**Technical Assessment**

**Water Use Permit Application #13775**

**February 18, 2024**

**Background**

Various technical materials were provided by Ingleside on the Bay Coastal Watch Association to TCHD Consulting for review of the Notice of an Application for Water Use Permit #13775 that was submitted to the Texas Commission on Environmental Quality (TCEQ) by Enbridge (then Moda) Ingleside Oil Terminal, LLC on July 27, 2021. TCEQ declared the data package administratively complete on August 11, 2021. Materials reviewed included but were not limited to the Notice of Application, along with supporting technical materials provided to and by TCEQ.

**General Conclusions**

After review of the technical materials provided, it outwardly appears that proposed Water Use Permit #13775 is likely a legal water grab for future industrial expansion. There was a considerable time gap from the time the TCEQ declared the application administratively complete on August 11, 2021, until Spirit Environmental (Enbridge contractor) inquired about it via email in October 2022. This does not make much sense if the purpose of the permit is really firewater and safety protection, as a company that typically becomes safety conscience would tend to push TCEQ for the permit more quickly rather than slowly walking it.

Although TCEQ recommended Special Conditions in the permit, the language appears to be boilerplate rather than carefully thought-out narratives for a specific location with special concerns. Additionally, the technical language appears to be mostly generalized and sparse with little specificity. Consequently, the proposed technical language and Special Conditions are largely unenforceable. And finally, and most importantly, the proposed permit will clearly allow Enbridge to resell water, if the rights are transferred with the proposed water conservation requirements. Enbridge Ingleside Oil Terminal, LLC selling its water rights to Ingleside Clean Ammonia Partners, LLC (or to another company) seems like a real possibility.

**Specific Technical Comments**

1. With regard to the relevant crafted paragraph described in the TCEQ Interoffice Memorandum from Trent Jennings, Water Conservation Specialist on the Resource Protection Team to Sarah Henderson, Project Manager on the Water Rights Permitting Team dated December 28, 2022, that is in the TCEQ Water Use Permit No. 13775 data packet that reads “Permittee shall implement water conservation plans that provide for the utilization of those practices, techniques, and technologies that reduce or maintain the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, and prevent the pollution of water, so that a water supply is made available for future of alternative uses. Such plans shall include a requirement that in every water supply contract entered into on or after the effective date of this permit, including any contract extension or renewal, that each successive wholesale customer develop and implement conservation measures. If the customer intends to resell the water, then the contract for resale of the water shall have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures.” **This appears to be boilerplate language that would allow Enbridge to sell its water rights to other interested parties rather than specific technical language for a particular area that TCEQ has concerns about. Presumably, this would provide flexibility for future industrial expansion in the area.**
2. With regards to Special Conditions A reading “Permittee shall implement reasonable measures in order to reduce impacts to aquatic resources due to entrainment or impingement. Such measures shall include, but shall not be limited to, the installation of screens at the diversion structure(s).” **This is generalized language with little teeth. The term “reasonable” is not well-defined, thus this would be difficult to enforce and “reduce impacts” is an acknowledgment that impacts are expected. Also, there is no specificity to the “diversion structure,” though Enbridge is expected to do something so presumably the company should be able to describe it if it was trying to be transparent.**
3. With regards to Special Condition B reading “Permittee shall install and maintain a measuring device, which accounts for, within 5% accuracy, the quantity of water diverted from the point(s) authorized above in Paragraph 2. DIVERSION and maintain measurement records.” **Again, this appears to be mostly generalized language as there are no specific requirements for the measuring device other than 5% accuracy. There are no specifics on calibration procedures or frequency, recordkeeping requirements, or if a declaration from the manufacturer is acceptable all by itself.**
4. Per the listed TCEQ Special Conditions listed in Water Use Permit #13775, there is no mention of who must be contacted and what the procedures or references will be regarding reselling water rights. **Would it affect this proposed permit, and is the permittee expected to do anything differently with regards to its permitting representations? More detailed information in this regard would make for a better permit.**
5. In the same TCEQ Interoffice Memorandum from Mr. Jennings to Ms. Henderson, dated December 28, 2022, the Consideration of Water Conservation Goals Section reads “Applicant stated the requested water will be used for firefighting and testing the firewater pump system for mechanical integrity and leaks. The target for water use efficiency is 98 percent of water will not be consumed and therefore returned as flow, with an estimated loss of 2 percent due evaporation. Water diverted but not consumed shall be discharged into Corpus Christi Bay. Additionally, Applicant will monitor the pump system for potential leaks and will repair discovered leaks in a timely manner. The target for water savings proposed by limiting water use the fixing leaks is a savings of 5 percent for a five-year goal and 10 percent for a ten-year goal.” **The phrase “The target for water use efficiency ….” seems to have a meaning that there is some wiggle room there. Also, the language is non-specific regarding infrastructure that is/will be in place from the pumps – will they be flexible hoses, rigid water pipes, what are the hose/pipes lengths and diameter? There are also no details on how the company calculated the water savings of 5 – 10% over the five-to-ten-year period, and therefore, the statement is not defendable at this time. Again, there is some generalized information here, but not enough technical details are provided for full transparency and enforceability.**
6. Records indicate that Moda Ingleside Oil Terminal, LLC water use permit application to TCEQ was declared administratively complete on August 11, 2021, while Spirit Environmental stated in an email to TCEQ on November 18, 2022, that the “… applicants legal name has since changed to Enbridge Ingleside Oil Terminal, LLC as listed in the Texas Secretary of State, attached.” Why the huge delay in time from August 2021 – November 2022? Contractor Spirit Environmental Associate Project Manager Chase Campbell checked back with TCEQ Sarah Campbell via email on October 2022, regarding this application, as there appeared to have been no update from the TCEQ regarding its technical review since an email on May 6, 2022. **The huge time delay and lack of communication between the two parties does not seem to be indicative of a company that is genuinely concerned about its firewater availability for emergencies.**
7. In the Surface Water Rights Permit Application – Supplemental Information packet dated July 2021, “the purpose of this document is to provide the necessary information to obtain a water use permit from the TCEQ to provide the site with adequate firewater in case of an emergency. Additionally, the water would be used to test the firewater pump systems for mechanical integrity and leaks.” **This section lacks specific language that is needed to make a solid technical assessment – what are the procedures and the frequency in testing for mechanical integrity checks and leaks?**
8. The Application generically states in Section 2.0 that it will have multiple firewater pumps that will be used to divert water with a combined maximum flow rate, but it provides no specificity in the section regarding the number of pumps or technical specifications of the pumps. This became a bit more clear in Section 3.6.1 when it stated that “there are currently three (3) proposed mobile pump systems to be placed anywhere along the proposed diversion reach as needed for future expansion. The three (3) proposed mobile pump systems, and any additional pump systems constructed in the future, will divert water at a combined maximum flow rate not to exceed 100,000 gpm.” That being said, Enbridge’s FOP renewal application included a memorandum from Edge Engineering and Science dated July 15, 2022, that stated that Enbridge wanted to “add three (3) firewater pump engines. These firewater pump engines were previously temporary engines and have now become permanent. These engines will be grouped as GRPFWP2.” **It is unclear as to what the real story is here. One document states that there will be three proposed mobile pump systems, while the other document states that there will be three permanent firewater pump engines – certainly, this needs to be clarified with more details on the engineering, technology, and infrastructure to fully gauge what is currently going on here.**
9. In Section 2.0, the Application states under the Purpose of Use paragraph that “the new appropriation of State Water requested with this application will be for industrial use. Moda (now Enbridge) will use the water for the following two (2) reasons, **but not limited to**: firewater – water will be used for firefighting in case of an emergency at the site and firewater pump systems flow tests – the firewater pump systems will be periodically tested for mechanical integrity and leaks. **This language is clearly not limiting Enbridge water use to firewater, which seems indicative that the water permit request is not clearly straightforward, and thus Enbridge will use its water rights for whatever it deems fit.**
10. **The Application provides no information on the transportation lines from the portable pumps to other infrastructure. What are the lengths and diameters of lines/pipes to determine the full volume of fluids being used so that realistic flow rates can be calculated instead of theorized?**
11. Section 3.8 of the Application states that “Moda (now Enbridge) will take reasonable measures to avoid impingement and entrainment of aquatic organisms for all new diversion structures. **Reasonable measures include, but are not limited to, filter screens. Again, generic language and no specificity. If Enbridge were trying to be a good steward of the environment and the community, there would be transparency in its data packet instead of generic statements. If TCEQ was trying to be an effective regulatory authority, its representatives would be asking relevant technical questions so that the permit could be beefed up and made more enforceable.**
12. On the Application’s Attachment 3 – Water Conservation Plan declarations, it was signed and approved by Vice President of Regulatory Affairs Clayton Curtis on July 15, 2021, who declared a water use rate of 500-acre feet with a diversion rate of 222.8 cfs. **On page 2, however, it lists 100% surface water usage at 300 – 500-acre feet which seems inconsistent with requesting 500-acre feet in multiple other locations. Was this a mistake or purposeful? Enbridge and TCEQ should clarify this discrepancy.**
13. **What is Enbridge doing now as far as making firewater available at it site – there appears to be no mention of this in the Application. Also, what kind of firewater system still exists at the site now, as it is likely that Moda and the Naval Station firewater infrastructure is still in place? It would certainly be appropriate to ask for and have Enbridge and TCEQ to add this technical information to the Application.**
14. The Application package has declarations for mergers and name changes with formalized statements and paperwork within the Application from certified notaries, yet when Moda sold to Enbridge there was only an email notification to TCEQ in October – November 2022. **Why did the Application name change not have to be formalized as it was done under previous ownership?**
15. **The Application provided no water discharge details about efforts required by TCEQ or that will be performed by Enbridge to ensure minimal impacts on aquatic life by mindfully controlled water flow rates and physical attributes of the engineered discharge system that will be physically put in place.**
16. Again, there are few details in the Application that were provided by Enbridge and acknowledged by TCEQ. **Why for instance were there no technical details on the possibility or consideration of using foam in firefighting mode. It is possible that it would be a preferred method that might have fewer negative impacts on the environment both on aquatic life and inevitable water runoff negative impacts.**
17. Air permits tend to have specific technical specifications on compressor engines – like engine size, capacity, RPM, etc. **Why were there no technical specifications supplied or asked for regarding the firewater pumps that are being sparsely described and proposed within the Application? This is relevant technical information that would be helpful in more fully gauging the potential environmental impacts of this proposed water permit.**
18. When reviewing the Surface Quality Water Rights Permit Application – Supplemental Information packet, Enbridge claims and TCEQ is allowing the declaration that 98% of the water will be returned to Corpus Christi Bay after use, as only 2% will be lost to evaporation. **How is it possible that there will be no spillage when connecting and disconnecting transfer lines or when doing integrity testing? The 98% estimation is not going to reflect reality.** **Per this part of the Application, it clearly states that the estimated diversion amounts from January – December is expected to be 25 acre-feet per month (which adds up to 300 acre-feet total) which equates to using more than 13.5 million liquid gallons of water per month, 446,371 gallons per day, and more than 160 million gallons (162,925,714.29) of water annually, which seems very extreme when testing a firewater system. Enbridge should be made to be more fully forthcoming in its proposed engineered firewater system to calculate and gauge the practicality of its technical statements in this proposed water permit.**
19. **If Enbridge wanted to be less environmentally intrusive and community friendly, it would pay the City of Ingleside for water and would store the fluid on-site in storage tanks and transfer it via pipeline. Afterall, if the firewater system will actually recover some 98% of the water, replenishment costs would be minimal after the initial water investment. Consequently, the technical statement in Section 3.9.1 of the Application’s Water Conservation Plan that says “Due to the amount of water needed for emergency firewater pump system testing, no feasible alternatives exist to the proposed appropriation and the requested amount of appropriation is necessary and reasonable to ensure the facility has adequate water for testing and emergency situations” is not technically accurate and is misleading. Enbridge (then Moda) did not provide any economic models to back up such a statement. Comparatively, TCEQ will be giving Enbridge, in essence, a tax break (who will be paying $789.10 for 500-acre feet of water) for not investing back into the Ingleside community.**
20. **And lastly, the upstream and downstream plots on the enclosed documents within the Application do not seem technically correct based on personal recollection, thus the downstream impacts would be expected to be felt more by Ingleside on the Bay rather being swept out to Redfish Bay. Presumably, this would increase the negative impacts to aquatic species and seagrasses in the vicinity of the populated areas. It appears that the company’s contractor either made a mistake or misrepresented the potential negative impacts to the local community, and TCEQ seemed not to notice.**