



Alachua County Environmental Protection Department

Chris Bird, *Director*

November 15, 2019

Rusty Kestle
Remedial Project Manager
U. S. Environmental Protection Agency
61 Forsyth Street
Atlanta, GA 30303

RE: Cabot Carbon Superfund Site, Gainesville, FL
Proposed Cap and Stormwater Controls Design Modifications

Mr. Kestle:

Alachua County is in receipt of a memorandum dated November 12, 2019, by de maximus, inc. to the EPA proposing stormwater modifications to the approved remedial action plan for the Cabot Carbon Superfund Site. The County objects to the proposed modifications to the remedial plan and submits that Cabot should implement the EPA approved remedy set forth in the "100% Remedial Design Report, Hawthorn Remedy, Cabot Carbon Superfund Site." We have a number of technical concerns with the proposed modifications. Technical staff have reviewed the memorandum and offers the following comments.

1. The memorandum does not provide construction plans or calculations that can be examined nor is the proposed memo signed and sealed by a professional engineer registered in the state of Florida.
2. The proposed modification is a substantial change to the original design. Has the engineer of record from Geosyntec been notified? Has he or she signed off on the change?
3. The proposed modification indicates that the existing pond is lined and that the liner is in need of repair. Please note that per the original construction plans dated November 1975 and received by the City of Gainesville on September 6, 1977, the existing pond is not lined.
4. From the premise that the pond is not lined, please note that the proposed modification does not address what impact the infiltration of water through the existing pond into the containment area will have on the extraction well design. The approved plan calls for installation of multiple paired surficial aquifer/Upper Hawthorn Group

extraction wells inside the containment area. The de maximis memo dated November 12, 2019 states "The dewatering system is designed to remove and treat water that infiltrates through the cap or slurry wall". If Cabot proceeds with the proposed changes to the stormwater management system, then Cabot must modify the groundwater extraction system to accommodate the increased recharge to the surficial aquifer inside the containment area. A signed and sealed demonstration should be required documenting that the integrity of the proposed groundwater extraction design is maintained.

5. The approved plan states "As presented in the RI/FFS (Gradient 2017), the objectives for extraction wells encompassed by the vertical barrier wall alignment are to: 1) provide hydraulic control; 2) mitigate the downward hydraulic gradient between the UHG and the LHG; and 3) remove contaminant mass from within the vertical barrier wall alignment." The proposed revisions to the plan would seem to make it more difficult to achieve the stated goals #1 and #2.

6. The County does not have any documentation that the pond is lined. However, if such documentation exists that confirms the pond is lined, the following additional questions apply:

- a. The memorandum indicates the extraction system is not affected by the requested modification. How was that determined?
- b. The existence of a liner needs to be verified.
- c. If verified, when was the liner installed, by whom, and for what purpose?
- d. What is the liner comprised of?
- e. Is it competent? If determined it is competent, a signed and sealed demonstration of that supporting documentation needs to be provided.
- f. Does its permeability limit infiltration of stormwater to the extent necessary for the current design which incorporates recovery wells to artificially lower the groundwater table within the slurry-wall containment area? If determined it does, a signed and sealed demonstration of that supporting documentation should be provided.
- g. The modification proposes the City of Gainesville to repair the pond's liner. Pursuant to Section 177.081, Florida Statutes, the City has no obligation "to perform any act of construction or maintenance within" the area dedicated in the Plat for Hamilton Park for "Stormwater Retention [sic] Purposes", except for such maintenance as the City has voluntarily assumed.
- h. How would the liners be spliced? Who will maintain the splice line?

7. The proposed modification does not address how the two existing pipes will be handled that serve the existing stormwater pond:

- a. How will the slurry wall or cap liner be constructed around the pipes?
- b. How would that be maintained?

c. Once the pipes become an integral part of the Superfund remedy by being enclosed within the cap liner, how would necessary repairs to the pipe be performed?

8. The existing pond is old and was constructed prior to state stormwater rules. The local stormwater criteria at the time were minimal, requiring water quality volume only. The new stormwater pond is required to meet the current substantive requirements of the City of Gainesville and St. Johns River Water Management District (SJRWMD) for stormwater management. The City and SJRWMD have each previously requested stormwater drainage design calculations to determine that the original design for the new stormwater pond (stormwater pond design in the approved plan) conforms to local and state stormwater requirements, which include water quality and quantity standards. A drainage report was provided stating there would be a minor increase that will be absorbed by the infiltration trench. However, the infiltration trench called out on plans is the liner burial detail. It is not an infiltration trench. In addition, the approved cap design directs stormwater runoff to the north and east into City right-of-way and onto private property. No calculations of pre-post surface runoff for areas not draining to the pond were provided. No response was received from Cabot to identify the increased runoff that will occur due to the change in impervious area created (cap liner) and grading (mounded capped area).

a. The modification presents the existing pond to be completely surrounded by an impermeable cap with no information of how much area drains to it, how high it would stage, resulting discharge rates/volumes from the outfall pipe, and how safety issues will be addressed as a result of the grade surrounding the pond area.

9. The modification indicates that the proposed pond size will be reduced and filled back in, as it has already been excavated. The memorandum indicates that stockpiled soil will be used for fill. Soil excavated from the new pond has not been characterized with "clean" material being segregated and stockpiled separately from "contaminated" material. Cabot must verify that soil returned to the open excavation meets applicable criteria. If contaminated soil is returned to the hole, applicable requirements for landfilling of contaminated materials should be met.

10. The modification indicates that the proposed pond will now be a zero-discharge pond. Revised calculations will be needed to determine whether the pond will meet the current substantive requirements of the City of Gainesville and SJRWMD for stormwater management. In addition, please note that per City code, the pond must be designed to provide an overflow / pop-off in the event that the pond becomes full during a major rain event.

11. The approved plan called for a liner covering the walls and bottom of the new pond. Given that the proposed change to the plan omits the liner, has Cabot characterized the soil in the excavation walls to assure it meets exposure criteria?

12. The approved plan called for filling of the existing pond with the area then being covered by a cap. That design eliminated potential exposure to soil at the existing stormwater pond. The proposed modification calls for the cap to tie into the hypothetical liner or the berm around the pond. The proposed modification does not eliminate potential exposure at the margins or within the existing stormwater pond. (Note that the berm cited by Cabot may not exist.)

13. The approved plan states that the low-permeability cover system will serve two primary purposes. 1) Prevent direct exposure to human and ecological receptors; and 2) reduce stormwater infiltration and groundwater recharge in the source area. The proposed revisions to the plan would make it more difficult to achieve the stated goals.

Please do not hesitate to call me at (352) 264-6801 if you have any questions on the above.

Sincerely,



Chris Bird
Director

CB/go

cc: Michele Lieberman, County Manager
Jim Harriot, Deputy County Manager
Sylvia Torres, County Attorney
Gus Olmos, EPD
Shane Williams, EPD
Daniel Hoffman, Assistant City Manager
Philip Man, City of Gainesville
Alice Rankeillor, City of Gainesville
Rick Hutton, GRU
Scott Miller, EPA
Chou Fang, SJRWMD
Tracie Vaught, FDEP
Wayne Reiber, Cabot Corp.
Robert Rule, de maximus, inc.
Steve Poirier, Geosyntec