From:	Strong, Janelle
To:	"Nicole.t.newell@chemours.com"
Cc:	Duke, Jessica; Henderson, Connie; Danny LeJeune; "Tim Desmarais – Kleinfelder –"
Subject:	MMR_137482-018 Trail Ridge South Mine Site ERP Application RAI #1
Date:	Friday, December 13, 2019 5:01:00 PM
Attachments:	Binder - MMR 137482-018 RAI #1.pdf

Ms. Newell,

Please see the attached RAI in response to the Environmental Resource Permit application for The Chemours Company FC, LLC – Trail Ridge South Mine Site.

Please contact me if you have any questions.



Janelle Strong Environmental Specialist Mining and Mitigation Program Division of Water Resource Management Florida Department of Environmental Protection Janelle.Strong@floridadep.gov Office: 850-245-7549



FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400 Ron DeSantis Governor

Jeanette Nuñez Lt. Governor

Noah Valenstein Secretary

REQUEST FOR ADDITIONAL INFORMATION (RAI)

December 13, 2019

The Chemours Company FC, LLC c/o Ms. Nicole T. Newell Plant Manager, Florida Plant PO Box 753 Starke, FL 32091 Via email: Nicole.t.newell@chemours.com

RE: Trail Ridge South Mine ERP Application The Chemours Company FC, LLC DEP File No.: MMR_137482-018 Bradford and Clay Counties

Dear Ms. Newell,

The Department of Environmental Protection (Department) has reviewed the information that you submitted on November 1, 2019 for an individual Environmental Resource Permit (ERP), pursuant to Part IV, Chapter 373, Florida Statutes (F.S.), and Title 62, Florida Administrative Code (F.A.C.). A project review identifying the items necessary to complete and clarify your application is enclosed.

The following questions relate to the completeness of your permit application. They are being asked in accordance with Chapter 62-330, F.A.C., and the Applicant Handbooks for ERP Applications for the Suwannee River Water Management District, as adopted by the Department.

Please submit your response by email to <u>MiningAndMitigation@floridadep.gov</u>, with a copy to <u>Janelle.Strong@floridadep.gov</u>. If the file is very large, you may post it to a folder on the Department's Mining and Mitigation Program ftp site at: <u>ftp://ftp.dep.state.fl.us/pub/incoming/Mining%20and%20Mitigation%20Program/Applicant_Submittal_Portal/</u>. After posting the submittal, send an e-mail to <u>MiningAndMitigation@floridadep.gov</u>, with a copy to <u>Janelle.Strong@floridadep.gov</u>, alerting us that it has been posted.

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 2 of 10

Sincerely,

Janelle Strong

Janelle Strong Environmental Specialist Mining and Mitigation Program

Enclosure: List of Requested Information Comments from Paul Still

cc: Connie Henderson – Chemours – <u>Connie.Henderson@chemours.com</u> Daniel LeJeune – Kleinfelder – <u>DLejeune@kleinfelder.com</u> Tim Desmarais – Kleinfelder – <u>TDesmarais@kleinfelder.com</u> The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 3 of 10

List of Requested Information

APPLICATION FORM

1. Please see the attached letter from Paul Still with questions and comments concerning this application. The applicant may want to address these concerns to Mr. Still directly.

SECTION A

- 2. Part 1.C: In addition to the box already checked ("Mines"), please check the second box, "Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water".
- 3. Part 2.D: The processing fee (Chapter 62-330.071, F.A.C.) has not been received by the Department. The fee is \$14,000 (or \$13,900 if paid electronically). If you would like to make an online payment for the outstanding balance, please visit the DEP Business Portal https://www.fldepportal.com and complete the online payment process for a submitted application.
- 4. Part 3.H: Pursuant to Applicant's Handbook Volume I Section 4.2.3(d)(5d), because the Clay County lease is on lands owned by the government of the State of Florida, the lessee shall provide one of the following:

1] Provide a bond made payable to the Agency (Department) in an amount sufficient to construct the stormwater management system, or provide other measures suitable for ensuring that the stormwater management system can be completed, removed, or abandoned in the event the lessee, at any time, fails to or cannot complete construction of the system;

2] Provide an agreement from a person in accordance with Part V of this Volume who agrees to be responsible for operation and maintenance of the system in the event the lessee, at any time, fails to or can no longer operate and maintain the system; or

3] Provide an easement or other legally-binding document from the landowner or other person with sufficient real property interest in the lands subject to the application giving the Agency (Department) and other persons who require it, a right of entry for purposes of inspecting for compliance, monitoring, operating and maintaining, and completing construction as needed to comply with the permit, if issued.

Please provide the required documentation pursuant to this item and the more complete lease, mineral rights, and company history information for both the SRWMD and Armory Board parcels as discussed during the teleconference between the Department and The Chemours Company FC, LLC on December 4, 2019.

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 4 of 10

SECTION C

- 5. Part 2.1: Since listed species appear to be present, utilize, and/or have the potential to utilize the site, coordination with the Florida Fish and Wildlife Conservation Commission/US Fish and Wildlife Service is needed. Please contact the agency/agencies and provide copies of the correspondence.
- 6. Part 2.6(f): The letter provided from the Division of Historical Resources appears to pertain to just the portion of the site within Clay County. Please provide information for the portion of the site in Bradford County.
- 7. Part 2.7: Part 1.1 of the Environmental Support Document states that "...silt fencing and other applicable erosion control measures will be installed around the proposed mine cells." Please elaborate on the erosion control measures.
- 8. Part 2.10(b): Please provide any correspondence from FFWCC and USFWS.
- 9. Part 2.10(d): See comment #6.
- 10. Part 2.12(b)(i)(7): It does not appear that a comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented has been provided. Please provide.
- 11. Part 2.12(b)(ii):
 - 11.1. The proposed reclaimed land use FLUCCS code 411 requires a sufficient burn plan. Please provide more detail on the fire management plan, including who will be responsible for implementing the plan on both the Clay County and Bradford County portions of the property.
 - 11.2. The applicant's answer references Exhibit H Best Management Practices Plan. Please provide.
- 12. Part 2.12(b)(iv): The following comments relate to the UMAM forms and tables:
 - 12.1. Mitigation Summary table: The applicant scored the Location and Landscape with mitigation score for all mitigation types as a 7 and has proposed to reclaim the coniferous plantations (FLUCCS 441) in the current condition as pine flatwoods (FLUCCS 411) as indicated in Figure 13 to provide improved landscape habitat support for the mitigation. Pine flatwoods require fire management and are characterized by specific plant species. In order to provide the Department with sufficient assurance that the pine flatwoods will be successfully implemented and maintained, please provide a planting/vegetative cover plan and a fire management plan. Provide documentation from the long-term operation and maintenance entities that they acknowledge these plans and agree to the necessary management.

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 5 of 10

- 12.2. The wetland-cut ditches proposed for impacts are relatively minor parts of larger wetland systems and do not need to be scored separately from the overall wetland; the UMAM score for water environment for the wetland took into account the existing ditches.
- 12.3. The applicant scored W-41 impact type 441W as 5-5-4. However, according to the UMAM inspection on May 21-23, 2019, the Department scored this wetland as 5-5-5. Please edit the table.
- 12.4. W-40 and W-44 were observed during the UMAM inspection on May 21-23, 2019, but they are not listed in the tables or depicted on Figure 11. Please edit the figures and tables where appropriate.
- 13. Part 2.12(b)(vi-vii): Please provide a third-party cost estimate for construction, vegetation, maintenance, and monitoring of the mitigation and a draft financial assurance document.
- 14. Part 3.1(b): The referenced figures do not contain a construction plan overlay. Please provide.

SECTION H

- 15. Part 1.a:
 - 15.1. The applicant's answer references the process water pond, tailings, and site preparation areas, but these areas are not demarcated on the plans. Please demarcate these areas.
 - 15.2. Please provide more detail about the water treatment methodologies.
- 16. Part 1.f: The answer provided in Section 3.1 of the Environmental Support Document does not appear to mention a monitoring period that starts prior to mining. It is stated "...within 3 months of permit issuance, monitoring piezometers will be installed in the undisturbed wetlands to monitor the surficial groundwater levels during mining operations and undisturbed wetlands will be visually evaluated on a monthly basis to ensure that no adverse impacts occur." Please mention the monitoring period that starts prior to mining.
- 17. Part 1.g: The public water supply well described in the applicant's answer is shown as a domestic well on Figure 6 of the Hydrogeological Analysis. Please edit or clarify.
- 18. Part 1.i: Attachment 4, Ambient Groundwater Quality Data was not provided. Please provide.
- 19. Part 1.p: The applicant's answer was "Not applicable, all chemicals associated with this project will be stored and utilized at the Plant Site, which will be covered in a separate

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 6 of 10

permit application." Section H was not required for the Plant Site application (MMR_131098-017). Please provide an answer.

- 20. Part 1.u: See comment #13.
- 21. Part 1.v: The table mentions that 200.93 acres are lands to be disturbed but not mined. This area is not demarcated on any of the figures. On a figure, please demarcate the land that is to be disturbed but not mined.
- 22. Part 1.z: All parts of the question were not sufficiently answered in the applicant's response. Please include details of the settling/disposal areas, including the effective area and storage volume. If any part of the question is not applicable, please explain why.
- 23. Part 2.a: Provide the project boundary and acreage.
- 24. Part 2.b(1): Please ensure that topography figures show topography extending at least 100 feet off the project area; include datum information.
- 25. Part 2.b(7): It does not appear that the applicant's answer addresses all items of the question. Please show where the product stockpile areas and waste disposal areas will be.
- 26. Part 2.b(8):
 - 26.1. Provide an approximate length of time and schedule to perform the construction and removal activities for each crossing or corridor.
 - 26.2. Figure 11 shows 5 wetland crossings, but the Environmental Support Document (page 36) indicated that 4 wetland crossings are proposed to be widened and does not mention another crossing. Please edit the plans/narrative where applicable. Please provide a map showing the crossings to be widened and cross-section and plan view design drawings.
 - 26.3. Please explain how the wetland crossing widening activities were taken into consideration when calculating the wetland impacts and mitigation in Section C.
- 27. Part 2.b(9): Demarcate the vehicle parking areas and haul roads on the during-construction and post-reclamation plans/figures.
- 28. Part 2.b(14): Provide the volumes and invert elevations for all water management structures, including the mine pits.
- 29. Part 2.b(17): Pursuant to 62C-37.003(1), Florida Administrative Code, an approved Conceptual Reclamation Plan is needed prior to commencing mining operations.

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 7 of 10

- 30. Part 2.d(3): Provide the requested information for the roadways in the post-reclamation condition.
- 31. Part 2.d(7): Provide the elevations, dimensions, side slopes, and design water depths for the mine pits.
- 32. Part 2.d(8): Indicate the size and invert elevations of the proposed culverts.
- 33. Part 2.e(1): Provide the elevations, dimensions, and side slopes for the mine pits. See comment #31.
- 34. Part 2.e(2), Part 2.e(4), Part 4.b, Part 4.h, Part 5.a: Provide the BMP Plan.
- 35. Part 2.1: Please provide the following GIS layers: project boundary, pre-mining and post-reclamation land use, pre-mining and post-reclamation topography with basins, and mitigation wetlands.
- 36. Part 3.c: It is unclear how the applicant arrived at the total pervious surfaces acreage and the total wetlands acreages for the post-reclamation area. Please explain.
- 37. Part 3.d: The applicant references a permitted off-site discharge point. Please give more information about this discharge point and its location.
- 38. Part 4.f: Please provide an answer to the second part of the question, describing how the elevations of the monitoring equipment will be surveyed and a schedule, if the elevations will be intermittently confirmed.
- 39. Part 4.i: Please explain how the new plant will not produce humates and/or why the need for specific storage areas for humate is not anticipated for this project; please provide more detail about the where/how the humates will be disposed of.
- 40. Part 5.d: The applicant mentions that the long-term responsibility of the site maintenance following reclamation will lie with the Camp Blanding Joint Training Center. Camp Blanding (Armory Board of the State of Florida) owns only the Clay County portion of the property. Indicate who will be the operation and maintenance entity responsible for maintenance for the Bradford County portion of the property following reclamation.
- 41. Part 5.f: See comment #40.

FIGURES/PLANS

- 42. Figure 11:
 - 42.1. Please comment how the wetland impacts from the expanded crossings were included in the tables.

- 42.2. The total acreage of the ditches given in Figure 11 (29.19 acres) differs from the acreage of the ditches given in Figures 7 and 8 (31.37 acres). Please edit where needed.
- 43. Figure 13: The only roads/trails that are noted are those at the crossings. Demarcate all roads/trails that will be present in the post-mining condition.

ENVIRONMENTAL SUPPORT DOCUMENT

- 44. 1.1 -Mining Method and Operation, Site Preparation (page 1): The applicant states "Upon completion of timber harvesting, silt fencing and other applicable erosion control measures will be installed around the proposed mine cells." Please describe the other applicable control measures.
- 45. 1.1 -Mining Method and Operation, Mining Methods (page 4): The applicant mentions that stormwater ponds will be constructed, but no stormwater ponds are demarcated on the plans. Please demarcate the stormwater ponds on the plans.
- 46. 2.3 Land Use, Wetland Descriptions (page 16): The applicant states "1418.74-acres of wetlands, 6.28-acres of wetland cut ditches, 25.47-acres of upland cut ditches, and 15.92-acres of surface water are located within the project area." These acreages relate to the permit area. There appear to be 740.45 acres of wetlands and other surface waters (including ditches) located in the project area. Please edit this statement.
- 47. 3.6 Mitigation Plan, Onsite Mitigation (pg 40):
 - 47.1. The Department's calculations of the acreages of proposed impacts differ from some of the acreages mentioned by the applicant. Further discussion will be conducted.
 - 47.2. The applicant states "3.72 acres of wetland cut ditches…require no mitigation." Wetland cut ditches do require mitigation; typically the appropriate land use for the mitigation would be the same as the surrounding wetland. Please edit this statement.

In addition, although the isolated wetlands less than one-half acre may not require mitigation, they still require reclamation pursuant to Chapter 62C-37, F.A.C. Please address how the isolated wetlands will be reclaimed.

48. 3.6 – Mitigation Plan, Onsite Mitigation (pg 42): The applicant states in the table that wetland contouring commencement will occur 1 year post-mining. Please be aware that the Section 62C-37.008(11)(b)(2), F.A.C., of the Heavy Minerals Reclamation Requirements states "Contouring for all acres mined in a given calendar year shall be completed no later than 18 months after the end of that calendar year or 18 months after an area is capable of being contoured when additional mining operations, such as waste disposal, occur."

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 9 of 10

- 49. 3.6 Mitigation Plan, Onsite Mitigation (pg 45): See comment #40.
- 50. 4.0 Summary: See comment #47.1

HYDROLOGY and ENGINEERING

- 51. Section A, Part 1.K addressing discharges: The applicant's response states "No discharges are proposed as part of this application. All stormwater within the active disturbance areas will be captured and incorporated into the closed loop process water system. Proposed discharges will be permitted separately through an Industrial Wastewater (NPDES) permit, to be submitted to the FDEP Northeast District office." These statements are contradictory; please explain.
- 52. Section C, Part 1.4, Seasonal High-Water Level: The response addresses only the SHWL in wetland areas. Please discuss for non-wetland/upland areas.
- 53. Section H, Part 1.m, addressing Minimum Flows and Levels: The response addresses two systems through the Worthington Springs and Ft. White gages. Please also address the Graham gage area (02320700).
- 54. Section H, Part 5.g.: The applicant's response states "*Industrial Wastewater will be handled separately through an IWW NPDES discharge application*." The Environmental Support Document also mentions new IWW permitting. Please provide reasonable assurance that flows through any new discharge points will not cause adverse water quantity impacts to receiving waters and adjacent lands.
- 55. Attachment 2, Stormwater Management Report. Page 8 of 15 mentions leaving the impervious and stormwater system in place after mining:
 - 55.1. The Department did not locate those items in the post mining stormwater calculations. There is mention of a separate stormwater analysis with discharges in a separate application, yet this application seems to include the area in Figure 14. Please keep those separated.
 - 55.2. Please revise stormwater calculations to include discharges from offsite drainage flowing onsite; HYDROCAD links may suffice to accomplish this. The narrative should be revised to clearly indicate that the plant area is offsite drainage flowing into the mine, and offsite drainage flowing into the reclaimed area.
 - 55.3. If the decision is made to combine the plant site and mining applications please discuss options with the Department.
 - 56. The Department observed some potential errors and omissions with the plans. The BMP Plan is to be submitted under separate cover, and a Storm Water Pollution Prevention

The Chemours Company FC, LLC - Trail Ridge South Mine ERP Application Review File No. MMR_137482-018 Page 10 of 10

Plans was not located. This information is needed to complete the review for Section H (Parts 2.b.2, 2.b.4, 4.b, 4.h, and 5.a).

- 57. The Department noted that several figures were not consistent, with the plant site either being included or excluded. Further discussion of the plans will be conducted.
- 58. Additional hydrologic/engineering concerns could arise depending on the applicant's response to comments.

From:	Mining And Mitigation
To:	Strong, Janelle
Subject:	FW: Chemours Mine ERP
Date:	Friday, December 6, 2019 1:43:03 PM
Attachments:	Response to DEP Chemours ERP.docx

From: Paul Still <stillpe@aol.com>
Sent: Friday, December 6, 2019 11:18 AM
To: Mining And Mitigation <MiningAndMitigation@dep.state.fl.us>
Subject: Chemours Mine ERP

I will attach my comments for the proposed Chemours mining ERP.

Thanks, Paul Still I have done a quick review of the Chemours ERP application MMR _137482-018. It appears that significant modifications are going to be required for this application so I did not conduct a complete and detailed review. I will do that after the revised application has been submitted.

I will however list items I noticed in my quick review.

The most significant issue is Chemours' fail to meet the requirements of Application Section A page 9 H. Real Property Interest. The Chemours response is copied below.

H. Real Property Interest

a. Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3(d)

of Applicant's Handbook Volume I. Please attach evidence of the applicant's real property interest over the land upon which the activities subject to the application will be conducted, including mitigation areas (if applicable). Refer to Sections 4.2.3(d)-(e) for sufficient real property interest documentation.

Please see enclosed Exhibit D. Lease documentation to mine the subject parcels are provided.

Mineral rights to mine lands with Camp Blanding Joint Training Center are held by the land owner, The Armory Board of the State of Florida. Note that the mineral rights for the SRWMD parcels in Bradford County are held by Rayonier Forest Resources, L.P.

No lease agreements are provided for the Bradford County part of the application.

Chemours acknowledges the Bradford County part of the permit is owned by SRWMD but fails to provide and lease agreement with the SRWMD or the other documentation required for water management district lands required by Applicant's Handbook Volume I Sections 4.2.3(d)-(e).

The document provided relative to mineral rights owned by Rayonier is not the lease. The document is a Memorandum of Lease Agreement.

The Memorandum indicates the lease referenced in the memorandum terminates on December 31, 2023. The plans call for 8 years of mining. While the date of issue of any permit is unknown, it clear that Chemours has not demonstrated control for even half of the proposed mining period.

The table on page 43 indicates mitigation will continue to be monitored 6 years after mining. Chemours has not demonstrated they have access to the land for that length of time.

The Memorandum of Lease Agreement with Rayonier appears to have been modified based on hand written notations and initials. Based on the dates on the notary entries these modifications may have been done after the Rayonier reprehensive signed the

document since only on set of initials is seen at each change. It I not clear why a 2019 memorandum would still be referring to The Chemours Company TT, LLC.

It is not clear if The Chemours Company FC, LLC has a valid lease to extract minerals from the Bradford County part of the proposed mining operation.

Documentation of Real Property Rights is further complicated by the history of the Applicant The Chemours Company FC, LLC. Based Exhibit D and on documents available on the internet DuPont spun off The Chemours Company. There appears to have been two subsidiary companies in 2015 The Chemours Company TT, LLC registered in Pennsylvania and The Chemours Company FC, LLC registered in Delaware. In 2018 Chemours TT merged with Chemours FC. The ERP application is by Chemours FC. The lease agreement with Rayonier is with Chemours TT as is the Camp Blanding agreement. It would appear that a clearer understanding of the merger and its impacts on these agreements is needed.

Section A page 5

K. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge: No discharges are proposed as part of this application. All stormwater within the active disturbance areas will be captured and incorporated into the closed loop process water system. Proposed discharges will be permitted separately through an Industrial Wastewater (NPDES) permit, to be submitted to the FDEP Northeast District office.

The above statement contradicts itself. No discharges verses discharges at a NPDES permitted point. Knowing the location of the NPDES point is critical because it potential moves water from one basin to another and would potentially impact the MFL set for the Upper Santa Fe River at Graham.

The site is in the headwaters of the Alligator Creek and Prevatt Creek water sheds. Dewatering of offsite wetlands needs to be addressed. This is particularly on the northern boundary where a wetland extends beyond the SRWMD property. It was noted that the ownership of the northern adjoining property was incorrect in the survey off the property. Decreasing flows and water quality issues could impact both Lakes Sampson and Rowell lakes that are used for fishing, hunting and recreation.

Section C

Page 2

Part 2: Environmental Considerations

Note: for many questions, a state statute/Applicant's Handbook Volume I (AH I) section is cited to assist the applicant in addressing these questions. However, additional federal criteria may apply.

1. Elimination or Reduction of Impacts (Avoidance and Minimization). Describe measures taken to eliminate or reduce impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.1*).

The geologic position of the ore deposits make elimination and reduction of wetland impacts difficult. However, central flow-ways and high-quality wetlands located within the proposed permit boundary were avoided to the greatest extent possible while providing access to the site for ore extraction. Please refer to the enclosed Environmental Support Document/Figure 11 for additional details/visual representation of avoided and undisturbed wetland areas.

There is a clear alternative for this site that would eliminate wetland impacts. That alternative would be to not mine the wetlands.

Page 4

3. Water quantity impacts to wetlands and other surface waters (*Refer to AH I Section* 10.2.2.4 and AH II).

Please refer to the enclosed Environmental Support Document and the Stormwater Management Report, Attachment 2

The impacts of both onsite and off site industrial waste water with a high iron content from the DuPont/Chemours operations need to be evaluated. The high iron content of the Chemours monitoring well MW 15 needs to be evaluated and more sampling wells installed if the slug test wells cannot be used as groundwater sampling wells.

Section H

Page 5

m. If the proposed project area is in the watershed of a first order stream (headwater), second order stream, etc., of a river where Minimum Flows and Levels (MFLs) have been established, provide a water quantity simulation representing the peak severance/dewatering conditions to demonstrate that the proposed activity will not contribute to violations of the established MFLs.

As mentioned above, the site is within the Santa Fe River Basin. MFLs have been established for both the Upper and Lower Santa Fe River Basin (as measured by streamflow gages at Worthington Springs and Ft. White, respectively). The peak severance at any given time during the project is 160 acres. This acreage is insignificant (<0.05%) relative to the contributing areas for these gages (571 and 996 square miles for the Worthington Springs and Ft. White gages, respectively). Furthermore, the mining operation will result in a very small net consumption of water; all of the water removed by dewatering (lateral groundwater inflow and rainfall capture) will either be returned to the pit with the sand tailings or discharged from the plant site.

Chemours has failed to note that an Upper Santa Fe MFL has also been established for the Graham gage. The proposed project could have impacts on the Graham MFL. The Graham gage watershed is much smaller than the Worthington Springs watershed. The project is in the headwaters of 5 basins. The basins are noted by a dashed line in Figure 14 but the basins are not identified by there WBIDs. The 2 northern basins provide flow to the Sampson River which joins the Santa Fe below the Graham gage. The Upper Santa Fe Basin is a Water Resource Caution Area. The NPDES discharge location is critical in determining the impacts on the Upper Santa Fe MFL at Graham.

Stromwater management information does not seem to be consistent in this document.

Page 3

All stormwater will be captured in the excavated pit.

Page 4

Stormwater ponds will be constructed above grade to retain and manage stormwater.

Page 5

Stormwater runoff from events up to a 25-year, 24-hour storm event will be contained within the open mine pit, which will be capable to store the design storm event (Attachment 2 – Stormwater Management Report).

Several issues would seem to arise with the proposed stormwater plan.

How will stormwater me managed prior to the first mine pit reaching its total depth?

How will storm water and water from returning sand be kept out of the area that is being mined?

The use of a 25-year, 24-hour storm event may not provide adequate protection of the natural systems from stormwater management systems failures and discharges of untreated industrial wastewater.

Based on my experience while the 25-year 24-hour storm can be significant and number of smaller events occurring over several weeks can produce more storm water that must be managed.

Muck Soils

Management of muck soils is critical in the reclamation of wetlands and reducing the materials that must be removed from process and mine contact water before it can be discharged. A clear understanding of the humin and humate content of muck soils may be needed to fully evaluate the need to manage muck soils.

Tables 3 and 4

It would help if the Pre and Post mining land use categories were the same so it is clear that there is no loss in wetlands types or acreage. As currently presented there appears to be a loss in wetland acreage with over 16 acres of cypress being lost.

The document Permit_Formal_Legal_Boundary has a line Formal Determination Boundary. This line appears to be the extent of the wetlands delineation that was performed. It is critical that the entire site have its wetlands delineated so wetland impacts outside the mined area can be evaluated. The wetlands delineation that was done may not be accurate enough to evaluate impacts on SRWMD owned land.

Paul Still 14167 SW 101st Ave Starke, FL 32091

904 368-0291

stillpe@aol.com