

***PEACE RIVER MANASOTA REGIONAL WATER SUPPLY AUTHORITY
BOARD OF DIRECTORS MEETING
June 1, 2022***

**ROUTINE STATUS REPORTS
ITEM 9**

Peace River Basin Report

MEMORANDUM

TO: Board Members and Mike Coates
FROM: Doug Manson, Laura Donaldson, and Paria Shirzadi Heeter
RE: Peace River Basin Report
DATE: May 16, 2022

Mosaic Fertilizer, LLC- South Fort Meade Mine ERP

On March 11, 2022, Mosaic Fertilizer, LLC (“Mosaic”) submitted an application to the Florida Department of Environmental Protection (“DEP”) to expand the environmental resource permit (“ERP”), conceptual reclamation plan (“CRP”), and project area boundary of its South Fort Meade Hardee County (“SFM-HC”) mine to incorporate approximately 132 additional acres (the “2021-01 Infills Parcels”) within Section 30, Township 33 south, Range 26 east. The 2021-01 Infills Parcels are comprised of 129.2 acres recently purchased by Mosaic, along with 2.8 acres within the right-of-way of Platt Road, which Mosaic will ask the Hardee County Board of County Commissioners to vacate. The application states that acquisition of the 2021-01 Infills Parcels provides the ability for mining equipment to access 21.5 acres currently classified as “undisturbed” in the existing ERP (collectively, the expanded boundary and reclassification shall be referred to as “2021-01 Infills Project”).

The 2021-01 Infills Project consists of 153.5 acres, which is comprised of: (1) increasing the SFM-HC mine boundary and corresponding ERP Permit Area to include the 2021-01 Infills Parcels; and (2) increasing the acres to be mined/disturbed to include portions of the 2021-

01 Infills Parcels as well as reclassifying a 21.5-acre area within the existing SFM-HC mine and ERP boundary from undisturbed to mined or disturbed. Extraction of the phosphate ore present will require approximately one year to complete. Mosaic's application for the 2021-01 Infills Project also requests the following modifications to the ERP: expand the surface water management (ditch and berm) system to encompass the expanded mine boundary/project area; authorize clearing of 9.20 acres of wetlands and 2.49 acres of other surface waters ("OSWs") within the Infill Parcels; re-establish drainage patterns through mine reclamation; and authorize the application of mitigation bank credits to offset wetlands/OSWs impacts.

Additionally, the application states that Mosaic is also applying for a State 404 Permit to authorize discharges of dredged or fill material into 11.69 acres of areas treated as waters of the United States for purposes of this application, all of which are located on the 2021-01 Infills Parcels. No other impacts to waters of the United States will occur within the modified project boundaries, including within the 21.5 acres of newly accessible uplands. Generally, the State 404 Permit area is located south of Perdue Road, east of Boyd Cowart Road, west of Platt Road, and north of Jack Jones Road.

The existing South Fort Meade Mine discharges treated excess process wastewater, stormwater runoff, groundwater inflow, and reclaimed domestic wastewater from designated outfalls into unnamed swales that then discharge into the Peace River. The application for this permit modification states that during the construction phase, rainfall and runoff within the 2021-01 Infills Project area will be contained and routed to the mine water system, and that any needed discharges will be in accordance with the South Fort Meade Mine Industrial Wastewater Facility Permit No. FL0037958, which authorizes construction and operation of outfalls into Parker Branch

and Little Charlie Creek in Hardee County (both of which are located within the Peace River watershed).

On March 17, 2022, DEP issued a letter stating that DEP personnel conducted a Compliance Evaluation Inspection (“CEI”) at the South Fort Meade Mine and found that the facility appears to be in-compliance with the wastewater permit requirements, based on the areas evaluated. During the CEI, various aspects of the permit renewal application for the facility (received on January 11, 2022), were also inspected and reviewed.

Mosaic Fertilizer, LLC- Bonnie Mine Facility

On February 4, 2019, Mosaic submitted a National Pollutant Discharge Elimination System (“NPDES”) permit renewal application to DEP for the Bonnie Mine Facility (FL0000523) (“Bonnie Facility”). On February 2, 2021, Mosaic submitted supplemental information seeking authorization to transport/accept first-stage lime treated water from the Bartow Facility, for further treatment and discharge at the Bonnie Facility. The February 2021 submission states that it supplements the information in the 2019 application, and requests that it be incorporated into that application. On March 1, 2021, Mosaic submitted a metals analysis for the single-lime treated water that has been stored in the Bartow Facility’s ponds (which will be transferred to the Bonnie Facility for additional lime treatment during 2021), and explained that the additional stage of lime treatment at the Bonnie Facility will further reduce metal concentrations in the water.

On March 25, 2021, Mosaic submitted a “Second Additional Response Supportive of February 2, 2021 Supplemental Information,” (“Second Response”) which includes additional water quality analysis, and discusses the water transfer scenario, the treatment of the Bonnie Facility discharges, and compliance with conductivity limits. The Second Response states that Mosaic is anticipating the

transfer of water from the New Wales Facility to the Green Bay Facility under existing authorizations, whereby the water will be further transferred to the Bartow Facility (as authorized by existing NPDES permits FL0000752 and FL0001589). It also states that the transfer of water between the New Wales, Green Bay and, ultimately, Bartow Facilities began during March 2021 and, at this time, Mosaic anticipates a total of approximately 145 million gallons of first-stage lime treated water to be transferred from the Bartow Facility to the Bonnie Facility during 2021. Mosaic's March 25, 2021 correspondence stated that the submittal of the Second Response completes the additional information that Mosaic has prepared in support of the proposed project to transfer water from the Bartow Facility to the Bonnie Facility.

On January 26, 2022, the United States Environmental Protection Agency ("EPA") issued a letter to DEP informing them that, in accordance with the EPA/DEP Memorandum of Agreement ("MOA"), the EPA needs to invoke the 60-day extension provision in the MOA to review the above-referenced draft NPDES permit and accompanying materials received by the EPA on December 28, 2021. The letter stated that EPA staff request this further review time to gather additional information pertinent to this permit reissuance, and correspondence from EPA accompanying the letter explained that the reason for the request for extra time was to coordinate their review with their water quality standards and listing and assessment staff.

Although the 60-day extension period explained above has since expired, as of the date of this report, no new documents have been added to the DEP online database for this permit.

The Bonnie Facility is located at 2501 Bonnie Mine Rd in Bartow, Florida, near the western boundary of the Peace River watershed.

Mosaic Fertilizer, LLC- Bartow Facility Leak/Crack

In January 2022, Mosaic notified DEP that it discovered 3 additional tears¹ in the freshwater ditch east of the North Pond of the North Gypsum Stack (“NGS”) at the Bartow Facility. Mosaic’s correspondence to DEP notifying them of the critical conditions (for the January tears) explained that all damage was above the water line, Mosaic responded in a prompt manner, there was no immediate risk to the environment, and that the areas will be cleaned and repaired. On March 1, 2022, Mosaic submitted a report to DEP prepared by Ardaman stating that the liner repair activities for the January 2022 tears were inspected by a third party engineer, Ardaman & Associates, Inc. (“Ardaman”), to verify and document that the material and placement techniques were acceptable.

Additionally, on January 11, 2022, a valve was inadvertently left open resulting in approximately 33,000 gallons of sulfuric acid cleaning solution being released to the process wastewater system, rather than to the big holding tank, in violation of the judicial consent decree the facility is operating under. On April 28, 2022, DEP issued a letter stating that DEP staff had conducted a hazardous waste discharge inspection of the Bartow Facility on January 26, 2022 (and attached a copy of the inspection report). The letter requested that Mosaic address the corrective actions for the January 11, 2022 discharge along with the 2021 Mosaic releases that were outlined in DEP Warning Letter #WL22-06HW53SWD issued on January 24, 2022 (the warning letter addresses discharges from the Mosaic Riverview Facility, Bartow Facility, and New Wales Facility).

The Bartow Facility is located at 3200 State Road 60 West in Polk County, at the boundary line of the Peace River watershed and over 50 miles away from the Peace River Regional Water

¹ As explained in prior reports, other tears/leaks at the Bartow Facility’s NGS and South Gypsum Stack have been reported by Mosaic to DEP in 2020 and 2021. Mosaic is also still providing weekly updates to DEP for repair work being done at the South Gypsum Stack of the Bartow Facility.

Supply Authority Facility. However, one of the Bartow Facility's outfalls (Outfall D-002) discharges treated process wastewater, non-process wastewater, and stormwater to an unnamed ditch that flows to Six Mile Creek, which ultimately enters the Peace River.

Mosaic Fertilizer—Green Bay Facility Line Tear/Repair

On December 2, 2021, Mosaic had notified DEP that while performing a routine inspection of the Green Bay Facility on December 1, 2021, Mosaic had observed a liner tear ("December liner tear") where the idled north gypsum stack to closed south gypsum stack transfer discharge pipe is located at the northwest corner of the Lined East Pond of the Green Bay Facility located in Polk County, Florida. The December liner tear was located well above the water level in the pond at the time of identification. Repairs to the December liner tear were completed on December 12, 2021. The repair activities were inspected by Ardaman to verify and document that the material and placement techniques were acceptable. On January 24, 2022, Mosaic submitted to DEP a summary report that was prepared by Ardaman to document field observations and inspections for construction quality assurance activities for the repairs conducted to the exposed liner system.

An additional 14 tears (in a different pond/location of the Green Bay Facility than the December liner tear) were also identified and reported to DEP by Mosaic in January of 2022. The repairs to these observed conditions were completed between January 24 and January 31, 2022, and on March 31, 2022, Mosaic submitted a summary report prepared by Ardaman to document construction quality assurance activities undertaken for the geomembrane liner repair conducted to the liner system associated with the Regional Holding Pond at the Green Bay Facility.

On April 14, 2022, Mosaic also notified DEP that Mosaic identified one location with a suspected liner tear within the Regional Holding Pond (the location of the suspected tear is below

the water line, and Mosaic is taking additional steps to confirm the location of the suspected tear) and another liner tear at the South Gypsum Stack Center Cell (this tear is located above the water line and will be repaired by Mosaic). On April 21, 2022, Mosaic submitted an update on the April 14th reported conditions, which included an approximate location of the tear and plan of action for investigation and repair of the conditions.

The Green Bay Facility is located near the boundary of the Peace River watershed. Additionally, it should be noted that in May 2021, DEP issued a NPDES permit major modification (No. FL0001589-025) to Mosaic to establish a pipeline corridor and associated conveyance systems connecting the Bartow Facility (NPDES Facility ID FL0001589) to the lined North Phosphogypsum Stack at the Green Bay Facility (NPDES Facility ID FL0000752).

Mosaic Fertilizer, LLC- Fort Green Mine Manson Jenkins Tract

On August 17, 2020, Mosaic submitted an application requesting modification of its existing ERP No. MMR_0142476-009, known as the Manson Jenkins (Southeast) Tract in Manatee County. The original ERP for the project was first issued to IMC Phosphates, Inc., now Mosaic, on November 25, 2002 for phosphate mining and associated activities. A modification was issued to Mosaic in 2011 that brought the ERP into substantial conformance with the Fort Green Mine conceptual plan that was issued at about the same time. The 2011 modification reflected a substantial reduction of wetland impacts, mitigation changes, and the sale of a small parcel within the original project area. The approved ERP, as modified, authorized impacts to 296.3 acres of wetlands and other surface waters and required mitigation.

This application requests the following modifications to the ERP: changes in mitigation to reflect the actual shapes of constructed, delineated, or future constructed wetlands; shifting of some

planned mitigation located within the access corridors and West Fork of Horse Creek (“WFHC”) crossing to other areas within project boundary to not delay mitigation construction; and all impact and mitigation acres for WFHC crossing are included in the overall mitigation acreage balance, with most already constructed. This application also request an extension of the permit expiration date for an additional 15 years, to December 31, 2036.

On December 9, 2021, Mosaic submitted a response to a September 16, 2020 RAI regarding the modification application. The RAI requested that Mosaic provide, and Mosaic submitted, the following: the request for modification using the correct forms; documentation supporting Mosaic’s statement that the permit area will not support the total amount of linear stream footage approved in the previous permit modification and to provide alternatives to the linear stream footage; the location that the wetlands mitigation have been shifted to in this requested modification; hydrologic data collection for the mitigation wetlands; hydrologic and vegetation data for the reference wetlands; updated cross-sections for each wetland included in the modification request; and hydrological modeling for the project area.

On January 7, 2022, DEP issued another RAI in response to the December 9, 2021 submittal (which this RAI refers to as the major modification application). Mosaic submitted its response to the RAI on April 7, 2022. The RAI response included the following additional information: a field visit was conducted by DEP staff along the proposed conservation easement (“CE”) areas to verify suitability and Mosaic is awaiting DEP’s assessment of the proposed CE areas; Ona Shrub Wetland Reference Hydrologic Data for hydrologic reference wetland data for shrub marshes; clarification as to how the proposed construction activities will not have adverse effects on the conservation of fish or wildlife, including endangered or threatened species, or their habitats; clarification as to how

measures will be taken, during construction activities, to avoid impacts to wetland-dependent wildlife and/or listed species that use uplands for nesting or denning; clarification regarding construction status of wetlands classified as “partially complete” or “not complete” on the wetland action plan submitted by Mosaic; the location of the 15.8 acres proposed to be added to the phase II CE area; piezometer locations and data; the seasonal high water level and wetland normal pool elevations for each wetland or surface water within the project site; cross sections for mitigation areas; impact summary tables; a hydrological monitoring plan; clarification that the total project area is 2086.7 acres and the total acreage of mitigation is 410.6 acres; GIS data for the wetlands, land use, and topography; additional flow ways evaluation information; additional information regarding proposed stream and valley design specifications; and several items relating to a comparative hydrological analysis conducted for the project site.

The Fort Green Mine is located in Manatee County, adjacent to Duette Road, and within the Horse Creek and Gum Swamp Branch sub-basins in the Peace River watershed.

Mosaic Fertilizer, LLC- Hookers Prairie Mine

On November 13, 2018, Mosaic submitted an application to DEP for a renewal of its existing NPDES permit for its Hookers Prairie Mine (FL0033294), where phosphate mining has previously ceased. On November 19, 2021, DEP issued the final permit (FL0033294-025-IW1S/NR). The permit authorizes Mosaic to continue ongoing reclamation activities, including the abandonment of clay settling areas and the discharge of excess mine re-circulation water, recovered groundwater and stormwater through the following outfalls: Outfalls D-001 and D-002, each discharge into Hookers Prairie, a tributary of the South Prong Alafia River; Outfall D-03A discharges via a system of reclaimed mine pits into Whidden Creek, a tributary of the Peace River; and Outfall D-005 flows

into Bryants Branch, a tributary of the Peace River. The permit also authorizes the Hookers Prairie Mine to continue: to transfer mine circulation water as needed to the Mosaic South Pierce Chemical Complex and Duke Energy-Hines Energy Complex through Mosaic owned infrastructure; and to accept reclaimed wastewater from the city of Bowling Green into its water re-circulation system.

Additionally, on November 8, 2021, Mosaic submitted a draft application to DEP for a minor modification (MMR_131819-067) to the approved mitigation plans for the Hookers Prairie Mine. More specifically, the letter requests a minor modification to ERP Nos. 0131819-010/017/054 and 0131819-015/060 (initially issued by DEP on May 20, 2008 and February 18, 2009, respectively) to modify the location, shape and acreage of two wetland mitigation areas and also addresses impact and associated mitigation reductions within the Cytec Brewster dragline walkpath project area (ERP No. 0131819-015/060). Both the subject wetland mitigation areas are located north of State Road 630 and south of the Mosaic South Pierce beneficiation plant. On February 2, 2022, DEP issued the final permit (MMR_131819-067) making the requested modifications.

On February 21, 2022, Mosaic submitted a request to modify ERP Nos. MMR_131819-015 and -060 and assigned File No. MMR_131819-068. The modification requested a permit extension of 5 years. On April 21, 2022, DEP approved the modification extending the expiration date of the permits to February 18, 2029.

The current NPDES footprint of the Hookers Prairie Mine consists of approximately 28,577 acres and includes the US Agri-Chemicals Rockland facility. The Hookers Prairie Mine is located at 110 Agricola Mine Rd., Bradley, Florida in Polk County, and is divided into three drainage basins—including Whidden Creek and Little Payne Creek, which are both tributaries of the Peace River.

Mosaic Fertilizer, LLC- Water Use Permit

On March 15, 2022, the Southwest Florida Water Management District (“SWFWMD”) gave notice of its intended agency action to issue a new water use permit (No. 21012.000) to Mosaic for its Long Island Marsh Sod Farm project for agricultural uses in Charlotte and DeSoto Counties. The permit is for an annual average allocation of 2.9774 million gallons per day (“mgd”) and peak month allocation of 13.3718 mgd. Although it is classified as a “new” permit, it is actually a partial transfer of currently existing Water Use Permit 20004606.011 due to new ownership of part of the acreage covered by that permit and there is no increase requested to the existing quantities being transferred from that permit. The water use is located in the Peace River Basin and Southern Water Use Caution Area.

Sarasota County BOCC—Water Use Permit

On November 1, 2021, SWFWMD received a water use permit modification application (permit no. 8836.015) from Sarasota County BOCC. The application requests to increase the consolidated permit’s permitted allocation. The proposed permit modification is for an annual average allocation of 19.987 mgd (increased from the currently permitted 13.737 mgd) and peak month allocation of 22.748 mgd (increased from the currently permitted 16.499 mgd). The permit is for public supply uses in Sarasota and Manatee Counties and is located in the Most Impacted Area of the Southern Water Use Caution Area and Manasota basin.

More specifically, the application requests a modification of the existing permit to allocate the additional 8.25 mgd in withdrawals to the Carlton Memorial Reserve Wellfield (“CMRW”) and to remove the University Parkway Wellfield (“UPW”) withdrawals (which consist of seven active groundwater supply wells that are permitted to provide up to 2 mgd average annual daily flow of

raw brackish water for treatment and blending at the University Parkway Water Treatment Facility). The memorandum submitted with the application explains that the amount of increased groundwater withdrawals from the CMRW as part of the permit modification is tied to the quantity of groundwater that can be safely withdrawn without impacting the Most Impacted Area of the Southern Water Use Caution Area, and presents the impact analysis associated with an additional allocation of 8.25 mgd from the CMRW coupled with the elimination of the UPW withdrawals.

On December 1, 2021, SWFWMD issued a RAI requesting a revised version of the CMRW Management Plan (dated November 2019) and the CMRW Environmental Monitoring Plan (dated May 14, 2013), as well as other additional information, including: what will occur with the withdrawals located at the UPW (whether these wells are planning to be plugged and abandoned after successful completion of phase 3 of the project, or if there will be other proposed uses for them at that time); the casing diameters and mainline diameters of the newly proposed wells; a more relevant discussion of predicted impacts with respect to the water resources in the area and reasonable assurance that any wetlands on and near CMRW will not be impacted by the proposed increases; and corrected modeling. On February 28, March 8, and April 8, 2022, submittals were made by the applicant in response to the RAI.

On May 2, 2022, SWFWMD gave notice of its proposed agency action to issue the permit for the requested quantities (permit no. 8836.015). This permit is on the SWFWMD governing board agenda for its May 24, 2022 meeting.

Rolling Meadow Ranch, Inc.—Water Use Permit

On March 22, 2022, SWFWMD gave notice of its final agency action issuing a water use permit modification (permit no. 6068.008) to Rolling Meadow Ranch, Inc., which includes an

increase in the permitted allocation. The annual average quantity increases from 1.172 mgd to 1.5304 mgd and the peak month quantity increases from 6.0338 mgd to 7.6249 mgd. The modification includes the incorporation of a surface water withdrawal as a FARMS project and the addition of 297 acres of citrus to the crop plan. The permit is for agricultural uses in Polk County and is located in the Southern Water Use Caution Area and Peace River basin.

734 LMC Groves, LLC—Water Use Permit

On April 26, 2022, SWFWMD gave notice of its final agency action issuing a water use permit modification (permit no. 7670.008) to 734 LMC Groves, LLC, which includes an increase in the permitted allocation. The annual average quantity increases from 0.9064 mgd to 1.0211 mgd and the peak month quantity increases from 4.7233 mgd to 5.337 mgd. The increase is due to adjustment in allocation as calculated by SWFWMD's irrigation demand model for irrigation of 755 acres. The permit is for agricultural uses in Polk County and is located in the Southern Water Use Caution Area, Central Florida Water Initiative area and Peace River basin.

T & T Environmental, LLC—Water Use Permit

On May 24, 2022, SWFWMD gave notice of its proposed agency action to issue a water use permit modification (permit no. 9492.007) to T & T Environmental, LLC, which includes an increase in the permitted allocation. The annual average quantity increases from 0.252800 mgd to 0.7027 mgd and the peak month quantity increases from 1.7394 mgd to 1.8007 mgd. The increase of the quantities is due to a crop change from 282 acres of citrus to 282 acres of sod. The permit is for agricultural uses in DeSoto County and is located in the Southern Water Use Caution Area and Peace River basin.

U.S. Agri-Chemicals Corporation —Water Use Permit

On May 6, 2022, SWFWMD received an application from U.S. Agri-Chemicals Corporation for a water use permit renewal (permit no. 438.010) for its Fort Meade Chemical Plant project, which includes a decrease in the permitted allocation. The permit application requests an annual average quantity of 5.7 mgd (previously 6.2 mgd) and peak month quantity of 6.2 mgd (previously 7.3 mgd). The permit is for industrial and commercial uses in Polk County and is located in the Southern Water Use Caution Area and Peace River basin.