



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER RESOURCES
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Notice of Determination

Byhalia Pipeline, LLC
Shelby County, TN.
DWR file # NRS 20.089

November 9, 2020

This notice presents the final determinations of the Tennessee Department of Environment and Conservation, Division of Water Resources, and responds to comments on the proposed Aquatic Resource Alteration Permit requested by Byhalia Pipeline, LLC for temporary impacts to 2.294 acres of wetlands, permanent conversion of 0.87 acres of wetlands type, and six stream crossings associated with the pipeline construction.

Notice of Determination	1
Background.....	2
Existing Conditions.....	3
Alternative Analysis	4
Response to Comments.....	5
Comments Concerning Groundwater:	5
Comments Concerning the <i>Memphis Aquifer</i>	6
Comments Concerning Public Hearing Process and Procedure	6
Comments Concerning the Alternative Analysis and Social and Economic Justification.....	8
Comments Concerning Environmental Justice.....	8
Comments Concerning the Permittee’s Parent Company and Compliance Record In Other States	9
Comment Concerning Stream Crossings.....	9
Comments Concerning Other Concerns	10

Background

Byhalia Pipeline, LLC applied for an Aquatic Resource Alteration Permit and Clean Water Act section 401 certification that would authorize the stream and wetland crossings on April 21, 2020.

The Division issued public notice soliciting comments on the above permit application on July 14, 2020 and announced the scheduling of a public hearing, which was held via video teleconference on August 27, 2020.

Existing Conditions/Proposed Loss of Resource Values

Compensatory wetland mitigation for impacts to wetlands shall be compensated at a 2:1 ratio for the conversion of 0.87 moderately functional forested wetlands. Compensatory wetland mitigation shall occur with the purchase of at least 1.74 credits from the Tennessee Mitigation Fund southwest TN service area. All other impacts to stream and wetlands will be temporary and restored to pre-impact conditions, as demonstrated through post-project monitoring.

Alternatives Analysis and Selection of Least Impactful Practicable Alternative

Route Alternatives

No Action Alternative

Under this alternative, Byhalia would not construct or operate the proposed pipeline. This alternative would not provide an interconnection to the two existing major crude oil pipeline systems, connecting major terminals in Cushing, Oklahoma with the Capline Pipeline running between Central Illinois and the Gulf Coast. The no action alternative does not meet the project's overall purpose of providing a connection between these two pipelines and was not further considered.

Alternative 1 – East Route

Byhalia considered an approximately 33-mile route east from the Valero Refinery and through the City of Memphis. However, this route has significant environmental impacts associated with multiple crossings of the Nonconnah River and its associated wetland and floodplains. This route would closely parallel the Nonconnah River for approximately 6 miles with four river crossings. Furthermore, this route is adjacent to the Nonconnah Levee System (Civil Works Project) for approximately 1 mile with open cuts and drills near the levee which could affect the structural integrity of the flood control structure. Additionally, along the portion of the route paralleling the levee, the presence of existing utilities and other infrastructure, would greatly constrain the space necessary to safely construct the project. This route would also cross through Memphis International Airport property, industrial areas, and residential areas raising safety and constructability concerns. This alternative is impracticable based on environmental, safety, and constructability concerns.

Alternative 2 – Corridor Route

Byhalia considered an approximately 35-mile route travelling south from of the Valero Refinery that would travel through the city of Memphis before meeting up with the Alternative 1 – East Route. However, safely constructing the pipeline in this route may not be possible due to limited space along railroad and overhead transmission line corridors. This route would cross the Memphis Harbor (McKellar Lake) and would encroach on T.O. Fuller State Park and cross under a significant aquatic resource in Robco Lake. Additionally, acquiring the right-of-way for portions of this route crossing Tennessee Valley Authority (TVA) lands may be difficult. The Alternative 2 corridor route would cross through fewer

industrial areas than Alternative 1, but still pass through several residential neighborhoods raising safety and constructability concerns. Alternative 2 is impracticable due to constructability concerns and its routing through a state park and residential neighborhoods.

Alternative 3 – Western Route

Byhalia considered an approximately 50-mile route travelling west from of the Valero Refinery that would largely avoid City of Memphis residential areas before meeting up with Alternative 5 – Proposed/Preferred Route. This route would cross the Ensley Levee System (Civil Works Project) twice, which raises concerns over the structural integrity of the flood control structures. This route also crosses North Horn Lake and its associated wetlands. Additionally, this route would cross adjacent to the TVA coal ash remediation site. Trenching and drilling associated with construction of the Project could potentially exacerbate pre-existing groundwater contamination associated with this site and result in contaminant migration. This route would cross T.O. Fuller State Park and is near the Chucalissa Archaeological Park, which may impact cultural resources. This alternative is impracticable due to these combined factors.

Alternative 4 – South Route

Under alternative 4, Byhalia considered an approximately 43-mile route travelling south from the Valero Refinery to Horn Lake, Mississippi before turning east. This route would cross the Memphis Harbor (McKellar Lake), T.O. Fuller State Park and a Desoto County, Mississippi property containing a public softball field. Additionally, this route would cross a previously recorded cemetery. Although the cemetery has likely been moved due to previous construction and development activities, significant cultural resource impacts could occur if unmoved or unmarked graves were encountered during construction. This route also crosses several properties where right-of-way access is a concern. This alternative is impracticable primarily due to landowner access and cultural resource concerns.

Alternative 5 – Preferred Alternative

The proposed route selected as the preferred alternative by Byhalia is an approximately 49-mile route that travels south from of the Valero Refinery to Horn Lake, Mississippi before turning east. This route avoids more densely populated residential neighborhoods by primarily travelling through undeveloped rural areas. This route avoids the private parcels with landowner access issues discussed in Alternative 4 and avoids T.O. Fuller State Park, federal properties, Robco Lake, levee systems and previously recorded cemeteries. This route crosses wetlands associated with the Coldwater River and Clearwater Creek but avoids crossing the Coldwater River. Impacts to waters are temporary during construction and the avoidance and minimization measures, as described below, will be incorporated to reduce the temporary impacts. Further, due to the linear nature of the Project, there is no alternative route that can avoid impacts to the aquatic ecosystem. Alternative routes will have new and significant adverse consequences (e.g., cultural, hydrological, environmental).

The Division has determined that the permittee’s preferred alternative, with conditions, represents the practicable alternative that would achieve the project objective and have the least adverse impact on resource values.

Antidegradation

In accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06), the Division has determined that the proposed activities will result in *de minimis* degradation because the applicant proposes to provide in-system mitigation to offset any appreciable permanent loss of resource values.

Response to Comments

The Division received numerous comments, primarily by email and also at the public hearing. Due to the high volume of similar comments, we have summarized and paraphrased the comments below. We believe we have captured all the substantive matters and have provided responses to those comments. It is important to note that the Division's authority comes from the *Tennessee Water Quality Control Act of 1977* and the federal *Clean Water Act*. The Division's authority is therefore limited only to matters that affect water quality. All comments relative to water quality were considered in making this final determination.

During the public participation process, the Division received comments that address a variety of public interest matters. These include impacts to the Memphis Aquifer from operation of the oil pipeline, environmental justice, groundwater, inadequate alternatives analysis, flawed economic justification, virtual public hearing limited public participation, stream crossings should be conducted in the dry and other important matters that citizens depend on government to address. However, the Division cannot address some of those concerns, simply because its authority is limited to water quality considerations.

Comments Concerning Groundwater:

There were comments received about the proposed project contaminating groundwater.

Responses to Comments Concerning Groundwater:

Most of the comments reflect a similar theme of concern for the possible release of oil into the groundwater table and the long-term groundwater contamination that would subsequently occur. These comments assert the permit must ensure the maintenance of water quality standards, both on the surface and in the ground.

The application is for the stream crossings and the wetland impacts associated with construction of the pipeline, not the operation of the pipeline. The operation of the pipeline is under the Pipeline and Hazardous Materials Safety Administration (PHMSA's) jurisdiction.

The permittee has developed inadvertent release contingency plans in the case of any material that may be released during the drilling process. The Contractors will supply trained personnel to observe for and respond to any inadvertent release of drilling fluid. Each crossing area will be observed during drill operations by the contractors for any release of drilling fluid. The contractors shall immediately stop drilling operations, relieve downhole drilling fluid pressure by disengaging pumps, and inform the company representative of any drilling fluid migration to the surface. In addition, the permittee will implement and maintain its sediment and erosion control plans at each stream and wetland crossing. These measures may include, but are not limited to, such measures as matting, silt fences, hay bales, and trench plugs and will comply with all State of Tennessee NPDES requirements.

Drilling fluid shall primarily be composed of bentonite and water and no toxic substance shall be used.

Bentonite is a type of clay used for lubrication when drilling, and also used for sealing boreholes. Inadvertent Return Contingency Plans have been prepared and will be implemented during construction by the HDD contractors. Although palustrine forested wetlands (PFOs) within the Tennessee segment of the project are to be bored, some clearing will be necessary for the positioning of equipment used for boring beneath adjacent or nearby features. Areas within the permanent right-of-way (ROW) will experience continued woody vegetation management. As such, approximately 0.87 acres will be permanently converted from PFO to palustrine emergent (PEM) wetland. All palustrine emergent wetlands (PEMs) and scrub-shrub wetlands (PSSs) will be open cut and returned to preconstruction contours with staged topsoil redistributed and allowed to naturally regenerate to preconstruction conditions. Construction will employ best management practices (BMPs) for clearing vegetation, re-establishing contours, and restoring permanent vegetation.

The permit requires that the Permittee shall monitor each stream and wetland crossing both during and after construction. Monitoring reports shall be submitted to this office during construction and for two years following construction. Such reports shall document the existing conditions at each crossing. In the event of any release or issues with the stream or wetland crossing a remedial action plan and a timetable to implement and complete.

Comments Concerning the Memphis Aquifer

The Division received numerous comments concerning the potential impacts of the pipeline on the Memphis Aquifer. Several commentators were specific about the lack of information concerning “gaps” in the clay layer that protects the aquifer or any study performed to protect the aquifer from pollution of the pipeline. Concerns were primarily related to the operation of the pipeline, but also some related to its construction.

Responses to Concerns Regarding the Memphis Aquifer

Aquatic Resource Alteration Permits do not regulate discharges to groundwater (only surface waters) or the operation of the pipeline. Utility line construction does not have the potential to affect this regional water table.

The Aquatic Resource Alteration Permit does not require an aquifer impact study, as the permitted impacts are solely related to the construction of the pipeline, involving very shallow trenching and boring techniques for which we have no reason to believe there is any possibility of affecting the deep regional aquifer. According to the 1995 USGS study of the Davis wellfields, the Cockfield and Cook formations are the confining layers within the project area. This study shows that the 30-foot directional borings for the pipeline are well above these confining formations.

Comments Concerning Public Hearing Process and Procedure

One commentator stated that the virtual Public Hearing limited public participation. Persons without access to the internet were not able to adequately review the application and supporting documentation. The inclement weather that the area was experiencing also limited public participation. The permit should be denied and reheard at a time when the public can attend in person.

Responses to Concerns for Permit Process and Procedure

The Department of Environment and Conservation strives to provide full public notice and participation and transparency. All the Department’s public notice rules were followed in this case.

The public hearing was conducted via video-teleconference in the interest of protecting public health, safety, and welfare in light of COVID-19 and ongoing health-based recommendations to limit the size of public gatherings. Governor Lee recently extended the state of emergency in Tennessee to December 27, 2020. Therefore, public hearings and meetings at this time are being conducted through electronic means such as Webex to allow for full and transparent public participation. Given the continuing uncertainty about when it will again be safe to conduct in-person public hearings, the Department cannot indefinitely defer this permitting process.

The Department believes that online public hearings increase, rather than decrease, access to public hearings as demonstrated by the high number of participants it has had since changing to this format. It is important to note that, as stated in the public notice for the hearing, internet access was not required to participate in the hearing: a call-in option was also provided. Moreover, the Department closely monitored storm conditions before and during the hearing and observed that the storm had not reached Memphis by the time the hearing was over.

ARAP's require four levels of public notice for each individual permit, all of which were implemented for this permit. First, public notices are emailed to a list of citizens and groups who have requested these notices. Second, the Division posts its notices on our public participation webpage. Third, the applicant must publish a public notice in the classified section of a local newspaper of general circulation, and fourth the applicant must post a two-foot by three-foot corrugated plastic sign within view of a public road in the vicinity of the proposed project. The sign must be maintained for at least 30 days. Six public notice signs were placed throughout the route of the project.

The Division maintains a public facing on-line Dataviewer where persons may access and view all the documents in the file that are uploaded to that record. The public notices direct the participant to that Dataviewer. The notice also provided contact information for the permit writer, who could respond to requests for information from residents unable to access this dataviewer. Similarly, any Tennessean can submit an open records request to obtain relevant documents.

Comments Concerning the Alternatives Analysis and Social and Economic Justification. The social and economic justification is also flawed.

The alternative analysis is inadequate. Only one paragraph is given to describing each alternative and rejecting those that are not preferred. There is no documentation of costs or benefits and no documentation of impacts to waters of the State.

Responses to Concerns on the Alternatives Analysis and Social and Economic Justification

Five alternative routes were evaluated and submitted. Each describes the various encumbrances with the route including water resources, cultural resources, cemeteries, and public properties such as a State Park. These routes and comparisons were submitted in tabular form as part of the application. An analysis of the least environmental damaging alternative was submitted.

Route Criteria

Byhalia designated the following criteria in order to achieve the stated purpose and need while identifying a route to be used for the Project. The following criteria were used to evaluate the alternatives:

- Residential Neighborhoods
- Protected Species and Habitat
- Wetlands and Waterways
- Historic Sites and Cultural Resources
- Federal, State, and Local Government Facilities, Structures, or Lands
- Private Property Access
- Pipeline Constructability

The preferred project route was chosen not only to minimize impacts to the environment, but also to cultural sites, public lands, levees, landowners, and communities during construction and once the line is in service. The proposed route parallels existing pipeline and utility corridors where practical to reduce its overall footprint, with additional avoidance and minimization measures employed to reduce impacts to natural resources where possible.

The proposed route selected as the preferred alternative by Byhalia is an approximately 49-mile route that travels south from of the Valero Refinery to Horn Lake, Mississippi before turning east. This route avoids more densely populated residential neighborhoods by primarily travelling through undeveloped rural areas. This route avoids the private parcels with landowner access issues discussed in Alternative 4 and also avoids T.O. Fuller State Park, federal properties, Robco Lake, levee systems, and previously recorded cemeteries. This route crosses wetlands associated with the Coldwater River and Clearwater Creek, but avoids crossing the Coldwater River. Impacts to waters are temporary during construction and the avoidance and minimization measures, as described below, will be incorporated to reduce the temporary impacts. Further, due to the linear nature of the Project, there is no alternative route that can avoid impacts to the aquatic ecosystem. Alternative routes will have new and significant adverse consequences (e.g., cultural, hydrological, environmental).

Based on the available information the Division has made a determination that the permittee has demonstrated that project represents the least impactful practicable alternative.

Because the proposed aquatic impacts are fully mitigated in-system, the activities authorized by this permit will result in no more than de minimis degradation. Accordingly, there is no requirement for Byhalia to demonstrate social or economic necessity.

Comments Concerning Environmental Justice

The Division received numerous comments in regard to the route through disenfranchised communities, especially the Boxtown Community, that are presently experiencing similar facilities. The pipeline is considered by these commentators to be another action that will adversely affect the environmental health of these communities. Here are some examples of the comments received:

“Connecting the pipeline through Boxtown in Memphis is an unjust and unforgivable act of environmental racism.”

“The Byhalia Pipeline proposal will very negatively affect a disenfranchised community. The people of that community already suffer from health issues caused by environmental discrimination. The proposal will only harm the community even more. This is racism. Please do not proceed with the pipeline proposal till other options are explored. “

“I am writing in reference to the Byhaila Pipeline Route being built through Boxtown, Tn in 38109. These are some of the most vulnerable residents in the city. Many have owned their homes for generations. The city and the state of Tennessee are allowing these minority black residents to be taken advantage of because this area poses the least resistance. That should not be a prerequisite to build this pipeline as the results could potentially be deadly. Whenever projects like this happen, black people normally get mistreated and marginalized. A pipeline through this area will would be detrimental to the entire area. Residents may have to move.

I am begging for this pipeline project not to be approved for this area as the residents would suffer health wise or would have to move. This is a low-income area and many of the homes here have been in families for generations.

Responses to Concerns on Environmental Justice

In 1994 President Bill Clinton issued Executive Order (EO) 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” with the aim of focusing

federal attention on the environmental and human health effects of federal actions on minority and low-income populations such that environmental protection for all communities is achieved. The EO directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low-income populations, to the greatest extent practicable and permitted by law.

At this time, Tennessee does not have an EO or specific language within rule or statute that requires and/or provides TDEC the explicit authority to consider environmental justice within its environmental regulatory program actions. However, striving for the equal treatment of all communities in administering environmental, natural resource, parks, and conservation programs is a priority of the department. TDEC takes a collaborative approach to environmental justice by working with communities to ensure that historically underserved low-income and minority communities are afforded equal access to its programs and services and provided adequate opportunities for meaningful involvement of all people with respect to the development, implementation and enforcement of laws, regulations and policies related to the application. Public notices were issued which included the placement of 6 public notice signs along the route, a legal Ad published in the Commercial Appeal and a Public Hearing was held prior to the issuance of the permit.

Comments Concerning the Permittee's Parent Company and Compliance Record in Other States

Several commenters requested that the permit be denied due to the compliance record of the parent company in other states.

Responses to Compliance Record in Other States

There is no legal basis to deny a permit based on alleged violations by another company in another state.

Comment Concerning Stream Crossings

One Commentor expressed concerns about the time of year and use of coffer dams for intermittent stream crossings that would result in a condition of pollution.

Impacts to all perennial streams will be minimized using HDD construction methods and no work will take place within the OHWMs of these streams. Intermittent and ephemeral streams, as well as WWCs are planned for open trench crossings. Construction within these stream OHWMs will occur when dry if possible. If not possible, cofferdams or other diversion methods will be used. All stream channels, beds, and substrates will be returned to preconstruction elevations, contours, and stabilized by revegetation after construction. No permanent stream channel alterations will occur as a result of this project.

These cofferdams will be **watertight** enclosures from which water is pumped to expose the bed of a body of water in order to permit the construction of a pier or other hydraulic work. Cofferdams are made by driving sheetpiling, usually steel in modern works, into the bed to form a watertight fence. The vertical piles are held in place by horizontal framing members that are constructed of heavy timber, steel, or a combination of the two. Water from the cofferdam shall not be pumped directly back into the stream, but instead to a detention basin prior to release.

The permit further provides:

Notice of Determination
Byhalia Pipeline, LLC
November 9, 2020

All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in Rule 0400-40-03-.03 of the Rules of the Tennessee Department of Environment and Conservation. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of waters of the state for any of the uses designated by Rule 0400-40-04. These uses include fish and aquatic life (including trout streams and naturally reproducing trout streams), livestock watering and wildlife, recreation, irrigation, industrial water supply, domestic water supply, and navigation.

Comments Concerning Other Matters

Several commentators mention that the construction of the pipeline will affect home values, provides questionable economic benefits, and will result in energy dependency.

Responses to Other Matters

The Division's authority is limited to matters affecting water quality and within the authority of the Tennessee Water Quality Control Act of 1977. In this regard, those matters above that are not within the Division's authority cannot be addressed by the Division in this permit.