

Comments Received During the Hercules Public Comment Period (September 29, 2022 – November 1, 2022) for the Hercules Corrective Action Plan (CAP) dated August 2022.

The Georgia Environmental Protection Division (EPD) received comments from five individuals via two emails, one letter, and oral comments from three individuals during the public hearing on October 20, 2022. A summary of the comments and EPD's responses to these comments are presented below.

Based on a review of the comments received, no changes were made to the permit. However, Hercules supplied an up dated schedule (Figure 8-1 of the CAP) which has been incorporated into the final version and is attached.

The following are EPD's responses to the comments received:

Comment 1: "Will EPD consider working with community organizations and stakeholders to host informational meetings in the community that are accessible by the residents affected by the sites in question? What changes will EPD make to its policies and practices of sharing documents with the public so that individuals across the state can engage in a meaningful way?"

Response: EPD is committed to ensuring that the community understands the remedial activities described in the CAP. Most of the information regarding the CAP and support documentation is available on the Hercules website. Please contact EPD staff working on the Hercules project with any specific information requests or to arrange more focused outreach.

Comment 2: There were several comments regarding what assurances can EPD provide to the public and local officials that the agency will use the full force of its enforcement authority to hold Hercules/Pinova accountable for missing deadlines in the future. One comment specifically requested that the Hercules CAP must specify clearly and openly when each corrective measure will be completed and milestones along the way.

Response: EPD is committed to ensuring that Hercules complies with the requirements of their permit and conducts necessary corrective actions to ensure that releases from the facility do not threaten human health or the environment. Unfortunately, it is impossible to predict the exact timeline or milestones for Corrective Action. Often strategies have to be adapted, changed, or replaced as cleanup proceeds, based on what is working and not working at a specific site. This is particularly true at a complex site like Hercules. However, EPD and Hercules have agreed on a timeline for corrective measures, which is presented in Hercules' CAP. EPD is committed to monitoring the company's progress, updating the CAP and timeline as required, and to ensuring that Hercules complies with the requirements of their permit by conducting the necessary corrective actions to ensure that releases from the facility do not threaten human health or the environment.

Comment 3: Will EPD include a requirement for Hercules/Pinova to increase the signage in/around the Terry Creek/Dupree Creek system and public information passively available to the public?

Response: The Terry Creek site is a federal Superfund site, so signage and public information are handled by the USEPA.

Comment 4: “Will EPD include in the final permit a condition that requires regular public hearings and better community engagement? Since EPD has the authority to adjust permits issued to polluters, can the agency include in the final permit a requirement that the permittee go through a formal review (and public hearings) after the corrective measures have been implemented? Should the corrective measures be ineffective, EPD should exercise its authority to revoke the permits.”

Response: EPD does not have the authority to require Hercules to hold additional public meetings outside of those required by the law. However, if the final Hercules CAP is substantively modified or revised, a public comment period with a public hearing will occur. EPD only approves corrective action measures it believes will be effective. However, if the identified corrective action measures prove ineffective, EPD would not revoke the permit. Instead, EPD would require Hercules to identify and implement different/additional corrective action measures.

Comment 5: A commenter asked when will post-implementation inspections be performed to investigate the integrity of the corrective measures for the former toxaphene tank farm? Additionally, when will the use limitations and environmental covenants be prepared for the former toxaphene plant farm and the Brunswick facility overall? The commenter was also concerned about the permanence of any land use controls that will be part of a corrective measure.

Response: Periodic inspections of all installed corrective measures is/will be required. Hercules has stated that inspections for the former toxaphene tank farm will begin in 2023. Hercules/Pinova is required by the CAP to file a UEC for the property, and they cannot certify completion of the CAP until one is in place. Further, the Georgia Uniform Environmental Covenants Act, O.C.G.A. 44-16-1 *et seq.* provides for land use controls that run with the land and that EPD has express power to enforce. Details for the land use restrictions that will be in the UEC won't be known until all corrective action measures have been installed.

Comment 6: Several comments discussed a lack of firm timeframes/deadlines for implementation and completion of corrective measures.

Response: Too many uncertainties exist to provide these at this time. The uncertainties include availability of contractors to implement and monitor the technologies and the rate at which the technologies work. Some of these uncertainties are evaluated during the implementation phases of the project, as discussed in Comment #9 below.

Comment 7: Hercules/Pinova reported in the 2021 Draft CAP, Section 3.1.5.2, that they had acquired data from 2019 sampling of off-site properties and found, “an enrichment of concentrations of [volatile organic compounds] VOCs in the deep zone of the upper surficial aquifer.” EPD’s response to this was to delete the data from the Final CAP, unless it could be verified. Hercules/Pinova did not comply with EPD’s recommendation and included a description of the findings in

CAP, Section 3.3.2.5 (Hercules CAP, pgs. 53 and 54). Why did EPD recommend that Hercules/Pinova NOT address this possible contamination, since it had been reported as a possible issue of concern? Additionally, now that EPD knows of possible contaminants in the upper surficial aquifer, what investigations will the agency launch to verify this contamination?

Response: The contamination referenced in the 2021 CAP was from an offsite property. EPD recommended that Hercules remove references to it because we had not seen any of the documentation and data substantiating the referenced statement. However, Hercules provided documentation and data substantiating this information in Appendix C of the 2022 CAP. EPD has since contacted that property owner and begun investigation of that property under the Response and Remediation program. Some of the contamination on the offsite property does not appear to be from Hercules/Pinova but instead a result of former activities at that site. EPD is addressing those releases with the property owner.

Comment 8: A commenter asked about a background level for toxaphene mentioned by EPD during the public availability session and wanted to know the source of the information and how it factored into remedial decision(s).

Response: The background level discussed was obtained from the USEPA *Brunswick Community Based Environmental Protection Study* conducted in late 1996, which included sampling four schools and 29 residential yards. Toxaphene was only detected in 1/3 of the residential samples, and the background level discussed was skewed by two very high results. Without these, the average toxaphene concentration dropped to approximately 8% of the current HSRA notification concentration for toxaphene. The *in-situ* stabilization remedy for soils on site was chosen for protection of groundwater and site workers. Background levels are generated during environmental investigations to serve as boundaries to the extent of the investigation.

Comment 9: Why does the Hercules CAP specify, “the initial objective to determine the efficacy of the technology is to reduce the average concentration of benzene in groundwater in that area by 50%,” (CAP, pg. 106), when the objective should be a reduction of benzene to the drinking water standard for each reading, not for average concentration?

Response: EPD discussed the “50%” wording with Hercules during the development of the final CAP that is the subject of this public notice. Hercules clarified, and EPD agreed, that the 50% wording was intended to be used as a screen; if the technology being pilot tested did not achieve a 50% reduction, it may not be effective in attaining remedial goals for the facility and might not be carried forward to full-scale implementation.

Comment 10: A commenter stated he was at the public availability meeting and said that EPD did a very good job, and he was looking forward to the public hearing.

Response: Thank you.

Comment 11: One commenter asked that the EPD heed the advice of citizens from the Oct. 19, 2022, public availability session and further investigate off-site areas. The commenter further stated that toxaphene is a manmade chemical, and any presence of toxaphene can and should be attributed to the manufacturing of toxaphene at the Brunswick facility. The commenter also stated that Hercules is ultimately responsible for all the toxaphene that exists in our community.

Response: ATSDR has published a toxicological profile for toxaphene; Section 5.3 of the document describes toxaphene use. Here, it is stated that, “Toxaphene solutions were often mixed with other pesticides partly because toxaphene solutions appear to help solubilize other insecticides with low water solubility. Toxaphene was frequently applied with methyl or ethyl parathion, DDT, and lindane.” The mere presence of toxaphene is not presumptive evidence of its improper use or disposal.

Comment 12: One commenter stated, “...(regarding) the groundwater in between the areas that are currently proposed to be treated in and around what the EPA considers to be the outfall ditch and the areas that are west, generally west, of Highway 17, what is Hercules and Pinova going to do to address those areas of groundwater contamination that are currently not being treated through their bioremediation?”

Response: The Terry Creek site is a Superfund site and is handled by the USEPA. However, the “areas...west...of Highway 17...” are currently being evaluated through two pilot studies (ISCO for shallow groundwater and Anaerobic biobarrier for deep groundwater). Final remedial technologies will be determined through the results of these tests (see Comment #9).

Comment 13: One commenter requested at least a two-week extension to the public notice period to allow time for people to submit their written comments

Response: EPD has previously responded to the commenter that the public comment period had been established for a longer time than required by the Rules, so an extension would not be provided.