

March 11, 2022



Department of Environmental Protection
Southeast Regional Office
Waterways and Wetlands Program
2 East Main Street
Norristown, PA 19401

Via Email: ra-epww-sero@pa.gov

Re: Sunoco's Major Amendment Request for Marsh Creek Sediment Remediation, Upper Uwchlan Township, Chester County, Chapter 102 Permit No. ESG100015001.

Dear Mr. Hohenstein:

Clean Air Council timely submits the following comments in response to Sunoco's Major Amendment Request for Marsh Creek Sediment Remediation, Upper Uwchlan Township, Chester County, Chapter 102 Permit No. ESG100015001. The Council reserves the right to amend these comments based on the contents of the revised application that Sunoco submitted to the Department on February 22, 2022 in response to the Department's first Letter of Technical Deficiencies. The revised application was made available to the public on the same day these comments were due. The Council anticipates filing further comments once there has been a meaningful opportunity to review the new materials and other members of the public should be afforded the same opportunity. Consistent with the Department's responsibility to provide for full and meaningful public process, comments regarding the newly-available information should receive the full consideration of the Department and be addressed in the Department's comment response.

Nevertheless, the Council found several deficiencies in the application that was available for review as of March 10, 2022, and requests that the Department deny Sunoco's application until they are addressed.

Background

This proposal comes after years of Sunoco's reckless conduct across the state and particularly at the Marsh Creek Lake site, and yet it contains many of the same types of problems that have plagued Sunoco's plans from the start. Against a backdrop of Sunoco's hundreds of avoidable inadvertent returns of drilling fluid, Clean Air Council and numerous others cautioned against permitting Sunoco to risk horizontal directional drilling at what became the HDD 290

site near Marsh Creek Lake. Nevertheless, the Department permitted the activity, and on August 10, 2020 Sunoco spilled approximately 8,000 gallons of drilling fluid into Marsh Creek Lake, a wetland, and two tributaries. The location experienced a subsidence the following day.¹ The Pennsylvania Department of Conservation and Natural Resources (“DCNR”) subsequently entered into a Consent Order and Agreement with Sunoco requiring Sunoco to remediate and restore some of the impacted areas, including dredging at least the top six inches of sediment from Ranger Cove; dewatering the removing the sediment; and restoring the lake, shoreline, and fish, turtle, and bird habitat.² The Department is charged with ensuring that Sunoco cleans up its mess, appropriately monitors the project, and does no further damage to this ecologically and recreationally valuable area. In doing so, the Department must remain mindful of Sunoco’s history of noncompliant, dishonest, and unlawful behavior.

Comments

- 1. Sunoco must address the concerns raised by the Department in its second letter of technical deficiencies issued on March 2, 2022, including showing all relevant riparian buffer boundaries in its site drawings and specifying the condition to which it will restore the disturbed area.**

The Department must not consider approving the major modification to the permit until Sunoco fully corrects and addresses all deficiencies identified in the Department’s March 2, 2022 Letter of Technical Deficiencies to Sunoco.

The Department noted, *inter alia*, that Sunoco omitted some riparian buffer boundaries from its maps. The Department and the public need Sunoco to provide accurate boundaries in order to review any potential adverse impact to riparian buffers.

Moreover, the Department accurately points out that Sunoco’s application is inconsistent when referring to the state to which it will restore the disturbed area, at times representing that it will leave it as a “meadow in good condition,” return it to its “pre-existing condition,” or restore it to “pre-construction” condition. The Council agrees with the Department that Sunoco’s references throughout the application package must be clear and consistent. The Department specifically notes that Sunoco’s application is unclear as to the planned scarification depth and the reasoning behind the scarification plan.

¹ *Marsh Creek Lake – (HDD 290)*, DEP <https://www.dep.pa.gov/About/Regional/SoutheastRegion/Community%20Information/Pages/Marsh-Creek-Lake-HDD-290.aspx> (last updated March 11, 2022).

² *Wolf Administration Requires Sunoco to Restore Lake at Marsh Creek State Park in Chester County*, PA Media https://www.media.pa.gov/Pages/DCNR_details.aspx?newsid=805 (Dec. 6, 2021).

The Department also requests that Sunoco “amend the Site Restoration narrative to include and describe the Restoration BMPs, the PPC Plans, and the Street Sweeping as ABACT BMPs as noted in Section I, Part 2 of the ESCGP-3 application,” noting that “these BMPs need to be considered for the post construction condition.” The Council urges the Department to ensure that Sunoco fulfills this request so that the full protections provided by the BMPs and PPC plans are implemented.

Finally, the Department asks Sunoco to provide an off-site discharge analysis which meets the requirements of Chapter 102 for off-site discharges into non-surface waters for each temporary culvert Sunoco proposes. Although, as the Department indicates, the Chapter 102 FAQ requests the analysis to account for a 10-year storm event, Sunoco should also include analysis for a 100-year storm event because such extreme weather events are becoming increasingly common due to climate change.

The Council supports each of the above additions sought by the Department and requests that the public be permitted to comment on Sunoco’s responsive revised application.

2. The Council supports the request of local community members that the restoration be overseen by an independent third party paid for by Sunoco.

The Department is keenly aware that Sunoco has an extensive history of noncompliance and inaccurate reporting, as well as 48 pending criminal charges resulting from Sunoco’s actions during the construction of the Mariner East II pipeline, including disastrous violations at this particular site. Sunoco’s continued dishonesty is evident in the instant application. Sunoco was required to list its compliance history, and, in doing so, Sunoco inaccurately listed multiple open Notices of Violation as resolved. For example, on January 7, 2022, the Department wrote that Sunoco lacked “any credibility” when it claimed that the sinkhole that was the subject of a September 10, 2022 NOV was a natural occurrence.³ On February 15, 2022, the Department informed resident Virginia Kerslake that it was still reviewing Sunoco’s additional submission, clearly indicating that the NOV was still pending resolution. Yet in its January 26, 2022 application, Sunoco inexplicably lists the NOV as “resolved.”

Sunoco has demonstrated time and again that it cannot be trusted to submit accurate reporting, nor to devise plans that are adequately protective of the environment. Given the particularly egregious history of Sunoco’s destruction at this site, the Council strongly

³ Letter from DEP to Sunoco, Jan. 7, 2022
https://files.dep.state.pa.us/ProgramIntegration/PA%20Pipeline%20Portal/MarinerEastII/NOV/2022/1-7-22_Chester_County-DEP%27s_request_for_additional_information.pdf.

recommends requiring Sunoco to hire an independent third party chosen by the Department to oversee Sunoco's progress in restoring the impacted area.

- 3. Sunoco should determine whether a previously-disturbed area is better suited to be a dewatering site than the location Sunoco currently proposes, including evaluating whether using an alternative location may reduce (1) ecological disturbances and (2) the nuisance to nearby residents.**

Residents near the proposed work site are concerned that they will have to endure months of noise, odors, loss of their scenic view of the lake, and disturbance from trucks hauling sediment down residential roads.⁴ The Department should minimize harm to the residential communities whenever possible, particularly when a potentially superior alternative is readily available.

As an alternative site for consideration, Sunoco already disturbed nearby land for an entry/exit site for the HDD drill location. The owner of that land previously consented to its use, and it has not yet been restored. Consequently, using that site might reduce additional ecological impacts in comparison to a site previously undisrupted by Sunoco. Sunoco should evaluate it as an alternative, factoring in the relative amounts of native vegetation that would be destroyed at each site, the relative ecological sensitivity, and the potential impact on nearby residents.

Commenters understand that there could be additional negative impacts from transporting the dredged material further from the lake, and that Sunoco's proposed site largely contains non-native vegetation. However, Sunoco can determine which site is more appropriate only through a careful analysis.

- 4. Sunoco must reveal any undisclosed and/or unapproved drilling additives that may be contained in the spilled drilling fluids and, if necessary, conduct laboratory and field tests to determine potential associated impacts and methods of remediation.**

The Presentment of grand jury criminal charges against Sunoco includes multiple incidents when Sunoco condoned the illegal use of drilling fluid additives which were not approved by DEP.⁵ Such unapproved additives included Baroid Fuse-It, which was "used at

⁴ See *Tell the DEP: Sunoco's "Cleanup Plan" for Marsh Creek Lake Doesn't Cut It*, Dragonpipe Diary (March 2, 2022) <https://dragonpipedairy.com/2022/03/02/tell-the-dep-sunocos-cleanup-plan-for-marsh-creek-lake-doesnt-cut-it/>.

⁵ Presentment at 62–64, available at <https://s3.documentcloud.org/documents/21079232/2021-10-05-mariner-east-presentment.pdf>.

many locations where drilling fluid spilled into the environment, affecting aquatic life in any creeks, streams or rivers it entered.”⁶ According to Fuse-It’s safety data sheet, it contains 10–30% hydrotreated light petroleum distillate and may be toxic to fish and other aquatic life.⁷

Sunoco’s application does not disclose what unapproved additives, if any, may be present in the material to be dredged. Sunoco needs to address the presence of any such additives. Open questions include: (1) whether any potentially toxic components of any additives could be released with the filtrate during the dewatering process; (2) whether the choice of chemical conditioners used in dewatering could influence the release of any such toxins; and (3) whether different or additional treatment of the filtrate could reduce or eliminate potential impacts from drilling additives. The Department should require Sunoco to address these questions and, if necessary, to modify the planned chemical additives to the dredge slurry and/or its treatment of the filtrate.

5. Sunoco’s application needs to include more detailed information regarding the water quality testing and potential additional treatment of the filtrate.

In an appendix to the application Sunoco states that the “discharge will be monitored for total suspended solids (TSS) and other water quality limits per” the PADEP Temporary Discharge Permit. However, it indicates that the filtrate would be treated only through passive release from the geotextile tubes and provides no specifics regarding water quality testing for the filtrate. To protect this watershed containing High Quality waters of the Commonwealth,⁸ Sunoco should test the filtrate to ensure that no contaminants leach from the sediment into the water, including testing for specific contaminants mentioned below. Additionally, Sunoco needs to be prepared to further treat the filtrate before discharging it into the reservoir if such treatment is appropriate based on the test results.

6. Sunoco’s permit application should include emergency clean-up plans in the event of a chemical spill in the polymer makedown unit operation area.

Sunoco needs to be prepared to react swiftly if there is an accidental discharge of concentrated coagulant or flocculant chemicals in the polymer makedown unit operation area, which is where the dredge slurry is mixed as an initial step in dewatering the sediment. Although Sunoco states that the final chemical selection will be made prior to construction, the HDD S3-

⁶ *Id.* at 63.

⁷ Halliburton, Material Safety Data Sheet for Fuse-It (Jan. 3, 2008) <https://irp-cdn.multiscreensite.com/3c87f020/files/uploaded/fuse-it-msds.pdf>.

⁸ *See* 25 Pa. Code § 93.1.

0290 Impact Assessment and Restoration Plan indicates that it will use a combination of ChemTreat P891L and P816E (although in some attachments Sunoco seems to indicate that it might use Aquatrol C1320).⁹ The safety data sheets for these chemicals specify that they present human health hazards and are ecotoxic at certain concentrations. For example, for P186E the LC50 for the aquatic insect *Ceriodaphnia dubia*, which is the concentration lethal to 50% of exposed individuals, is only 3.5 mg/l, and the LC50 for the fathead minnow is only 30 mg/l. If an accidental spill occurs, Sunoco needs to ensure that it will be promptly contained and cleaned without unnecessary damage to the ecosystem.

Additionally, while, if the dredge slurry is properly mixed, the chemical conditioners should remain bound to the sediment, Sunoco should test the filtrate to ensure chemical are not in fact released into the environment.

7. Sunoco needs a plan to address the presence of excessive arsenic, sodium, and phosphorous identified in the pre-dredge waste characterization and to ensure that those contaminants are not returned to Marsh Creek Reservoir with the filtrate.

The September 2021 analysis of the pre-dredge sediment in Ranger Cove conducted by AECOM found multiple potentially problematic contaminants. First, it discovered that the pre-dredge sediment contains sodium and phosphorous levels high enough to be “classified as a [Department of Transportation] Class 9 environmentally hazardous material.”¹⁰ Sunoco needs to test for excessive sodium and phosphorous in the filtrate and provide any necessary treatment to avoid potential adverse impacts to the Marsh Creek ecosystem. Laboratory tests of sodium and phosphorous levels in filtrate from a dredge slurry that is (1) made with sediment sampled from the contaminated area; and (2) treated with the coagulant and flocculant Sunoco intends to use should be sufficient.

Second, one sample contained an alarming 4,600 µg/L of arsenic,¹¹ far in excess of the allowable arsenic limit of 150 µg/L under the Pennsylvania water quality criteria for fish and aquatic life.¹² While excessive arsenic was not present in other samples taken, the Department should consider whether further pre-dredge sampling is required to determine the full extent of the contamination. Although it is likely that the arsenic will remain bound to the dewatered sediment, the Department should nevertheless require Sunoco to present some concrete evidence that arsenic will not be present in the filtrate discharged into the lake.

⁹ HDD S3-0290 Impact Assessment and Restoration Plan, rev. 4, at PDF page 22.

¹⁰ *Id.*, at PDF page 559.

¹¹ *Id.*

¹² *Id.* at 596

8. Sunoco needs to specifically test the sediment in the Northern Red-Bellied Cooter overwintering area which will not be dredged.

The Pennsylvania Natural Diversity Inventory clearance from the Pennsylvania Fish & Boat Commission specifies that a 50' by 700' area along the northwest shoreline should not be dredged to protect the overwintering habitat of the Northern Red-Bellied Cooter.¹³ However, Sunoco, under the supervision of the biologist who they are required to have on-site during their work, should still test the sediment in that area to ensure that it does not contain unsafe levels of arsenic, sodium, phosphorous, or other contaminants. Otherwise, unaddressed contaminants could harm the turtle population, thereby undermining attempts to protect the turtles by preserving a crucial piece of their habitat.

9. Sunoco should include only native species in the seed mix it uses to revegetate the area impacted by the dewatering project.

The Department should require Sunoco to use only seeds of native plant species in reseeded the impacted area because native plants promote the health of the ecosystem, support native fauna, improve soil quality, and fix more carbon in the soil.

The current mixture of plants growing in Sunoco's proposed dewatering zone includes milkweed and daisy fleabane.¹⁴ Both species have native varieties which are useful to wildlife. Milkweed is a host plant for monarch butterflies,¹⁵ and daisy fleabane provides food for bees, flies, and some native mammals. Accordingly, the Department should consider requiring Sunoco to, upon consultation with an ecologist, include milkweed and/or daisy fleabane in the seed mix it uses to revegetate the area. Additionally, the dewatering project is required to be conducted during the active period for the threatened Northern Red-Bellied Cooter, which overlaps with the season during which butterflies depend on milkweed. To minimize adverse ecological consequences, Sunoco should consider seeding additional milkweed in advance in a suitable location near the LOD.

¹³ Correspondence from Pennsylvania Fish & Boat Commission to Energy Transfer, Feb. 16, 2022, available at https://files.dep.state.pa.us/RegionalResources/SERO/SEROPortalFiles/Community%20Info/MarshCreekLake/Remediation/55023_2-14-2022.pdf

¹⁴ Sunoco's Application for Major Modification dated January 26, 2022, at PDF 102.

¹⁵ https://www.fs.fed.us/wildflowers/pollinators/Monarch_Butterfly/habitat/index.shtml.

Conclusion

For the foregoing reasons, it would be inappropriate for the Department to approve Sunoco's application at this time. Sunoco must first meaningfully address both the deficiencies stated above and those identified in the Department's March 2, 2022 Letter of Technical Deficiencies.

Respectfully submitted,

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