

Notice of Determination: ARAP NRS21.238 and TN0082368

This notice summarizes the Division of Water Resources' consideration of public comments received for proposed Aquatic Resource Alteration Permit (ARAP) permit NRS21.238 and Individual NPDES permit TN0082368. This notice also announces the Division's final permit determinations. The Division has made the determination to issue permit NRS21.238 for specified impacts to six streams, two open water features and two wetlands associated with the construction of Ford's Blue Oval City for the manufacturing of electric vehicles and batteries. The Division has made the determination to issue construction permit TN0082368 for site preparation and construction of manufacturing and warehousing units at the megasite from total area of disturbance estimated at 1,817 acres.

Introduction

The Division appreciates stakeholders' participation and comments received. Public participation helps ensure that local factors relevant to water quality protection have been considered in the regulatory permitting process. This Notice of Determination addresses comments received through public participation in a public notice and public hearing whose chronology is summarized below. All comments received have been considered in the final determination. Comments received which are outside the jurisdiction of TDEC's water quality regulations and permitting authorities are also identified and acknowledged in this determination.

Summary of Public Participation Opportunities

On January 18, 2022, the Division solicited comments on the applicant's proposal to impact six streams, two ponds and two wetlands for the construction of Blue Oval City by Ford for the manufacturing of electric vehicles and batteries. Cumulatively, 13,137 feet of stream and 4.82 acres of wetlands are proposed to be impacted. Permittee responsible mitigation is proposed at an in-system, offsite location to compensate for stream impacts. Permanent loss of resource values from wetland and pond impacts are proposed to be mitigated through the purchase of credits from the Hatchie River Wetland Mitigation Bank, which is in-system. On this same date, the Division also solicited comments on activities associated with the Individual NPDES Construction Stormwater Permit for the disturbance to an estimated 1,817 acres for site preparation and construction of manufacturing and warehousing units

at the same location. Discharges of stormwater from the Blue Oval City construction site to unnamed tributaries to Big Muddy Creek, unnamed tributaries to Little Muddy Creek and existing wetlands located at the site is proposed from 26 separate outfalls.

The details of permit applications were communicated to the public during a public hearing. The time and location for the Hearing was published on the Division's Public Participation Webpage on January 18, 2022. Newspaper ads communicating this information were published in multiple newspapers in general circulation. The notice was published in The Jackson Sun and The Commercial Appeal on January 21, 2022. Public notice signs were posted at the site on January 21, 2022. The public hearing was conducted on February 22, 2022 at the Haywood County Justice Complex Courtroom. The Division accepted comments from the public through March 4, 2022.

Comments and Responses

The following comments have been edited and summarized from their original form to organize the presentation of content. It was not Division's intent to omit or misrepresent comments received.

- 1. The streams in this area are listed 303(d); they have impairments largely due to channelization, sedimentation and have phosphorus issues. They are not the best of streams in many ways, so there should be a great deal of concern placed on how the activities on the site influence those streams- a lot of this is related to sediment. How is this being done? We would like to see the plans for stormwater control during site development, and request the construction stormwater inspection reports, plans for post construction long-term stormwater control and reuse and green infrastructure are made public. Will you share the industrial stormwater pollution prevention plan?**

Response: Direct alterations to habitat in jurisdictional Waters of the State are being authorized through the Aquatic Resource Alteration Permit. The current condition of the Waters impacted, proposed impacts, justifications for impacts, and mitigation of those impacts are addressed in the "Permit Rationale" appended to the Aquatic Resource Alteration Permit, in accordance with the Tennessee Antidegradation Statement (Rule 0400-40-03-.06). Disturbed soil, if not managed properly, can be washed off-site during

storms. Impacts of potential erosion and sediment input into Waters of the State are being addressed through an individual NPDES permit TN0082368. Site topography, ground cover and variety of structural and non-structural best management practices (BMP) were all taken into account when developing a site-specific storm water pollution prevention plan (SWPPP). This NPDES permit requires that a suite of BMPs be used by the permittee. In addition, extensive monitoring, inspections and site assessments were all included in the final permit. Supplementary controls and even chemical treatment have been included in order to achieve effective protection of receiving streams and minimize or completely eliminate degradation of water resources. All information and documentation regarding these two permits can be found on the TDEC DataViewer at:

https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34031:::34031:P34031_SITE_ID:110683

- 2. We need water to infiltrate and get back to the aquifer. This is primarily done in streams and ensuring there isn't an overloaded sediment system that could clog the streams. How will we ensure we are still getting infiltration in the stream systems? Could numerical thresholds be introduced if there is too much sediment load and stormwater controls aren't kept in place due to rainfall events or whatever the case may be during construction. Appreciate that these reports will be publicly available. For the post construction site drainage plan, wetlands should be part of tertiary treatment, and be part of the part of slowing flow of stormwater and allow sediment to settle and increase recharge.**

Response: The Clean Water Act sections 301 (a) and 402 (p) (3) (B) prohibit the use of jurisdictional Waters for "in-stream treatment" of water quality. For this reason, it is not appropriate to use the streams, wetlands, or open water habitats on site for the purposes of sediment settling and removal. Constructed wetland systems are sometimes used to improve water quality, but State of Tennessee permits do not require, and the applicant has not proposed, use of constructed wetlands to treat stormwater. Please see response to comment 1. with respect to control of sediment via NPDES permit terms and conditions.

- 3. For wastewater permit, as far as tertiary treatment we'd like to see how wetlands can be used to treat wastewater discharge. PFAS, lithium ion, cobalt,**

nickel, aluminum and a lot of these different constituents that we see onsite should be monitoring regularly in the discharge.

Response: The Clean Water Act sections 301 (a) and 402 (p) (3) (B) prohibit the use of jurisdictional Waters for treatment of water quality. For this reason, it is not appropriate to use the streams, wetlands, and open water habitats on site for the purposes of treating wastewater discharge. Constructed wetland systems are sometimes used to improve water quality, but State of Tennessee permits do not require, and the applicant has not proposed, use of constructed wetlands to treat a wastewater discharge. Nature of industrial process, volume of proposed discharge and efficiency of proposed mechanical wastewater system were all considered in evaluating treatment options; constructed wetlands would not be a feasible alternative in this case. Extensive monitoring, as required in EPA's application form 2A, will be conducted on the facility's effluent upon commencement of production. More information on Memphis Regional Megasite WWTP can be found in a separate NPDES permit TN0081906:

https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34051:::34051:P34051_PERMIT_NUMBER:TN0081906

4. Comments were received in regard to the Hatchie River burrowing crayfish. Will the endangered Hatchie River burrowing crayfish or its habitat be impacted by the activities? There is no reference to the state designated natural area with aquatic and riparian habitat set aside in a perpetual land use restriction for the conservation of *Fallicambarus hortonii*.

Response: The closest verified occurrence of the Hatchie Burrowing Crayfish (*Creaserinus hortonii* syn. *Fallicambarus hortonii*) documented in the records of the Tennessee Wildlife Resources Agency and the TDEC Division of Natural Areas is approximately 26 miles away from the Blue Oval City site. There are no State Natural Areas within the project boundary or in proximity to the Blue Oval City site.

The letter provided by TWRA in response to required Division of Water Resources coordination for these permitting activities (included in the DWR Data Viewer as part of the administrative record for these permits) indicates the agency does not have concerns that this project will have adverse impacts to any aquatic species under its authority.

TDEC is aware of projects in the vicinity of the Blue Oval City site associated with potential conservation easements and establishment of Hatchie Burrowing Crayfish habitat. To date, no occurrences of *C. hortoni* have been documented in or around the Blue Oval City site, and the potential conservation activities are beyond the project boundaries associated with the impacts authorized by the ARAP.

5. We are glad to see the mitigation credits are going in the same watershed. Would like to see that type of approach- where mitigation is happening where the impacts are happening- continue.

Response: Thank you for this feedback. The Tennessee Water Quality Control Act, the ARAP Rule, and the Division's implementing practices require that mitigation for unavoidable impacts to jurisdictional Waters of the State as is practicable. When compensatory mitigation cannot occur in the same HUC-8 watershed, the amount of mitigation required is increased in proportion to the distance from the site of impact. The proximity of mitigation to the impact also affects the Division's assessment of the degree of loss of resource values as documented in the Antidegradation statement of the Permit Rationale.

6. We are thankful to see that green infrastructure has been taken into account.

Response: Thank you for this feedback. The Division encourages implementation of green infrastructure, but requiring specific green infrastructure practices is not within the scope of the permitted activities.

7. Sierra Club never agreed that it was appropriate or legal for the state to issue a permit to the state building commission regarding the 3.1 million gallons discharge to the Mississippi river because we didn't know what the actual pollutant would be and there were not clear limitations, numeric or otherwise, or what constituents might be in the discharge. We also don't think it's appropriate or legal to issue an expanded five million plus permit without constituents being identified and there being numeric or other controls in that regard. Further, for the individual construction permit, we believe that there needs to be baseline data that doesn't include high storm events or previous

sediment loadings; What has happened there before we can decide what is going on now will be appropriate.

Response: This comment is related to NPDES individual permit TN0081906, issued in 2018 to the Memphis Regional Megasite WWTP for discharge of treated municipal wastewater from Outfall 001. Specifically, the permit authorizes treatment of municipal wastewater, including domestic waste and pretreated industrial effluent, from the Blue Oval City, a planned automotive assembly and battery manufacturing plant. The proposed permit modification increases the permitted design flow from 3.5 MGD to 5.1 MGD and transfers the permit to the Megasite Authority of West Tennessee. The application indicates the discharge will result in less than de minimis degradation due to the available assimilative capacity in the Mississippi River. Treatment will consist of sequencing batch reactor (SBR) biological treatment including a conventional grit and trash removal headworks, tertiary effluent disc filters, screw press biosolids handling and on-site reuse of treated wastewater. The permit writer does not recall any specific agreements made with Sierra Club regarding authorization of that point source discharge. Extensive monitoring, as required in EPA's application form 2A, will be conducted on the facility's effluent upon commencement of production. More information on Memphis Regional Megasite WWTP can be found in a separate NPDES permit TN0081906: https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34051:::34051:P34051_PERMIT_NUMBER:TN0081906.

8. Is the mitigation being proposed adequately replacing the thousands of feet of stream? And looks like a dozen of acres of wetlands will be impacted here.

Response: Tennessee Rule Chapter 0400-40-07-.04 requires compensatory mitigation when an applicant proposes an activity which would result in an appreciable permanent loss of stream or wetland resource values. The Division has evaluated the applicant's proposed impacts to streams as well as the proposed compensatory mitigation through the use of an appropriate quantitative assessment methodology, The TN Stream Quantification Tool (TN SQT) was used to calculate loss of stream function associated with the proposed stream impacts at the Blue Oval City site. The permittee is required to provide compensatory mitigation for a total of 8,616 functional feet of impact. The permittee proposes to implement stream mitigation on 20,795 linear feet of stream channel along Cub Creek and several tributaries. Proposed restoration activities are expected to generate approximately 10,491

functional feet of lift, roughly 22% more than required to mitigate for proposed impacts. The proposed mitigation is in the same HUC-8 watershed as the impacts, so no additional multipliers for mitigation requirements are warranted. Further, all ARAPs issued by DWR include the provision for assessment of additional mitigation requirements if the compensatory mitigation proposed fails to generate the functional lift planned or otherwise fails to adequately offset impacts for aquatic resource values. TDEC has determined that the stream mitigation proposed is sufficient to offset the loss of aquatic resource values due to the activities proposed by the applicant.

The Aquatic Resources Inventory supplied by the applicant and verified by TDEC, when cross-referenced with the applicant's construction plans submitted with the ARAP application, indicates that 4.82 acres of wetlands and 1.75 acres of open water habitat will be filled by construction activities. Rule Chapter 0400-40-07-.04 establishes that the ratio for acres required for wetland mitigation should not be less than 2:1 relative to acres of wetland impacted. The permittee is required to mitigate wetland losses at this 2:1 ratio, and losses of open-water habitat at a 1:1 ratio. The permittee proposes to purchase 11.64 wetland mitigation credits from the Hatchie River Wetland Mitigation Bank, and has provided the Division with proof of reservation of the required amount of wetland credits from this bank. The Wetland Mitigation bank is located within the same watershed, Lower Hatchie River watershed, as the project site, so no additional multipliers for mitigation requirements are warranted.

9. Appreciate Ford being a forward-looking progressive organization and hope they make voluntary choices to do the best they can here.

Response: Thank you for your comment.

10. There's not a lot in statue, but the amount of water being taken out of the aquifer in these areas needs to be accounted for. Very concerned for the kind of depression that could occur in this area from the withdrawals that are being conceived and there isn't adequate opportunity for recharge in the immediate area.

Response: Withdrawal of groundwater is not within the purview of the ARAP or NPDES stormwater permits.

11. Comments were received from the Tennessee Wildlife Resource Agency (TWRA).

Response: The Division appreciates the TWRA's fulfillment of our required intergovernmental coordination through their comments on this project. While the TWRA's database does not indicate any aquatic T&E species under their authority within an 8-mile radius, the TWRA is requiring implementation of BMPs for erosion prevention and sediment control throughout the project site and during all work activities. They note that it is especially important during the months of March through June to minimize impacts to spawning activities of fish. The ARAP addresses this requirement through inclusion of the condition: "Best Management Practices (BMPs) shall be stringently implemented throughout the project site and during the construction period to prevent sediments, oils, or other project-related pollutants from being discharged."

12. Comments were received regarding how altering streams by channelization and the installation of culverts will increase volume, velocity and possible sedimentation of Little Muddy Creek that crosses property north of the proposed railyard. The following specific information is requested:

- 1. Further baseline studies be done to determine an average volume, velocity and sedimentation of Little Muddy Creek pre-construction, during construction, and after construction during stormwater events both at the outfall(s) onto my property and at the Little Muddy Creek/ Keeling Road juncture.**
- 2. additional information from Ford, SK, and Walbridge that might bear on these concerns, and be appraised in a timely manner of proposed plans and designs for stormwater buffering & runoff and how this might be monitored during the construction and operational phase of this project. This is especially important considering the speed of this development.**

Response: Management of post-construction stormwater runoff is not within the purview of the ARAP or NPDES stormwater permits. With respect to construction site stormwater runoff, please see response to comment 1.

13. We have completed a summary review of the application and proposed NPDES permit for Stormwater Discharges.

While we commend the use of an 'Individual' NPDES permit as opposed to TN's General Stormwater Permit(s), we lament that any federal permitting actions (and wastewater funding) are precluded as there is NO NEPA process or Environmental Impact Statement. EIS, for the massive, colocated, codependent and commingled activities and related 'megasite' permitting proposals.

During our summary review, We are astonished that within the Application, and TDEC's own review there is NO apparent reference to the state designated natural area (that portion of these same 'megasite' lands*) with aquatic and riparian habitat set aside in a perpetual Land Use Restriction for the conservation of Fallicambarus hortoni !!!

Discovered in the 1970's, the Hatchie Burrowing Crayfish is a S-1 (state) and G-1 (global) CRITICALLY ENDANGERED SPECIES known only in our Hatchie Scenic River watershed of West TN. In addition to regular sedimentation, this crayfish (and most amphibians) are vulnerable to the turbidity and particularly to colloidal particles which may be generated through disturbance of our silt-loam Alfisols to B and C horizons.

We note from the proposed EPSC Plan that Pre-Development Areas 8 and 9 contain more than 1,000 acres of watershed through our existing 'conservation easement'. The proposed disturbances Post-Development include a TVA substation, EMS Station, Offices, drive lanes, new access roads and a massive Lithium Battery (Recycling) Plant of more than 800 acres WITH NO STORMWATER TREATMENT such as retention, primary settling, or water polishing (chitosan or land application). Silt fence and berms do NOT offer stormwater treatment for these pollutants.

We recognize that Ford has a nameplate before the public and we are optimistic that they will 'do the right things' and we expect they will also leverage their partners (SK Energy/Innovations?) Ford Model E affiliates, and Ford Model E suppliers to do as well. We will have to watch that TN Dept of Environment and Conservation does not backslide. (Brian Canada, permit writer for SR-222).

Response: The National Environmental Policy Act (NEPA) requires review of the effects of all Federal, federally assisted, and federally licensed actions, not just of those defined as "major" or as having "significant" impacts. The level of review given different kinds of projects varies with the likelihood of serious impact. Since Blue Oval City is not Federal,

federally assisted, and federally licensed actions, NEPA review is not required. Impacts of potential erosion and sediment input into Waters of the State are being addressed through an individual NPDES permit TN0082368. Site topography, ground cover and variety of structural and non-structural best management practices (BMP) were all taken into account when developing a site-specific storm water pollution prevention plan (SWPPP). This NPDES permit requires that a suite of BMPs be used by the permittee. In addition, extensive monitoring, inspections and site assessments were all included in the final permit. Supplementary controls and even chemical treatment have been included in order to achieve effective protection of receiving streams and minimize or completely eliminate degradation of water resources. All information and documentation regarding these two permits can be found on the TDEC DataViewer at:

https://dataviewers.tdec.tn.gov/pls/enf_reports/f?p=9034:34031::::34031:P34031_SITE_I_D:110683 With respect to protection of threatened and endangered species, please see response to comment 4.

Determination

In accordance with the above responses to comment and for the reasons set forth in the Rationales for the draft ARAP and NPDES permits and the public notices for both permits, the Tennessee Department of Environment and Conservation, Division of Water Resources finds that the proposed activities may be authorized through NPDES Permit TN0082368 and ARAP NRS21.238 in a manner protective of all designated uses and associated water quality standards.