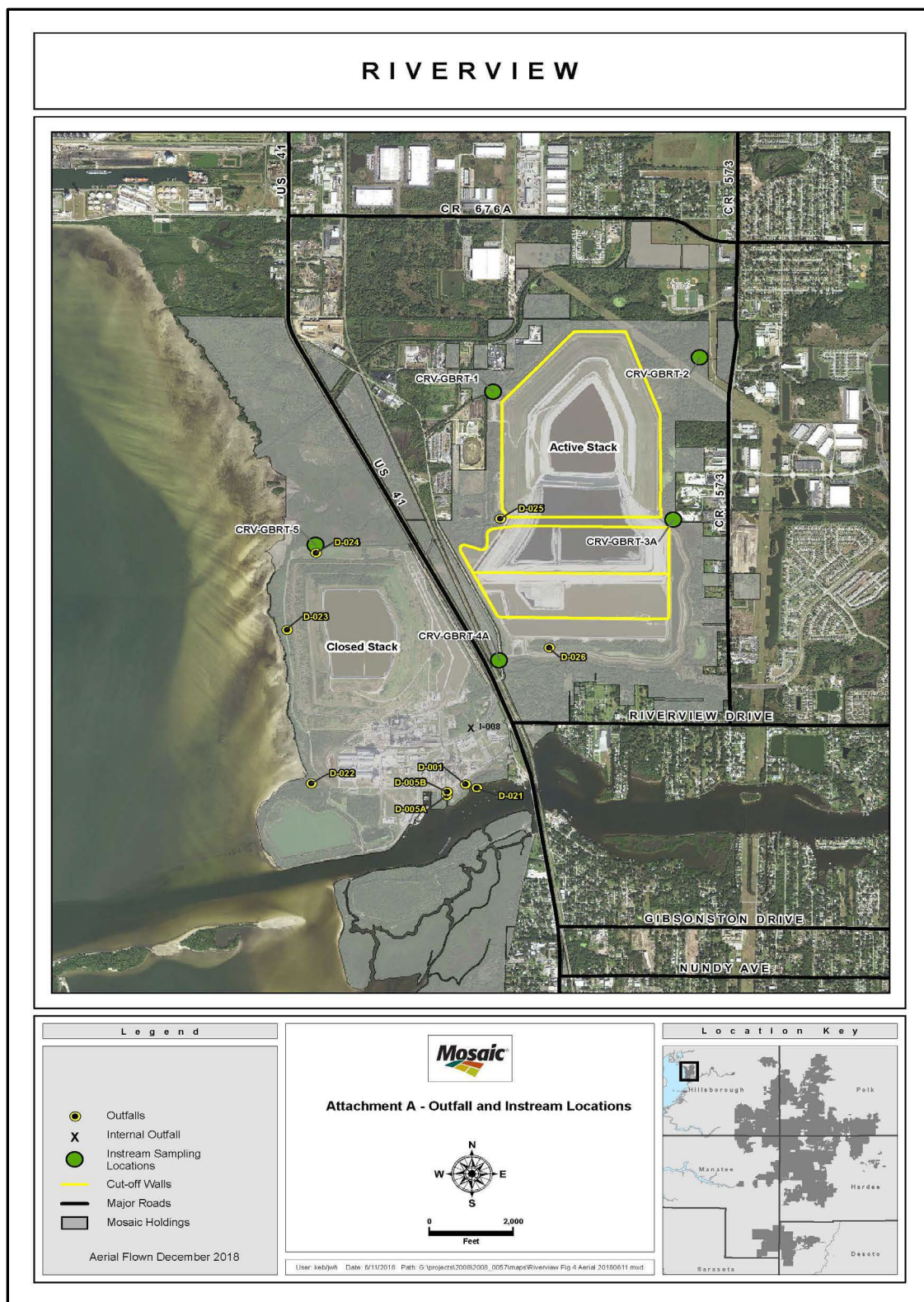


Figure 1. Outfall and Instream Locations Map from Permit FL0000761.



# Attachment C

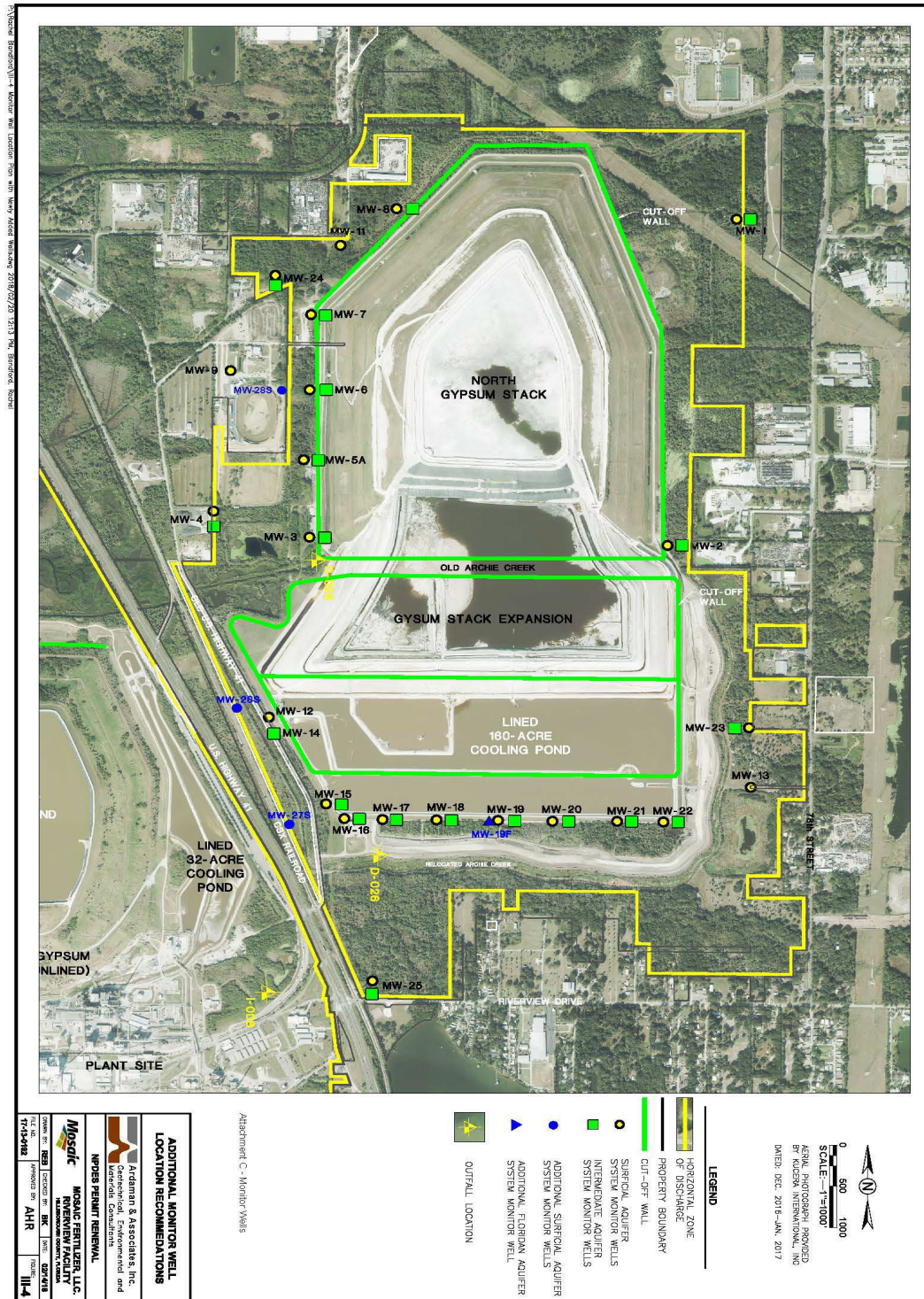


Figure 2. Additional Monitor Well Location Recommendations Map from Permit FL0000761.





Photograph 1. The overall critical condition area.



Photograph 2. The area of the torn liner.





Photograph 3. The coffer dam that was installed around the critical condition area.



Photograph 4. The dry gypsum used as a barrier to isolate the critical condition.



Photograph 5. Facing north from the critical condition location.