



**STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
401 CHURCH STREET
L & C ANNEX 6TH FLOOR
NASHVILLE TN 37243**

Addendum to Rationale
Including
Record of Comments and Responses
(Notice of Determination)

**National Pollutant Discharge Elimination System (NPDES)
Permit for Stormwater Runoff Associated
with Construction Activity**

Memphis Regional Intermodal Facility

Permit No. TN0081108

November 12, 2010

Administrative Record

The Division of Water Pollution Control (division) received a permit application on February 21, 2010 for a construction stormwater permit for the construction of a Regional Intermodal Facility in Rossville, Fayette County, Tennessee. Following the receipt of a complete application, the division issued Public Notice Number MMX-013 on July 12, 2010, which contained the proposed new issuance of a permit for the Memphis Regional Intermodal Facility, Permit Number TN0081108. A public hearing, which was public noticed on June 16, 2010 under public hearing notice number PH 2010-10 and which was posted on the division's website (http://tn.gov/environment/wpc/ppo/mdi/ph2010_10.pdf), was held on Tuesday, August 3, 2010, at 6:00 PM CDT at the Town of Collierville Town Hall located at 500 Poplar View Parkway, Collierville, TN 38017. Following the August 3, 2010 public hearing, the division received comments through August 16, 2010.

The proposed NPDES permit was drafted in accordance with the provisions of the Federal Water Pollution Control Act, the Tennessee Water Quality Control Act, and other lawful standards and regulations. This Notice of Determination (NOD) serves as the division's response to questions, comments, and issues that were raised at the hearing and/or submitted during the subsequent comment period.

Comments received and responses

The following comments were received on August 6, 2010, from the permit applicant regarding the draft permit.

1. **Comment:** **Continuous monitoring of selected outfalls. Draft Permit Part I.A. We believe the flow in these outfalls is not continuous enough for accurate continuous monitoring.**

Response: Continuous monitoring is required when there is a discharge from these outfalls. Other construction sites with this requirement have been able to obtain continuous monitoring results when discharging.

2. **Comment:** **Continuous in-stream monitoring. Draft Permit Part I.A. We believe the flow in these streams is not continuous enough for accurate continuous monitoring. If this monitoring is retained, we believe that the difference between continuous and non-continuous or in sufficient flow should be clarified.**

Response: The division understands that flow may dry up in the receiving streams during dry periods (i.e. summer months). As such, if dry periods are documented by the permittee, continuous monitoring will not be required during those periods. However, continuous in-stream monitoring is possible and is expected the remainder of the time. In addition, in-stream monitoring results will need to be reported on the DMR provided in Attachment III. The paragraph preceding the in-stream monitoring requirements table listed under subpart I.A. of the draft permit has been clarified and now reads as follows:

In addition, continuous in-stream monitoring will be required for three locations on unnamed tributaries to Wolf River when there is sufficient flow. The permittee shall document any periods of non-continuous or insufficient flows in the stream(s); when there is non-continuous or insufficient flows in the receiving stream the monitoring requirements listed in the following table will not apply. However, during these periods of low or no stream flow, the permittee shall inspect the in-stream monitoring locations twice weekly (which may be done concurrently with the EPSC inspections required under section IV.D.8.) to document the continued absence of stream flow. Continuous in-stream monitoring must resume once the stream resumes the maintenance of a flow. If non-continuous or insufficient flow is noted (i.e. during a rain event) at the in-stream monitoring locations, grab samples will be taken at monitoring locations at the frequency defined for the outfalls below sediment basins. Those in-stream locations, IMP1, IMP2, and IMP3, are approximated in the Permit Limits table below, but exact monitoring locations shall be approved by the Memphis EFO prior to initiation of in-stream monitoring. In-stream monitoring results shall be reported on the DMR provided in Attachment III.

3. **Comment:** **Monitoring of all outfalls, rather than representative outfalls. Draft Permit Part I.A. Sampling all outfalls seems unwarranted for a construction project like this. We are particularly concerned that the sampling of all outfalls, when representative sampling would suffice, creates unnecessary safety issues associated with monitoring during adverse weather.**

Response: Monitoring at every outfall is required under the new Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category, 40 CFR Part 450 (i.e., Construction ELG). However, note that section I.C.3 allows representative monitoring for linear portions of the construction site (i.e. such as the portion of this site that lies to the north of Outfall SW9, not including Outfall SW9). The permit also allows for adjustments to the sampling frequency and time of collection of the first sample or subsequent samples for circumstances such as adverse weather conditions or intense rainfall, which would cause a reasonable person to believe that the safety of the sample collection personnel would be in jeopardy.

4. Comment: Weekly quality assurance at each monitoring location. Draft Permit Part I.D.4. Weekly quality assurance may not be effective during weeks when there is no rainfall and it is unclear what weekly quality assurance standards consist of.

Response: Weekly recorded staff gauge readings and corresponding instrument readings (for each monitoring location) are required to determine the corrections to be applied to instrument data prior to processing (calculating flows). Staff gauges and water level measuring instruments (e.g., pressure transducers) should be located in or hydraulically connected to the low point in the stream cross-section so that level readings are available under low- and even no-flow conditions. Ideally, in-stream monitoring would be conducted in a location with a stable or relatively stable control section with a somewhat deeper "pool" upstream for measuring water levels. Only if the stream is dry would QA measurements be unavailable or ineffective.

5. Comment: Sampling results from outfall discharges effluent at weekly, monthly, or continuous periods. Draft Permit Part I.A. and Part I.D.2. Some outfalls may not discharge except after rainfall events and frequent unproductive trips would be required to outfall locations in attempt to collect samples.

Response: Twice weekly inspections are a requirement of this permit, per section IV.D.8. At a minimum the outfalls must be inspected at this frequency and this would help determine if there is a discharge and if discharge monitoring is required. If no rainfall occurs during the week these twice weekly inspections shall be sufficient to demonstrate that no discharge occurred and the DMR may be marked as "No Discharge". However, the permittee is responsible for checking all outfalls following a significant rain event to determine if a discharge is occurring.

6. Comment: Our application called for grab samples to be taken during the first 60 minutes of a qualifying storm event while the permit requires that it should be taken in the first 30 minutes. Draft Permit Part I.C.2. We are concerned that it may not be possible to collect all such samples within 30 minutes of a qualifying storm event.

Response: Section I.C.2. of this permit allows for grab samples during the first hour of the discharge if it is not possible to obtain a sample within the first 30 minutes of discharge: "The first grab sample should be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample may be taken during the first hour of the discharge,

and the discharger shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable.”

7. **Comment:** **Changing the definition of a qualifying storm event from 0.5 inches to 0.1 inches. Draft Permit Part I.A. We believe it may not be possible to get discharge from the outfalls from a rainfall event of 0.1 inches.**

Response: If no discharge occurs as a result of a 0.1 inch rain event then the DMR should be marked as “No Discharge” using the box provided in the upper right-hand corner of the DMR. This box was not provided on the DMRs provided in the draft permit. This omission was corrected to provide that option.

8. **Comment:** **Expanding the use of polyacrylamide to treat all stormwater effluent for all phases of construction and notify Memphis EFO at least two weeks in advance of any polymer use that is not detailed in SWPPP. Draft Permit Part I.A. We believe it would be more effective to phase our erosion control measures to make sure we are using the best BMPs possible.**

Response: The division understands the concern that polyacrylamide use may not be warranted for all stormwater runoff from the site. In addition, the division understands that the immediate use of an alternate polymer may be necessary. This paragraph has been modified to read as follows:

The Memphis Regional Intermodal Facility is required to use polymers (including polyacrylamide, i.e. PAM, and flocculants) to treat all stormwater effluent from all sediment basins; polymers shall be used elsewhere on the site as-needed. The permittee has submitted information regarding the specific planned uses of polymers and the specific polymers that will be used at the site. The Memphis EFO shall be notified at least two weeks in advance of any polymer use that is not detailed in the stormwater pollution prevention plan (SWPPP). Notification shall include the names of the polymers, method of polymer use (i.e. broadcast spreading, block or log forms, emulsions, etc.), and details describing the site locations where polymers will be placed. If any polymer use that is not detailed in the SWPPP needs to begin sooner than two weeks after notifying the Memphis EFO, authorization may be obtained from the Memphis EFO to commence with the proposed polymer use. All polymers shall be mixed and/or applied in accordance with Occupational Safety and Health Administration (OSHA) MSDS requirements and the manufacturer’s recommendations for the specified use conforming to all federal, state, and local laws, rules, and regulations.

9. **Comment:** **The need to test the concentration of polyacrylamide and aluminum in samples. Draft Permit Part I.A. and Rationale VIII. We are unaware of appropriate field tests for aluminum and for polyacrylamide.**

Response: The permit does not mandate a field test. Rather this is a monitoring requirement that may be met through the use of either a field test or a laboratory test.

10. **Comment:** **The need of biological monitoring. Draft Permit Part III.E. Given that Stream 6 is impaired for *E coli*; we are unclear as to the purpose of biological monitoring.**

Response: Biological monitoring is being required to define the facility's biological impact of construction stormwater discharges on the receiving streams.

11. **Comment:** **Requirement to place and maintain a sign(s) at each outfall. Draft Permit Part III.C. We would like some clarification with regard to the specific requirements for such signs, including the public visibility standard.**

Response: The sign requirement has been modified to read as follows:

Within sixty days of the effective date of this permit, the permittee shall place and maintain an outfall sign at each outfall. These signs shall be clearly visible to on-site personnel and must clearly list the Outfall number.

In addition, a sign shall be placed at all public right-of-ways and at locations where receiving streams leave the permittee's property. These sign(s) should be clearly visible to the public from the bank and the receiving stream or from the nearest public property/right-of-way, if applicable. The minimum sign size should be two feet by two feet (2' x 2') with one inch (1") letters. The sign should be made of durable material and have a white background with black letters. These signs are to provide notice to the public as to the nature of the discharge and, in the case of the permitted outfalls, that the discharge is regulated by the Tennessee Department of Environment and Conservation, Division of Water Pollution Control. The following is given as an example of the minimal amount of information that must be included on the sign:

<p><i>Construction Stormwater Runoff Memphis Regional Intermodal Facility (Permittee's Phone Number) NPDES Permit No. TN0081108 Tennessee Division of Water Pollution Control 901-371-3000 Environmental Field Office - Memphis</i></p>

Signs may be removed once all applicable outfalls have been eliminated.

12. **Comment:** **Soil analysis must be performed prior to the application of fertilizer to any portion of the site. Draft Permit Part I.A. The permit requires that the site be adequately stabilized; this should be an adequate specification without specifying how the permittee will accomplish stabilization.**

Response: This requirement is not limiting the ways that the site can be adequately stabilized. But, vegetation establishment, using fertilizer applications, is a common form of soil stabilization on construction sites. Nitrogen and phosphorus runoff from hydroseeding can be a major contributor to nutrient loading into

surface waters. Soil analysis prior to fertilizer application will help ensure that adequate, but not excessive, nutrients are available for vegetation establishment.

- 13. Comment:** Requirement to report the total drainage area and acreage of land disturbance in the drainage area for each outfall at the time when discharge samples are taken. Draft Permit Part I.A. and Draft Permit Part I.C.3. We believe the calculation of disturbed area by outfall will be difficult to accurately determine in the field given the nature of the construction project.

Response: The division understands that while it may not be possible to report an exact acreage of total drainage area and land disturbance, it should be possible to provide a reasonable estimate of these numbers. These values are important for division staff to have as they analyze and interpret the monitoring data.

- 14. Comment:** Record how long after start of discharge that 1st the sample was taken. Draft Permit Attachment V. We are uncertain how we would know when the discharge started without continuous observation.

Response: The amount of time elapsed since the discharge first started will be an estimate. However, as this is a permit requirement it is expected that the permittee will be aware of when it rains on a site and that the permittee will keep a close watch on the facility's outfalls to be aware of when discharges began and thus when monitoring must commence.

- 15. Comment:** Estimate average and maximum flow rates per outfall in MGD (million gallons per day) for all outfalls. Draft Permit Part I.A. and Attachments I-IV. We believe flow cannot be readily estimated in areas without continuous flow or continuous observation.

Response: Flow estimates for outfalls without continuous monitoring should be based on the site conditions in existence at the time of sample collection. These estimates will be a snap shot of the facility and are not expected to demonstrate flow from the facility over time.

Following receipt of Norfolk's initial permit comments, division staff met with the permit applicant and their consultants. The following comments were received on August 16, 2010, following that meeting.

- 16. Comment:** Based on 40 CFR Part 122, Subpart C, Tennessee Code Annotated Section 1200-04-10-.03, and the EPA Permit Writer Guide (Dec 1996), and EPA's abeyance request for the Final Rule establishing effluent guidelines from construction sites (filed Aug 2010), Norfolk Southern (NS) requests that the number of outfalls required to be monitored, the frequency of the monitoring, and the type of samples taken be re-evaluated to a representative sampling of type, interval, and frequency sufficient to yield data to verify compliance. NS requests the 13 outfalls identified in the original Monitoring Plan be monitored for Turbidity at a quarterly frequency unless issues are identified.

Response: See response to comment 32 for allowance of the use of representative outfalls.

17. **Comment:** **Part I.A. and Attachments. Conductivity can be read using either a hand-held meter or a probe, while Total Dissolved Solids (TDS) must be interpreted from conductivity. Therefore, if continuous readings are established, conductivity data could be provided without interpretation for TDEC's use. The monitoring tables need to be adjusted to reflect the replacement of TDS with Conductivity along with some text adjustments in a couple of locations in the permit.**

Response: The monitoring requirements listed in subpart I.A. of the permit were modified to require monthly conductivity grab samples in place of TDS monitoring. All references in the permit to total dissolved solids (TDS) monitoring were either changed or deleted, as appropriate.

18. **Comment:** **Part I.A. and Attachments. Even with the new EPA rule for turbidity monitoring, there is not a requirement for continuous monitoring of outfalls. Therefore, NS is requesting the frequency of monitoring of outfalls with sediment basins be changed from continuous to once per month for flow, conductivity, TSS, and turbidity. The tables and text need to be adjusted to reflect this change. In the outfall monitoring tables, NS also requests a footnote be added to refer to the option to sample representative outfalls.**

Response: Continuous monitoring of outfalls is not based on the EPA "Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category," 40 CFR Part 450. Rather this requirement is one that has been selected based on the nature and timing of the permitted activity. The continuous monitoring requirement of outfalls with sediment basins will be retained in the final permit.

19. **Comment:** **Part I.A., Part I.D.2., and Attachments. NS has a good start for a QA program in the initial monitoring plan submitted to TDEC. NS requests that the Quality Assurance (QA) Plan simply be established in general conformance to CFR 40 Part 136 instead of the prescriptive list in the tables in Part I.A. and the attachments. The revisions requested are shown in the attached file on pages 3 and 9.**

Response: The Monitoring Plan that was submitted by the applicant is a good starting point. However, revisions will be necessary to ensure that it meets the requirements of the permit. The prescriptive requirements listed in the Permit Limits tables in subpart I.A. are consistent with the division's requirements for individual NPDES permits for construction stormwater. In addition, these requirements are listed in the permit limits tables in an attempt to keep all routine sampling requirements in one location. The duplicate samples required in the Permit Limits tables will be retained. In addition, the Continuous In-Stream Monitoring requirements listed in section I.D.4 are appropriate and will be retained in the final permit.

20. **Comment:** **Part I.A. The below paragraph as written in the draft permit on page 4 gives the impression that rainfall amount needed to be correlated with sample time. See requested changes below:**

"The permittee shall maintain a log of rainfall events including date, duration (in hours), and total rainfall per calendar day. For sampling events, the permittee shall provide an estimate of the total volume of the discharge sampled per outfall."

Response: This paragraph has been changed to read as follows:

The permittee shall maintain a log of rainfall events including date, estimated duration (in hours), and total estimated rainfall per calendar day. For sampling events, the permittee shall provide an estimate of the total volume of the discharge sampled per outfall and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event.

21. **Comment:** Part IA. NS appreciates some of the initial changes TDEC made on the requirements to use polymer on site on page 4, but NS prefers to simplify and clarify this issue. The revisions requested are:

The Memphis Regional Intermodal Facility may be to use polymers (including polyacrylamide, i.e. PAM, and flocculants) to treat stormwater effluent as-needed. The permittee has submitted information regarding the specific planned uses of polymers and the specific polymers that will be used at the site. The permittee shall receive approval from the Memphis EFO prior to using any polymer that is not detailed in the authorized stormwater pollution prevention plan (SWPPP). Notification shall be requested at least two weeks in advance, if practicable, and shall include the names of the polymers, method of polymer use (i.e. broadcast spreading, block or log forms, emulsions, etc.), and details describing the site locations where polymers will be placed. All polymers shall be mixed and/or applied in accordance with Occupational Safety and Health Administration (OSHA) MSDS requirements and the manufacturer's recommendations for the specified use conforming to all federal, state, and local laws, rules, and regulations.

Response: This paragraph has been modified to read as follows:

The Memphis Regional Intermodal Facility is required to use polymers (including polyacrylamide, i.e. PAM, and flocculants) to treat all stormwater effluent from all sediment basins when there is one or more acres of soil disturbance in the sediment basin drainage area; polymers shall be used elsewhere on the site as-needed. The permittee has submitted information regarding the specific planned uses of polymers and the specific polymers that will be used at the site. The Memphis EFO shall be notified at least two weeks in advance of any polymer use that is not detailed in the stormwater pollution prevention plan (SWPPP) that has been reviewed by the division. Notification shall include the names of the polymers, method of polymer use (i.e. broadcast spreading, block or log forms, emulsions, etc.), and details describing the site locations where polymers will be placed. If any polymer use that is not detailed in the SWPPP needs to begin sooner than two weeks after notifying the

Memphis EFO, authorization may be obtained from the Memphis EFO to commence with the proposed polymer use. All polymers shall be mixed and/or applied in accordance with Occupational Safety and Health Administration (OSHA) material safety data sheet (MSDS) requirements and the manufacturer's recommendations for the specified use conforming to all federal, state, and local laws, rules, and regulations.

In addition, it was brought to the division's attention that the permittee was unable to find a laboratory that was able to conduct testing for polyacrylamide residual. Upon investigation of this the division determined that it would be more appropriate to have the permittee monitor for acrylamide monomer. The final permit was changed to require acrylamide monomer testing for all sediment basins. The following language was added to the applicable permit limit table as footnote #8:

8. Acrylamide monomer sampling shall follow EPA Method 8316. Acrylamide monomer monitoring is only required when polymers are used in these outfalls, if a discharge occurs. Acrylamide monomer monitoring is required at a minimum of 1/Month for these outfalls (if a discharge occurs). Once the permittee obtains a minimum of 12 valid samples (and corresponding results) the permittee may request elimination of acrylamide monomer monitoring from the division's permit section. The permittee shall not discontinue acrylamide monomer monitoring until they receive written authorization from the division's permit section.

22. **Comment:** Part I.A. Based on our discussions, below is the suggested re-worded paragraph to clarify the goal and requirement for soil analysis prior to the application of fertilizer on page 4.

"The SWPPP shall include measures to prevent or minimize over-application of fertilizer applied as part of the site stabilization best management practices."

Response: The requirement to perform a soil analysis shall remain in the permit. As stated in the response to comment #12 vegetation establishment, using fertilizer applications, is a common form of soil stabilization on construction sites. Given the scope of this project, the division believes that this additional control is necessary to help ensure that nutrient loadings to surface waters are minimized.

23. **Comment:** Part I.A. TDEC expressed a concern for Polyacrylamide Residual or Total Recoverable Aluminum if PAM or alum were used in the basin directly upstream of the outfall. If the Division requires the use of PAM or similar product, NS requests the below language be added to page 5 to better reflect that concern.

"If polymers are added to the stormwater effluent in the last sediment basin directly above the outfall, these outfalls (SW9, SW10, SW29, SW30, SW31, and SW32) shall be tested for Polyacrylamide Residual (or other equivalent tests) once per month, if discharge occurs.

If Alum is added to the stormwater effluent directly above the last BMP, the outfall below the BMP shall be tested for Total Recoverable Aluminum (or other equivalent tests) once per month, if discharge occurs.

Test results for Polyacrylamide Residual or Total Recoverable Aluminum shall be provided along with other monitoring results from the appropriate outfall. If the laboratory results are not back in time to meet the DMR reporting requirements, their absence should be noted on the DMR and the results should be included with the next month's DMR. The permittee will make best efforts to meet DMR reporting requirements. The permittee will notify TDEC regarding lab analysis issues or deficiencies. Deficiencies resulting from lab analysis shall not be considered noncompliance with permit."

Response: The following language was added to subpart I.A. to clarify polyacrylamide residual reporting requirements.

If polymers are added to the stormwater effluent in the last sediment basin directly above the outfall, these outfalls (SW9, SW10, SW29, SW30, SW31, and SW32) shall be tested for polyacrylamide residual using EPA Method 8032A once per month, if discharge occurs.

Test results for polyacrylamide residual shall be provided along with other monitoring results from the appropriate outfall. If the laboratory results are not back in time to meet the DMR reporting requirements, their absence should be noted on the DMR and the results should be submitted as soon as possible on a supplemental DMR form. The permittee will make best efforts to meet DMR reporting requirements. The permittee will notify TDEC regarding laboratory analysis issues or deficiencies. Deficiencies resulting from laboratory analysis of polyacrylamide residual shall not be considered non-compliance with permit.

Monitoring for Total Recoverable Aluminum was removed from the permit as it was determined that the polyacrylamide residual test, using EPA Method 8032A would be adequate to determine if residual polyacrylamide was being discharged.

24. Comment: Part I.A. Based on our discussions we understand why TDEC wants the estimated acreage of land disturbance in the drainage area for each outfall at the time when discharge samples are taken. Since TDEC agrees that this is a rough estimate, we would like to clarify that in the text on pages 5.

Response: The applicable paragraph from subpart I.A. has been edited to clarify that the drainage area and acreage of land disturbance are to be estimates. The paragraph now reads as follows:

The permittee shall report the estimated total drainage area and estimated acreage of land disturbance in the drainage area for each outfall for each sampling event. Record of the estimated drainage area and amount of land disturbance for a given sample event shall be

reported in the notes section of the Discharge Monitoring Report (see section I.E.1 below).

25. **Comment:** **Part I.C.2. The draft permit defines normal business hours on page 7. NS would also like to define normal business days as Monday to Friday, or when workers are normally present on the construction site.**

Response: This definition of normal business hours was provided for sampling requirements subject to an NTU Limitation for Turbidity. As this turbidity limitation has been removed from the permit (see response to comment 32 below) this definition is no longer applicable and has been removed from the permit. As such, a definition for normal business days is not necessary and will not be added to the permit.

26. **Comment:** **Part I.C.7. Since storm events can occur on multiple calendar days, NS felt a clarification should be made that a 2-year 24-hour storm event occurs in a 24 hour period, not in a given day, if this text is retained in the permit (currently on page 8).**

Response: This text has been removed from the final permit; see the response to comment 32 below.

27. **Comment:** **Part I.D.2. NS felt there was some disconnect between the 6 a.m. to 6 p.m. sampling day and the definition of a No Discharge event. NS requests changes to the text on page 9 to clarify the definition of the no-discharge requirement:**

Response: The Sampling Frequency requirements under section I.D.2 (as numbered in the draft permit) were modified based on the permit applicant's suggestion. This section, which is located in section I.C.2 of the final permit, now reads:

The permittee should mark the 'No Discharge' box on the Discharge Monitoring Report form only if a permitted outfall does not discharge effluent at any time during the monitoring period. If the outfall discharges effluent at any time during the monitoring period, the permittee must provide at least one sampling result from the effluent of that outfall.

28. **Comment:** **Part I.D.3. NS requests a clarification be added for when the sampling of an outfall should begin and end. NS requests the below language be added to page 9 to better reflect that concern.**

"Sampling requirements will start as soon as the area within an outfall is disturbed and will continue until an outfall is determined to have reached final stabilization. Sampling requirements do not apply to outfalls that have not been disturbed or have been finally stabilized, as described in subpart IV.A."

Response: The suggested clarification has been made. The following paragraph has been added to section I.C.2 of the final permit (numbered as section I.D.2 in the draft permit):

Sampling requirements will start as soon as the area within an outfall is disturbed and will continue until an outfall is determined to be final stabilized. Sampling requirements do not apply to outfalls that have not been disturbed or have been finally stabilized, as described in subpart IV.A.

29. Comment: Part I.E. Based on discussions, it appears that a definition of a qualified storm is not required, since after 2011 any discharge must be sampled, and can be deleted from the permit on page 14.

Response: Given EPA's abeyance request (see comment 32 below) on the Final Rule, the compliance schedules originally listed in section I.C.1 of the draft permit are no longer applicable. As such the qualified storm event defined in the draft permit still applies and will remain in the final permit.

30. Comment: Part III.C. NS appreciates the revisions made to the sign section of the permit on page 29-30. To further clarify the differences between the outfall and project signs, the revisions requested are shown in the attached file.

Response: This subpart has been revised to clarify the differences between the outfall and the project signs. It now reads as follows:

The permittee shall place an outfall sign at an outfall seven days prior to the commencement of any construction activity in the outfall's drainage area. Outfall signs shall be clearly visible to on-site personnel and must clearly list the Outfall number. Outfall signs must be maintained to mark the correct location of the outfall. An outfall sign may be removed from temporary outfalls once the outfall has been eliminated.

Within sixty days of the effective date of this permit a sign shall be placed at each public right-of-way and at locations where receiving streams leave the permittee's property. These sign(s) should be clearly visible to the public from the bank and the receiving stream or from the nearest public property/right-of-way, if applicable. The minimum sign size should be two feet by two feet (2' x 2') with one inch (1") letters. The sign should be made of durable material and have a white background with black letters. These signs are to provide notice to the public as to the nature of the discharge and, in the case of the permitted outfalls, that the discharge is regulated by the Tennessee Department of Environment and Conservation, Division of Water Pollution Control. The following is given as an example of the minimal amount of information that must be included on the sign:

<p><i>Construction Stormwater Runoff Memphis Regional Intermodal Facility (Permittee's Phone Number) NPDES Permit No. TN0081108 Tennessee Division of Water Pollution Control 901-371-3000 Environmental Field Office - Memphis</i></p>

Signs may be removed once all outfalls served by a sign have been eliminated.

31. **Comment:** **Part III.E.3. With the requirement to perform biannual bio-monitoring, NS requests some clarification and flexibility in the wording as shown in the attached file on pages 30 - 31.**

Response: Clarification was added to the requirements of subpart III.E. This section heading was changed to "Macroinvertebrate Biological Monitoring." The location section was edited to require that the sampling points must be submitted to and approved by the Memphis EFO. The Sampling requirements were edited to allow initiation of sampling upon receipt of Memphis EFO authorization. The rooted job banks required under this subpart must be collected using a 500 micron mesh triangular dip net or equivalent.

32. **Comment:** **Part I.A. and Part I.C. Based on "EPA's unopposed motion for partial vacature of the Final Rule, remand of the Record, to vacate briefing schedule, and to hold case in abeyance" filed in USCA 7th Circuit on August 13, 2010, NS requests that all requirements based on the 280 NTU portion of the Final Rule be deleted from the permit.**

Response: Based on the cited motion, all requirements related to the best available technology economically achievable (BAT) numeric effluent limitation have been removed from the final permit. Below is a list of items related to the BAT numeric effluent limitation of 280 NTU that were removed from the permit:

- The turbidity limit of 280 NTU in the permit limits tables under subpart I.A.,
- The Compliance Schedule listed under section I.C.1,
- The NTU Limitation for Turbidity listed under section I.C.2,
- The Reporting Requirements for Turbidity Sampling, section I.C.4,
- The Sampling Exception for Adverse Weather Conditions, section I.C.6,
- The Exception for NTU Limitation for Turbidity, section I.C.7,
- The second paragraph of the Representative Sampling, section I.D.1,
- The DMR for outfalls with a turbidity limit, provided in Attachment II,
- The DMR for continuous monitoring with a turbidity limit, provided in Attachment IV, and
- The Construction Monitoring Report Form, provided in Attachment V.

In addition, several sections that were contained within subpart I.C were modified and moved to other sections of the permit. Those changes are listed below:

- The Representative Outfalls for Linear Construction Activities listed under section I.C.3 were edited and moved to subpart I.A. The modified language now reads:

Portions of this construction site have two or more outfalls that must be sampled that the permittee reasonably believes will discharge substantially identical effluents. Those outfalls will be divided into representative groups with similar characteristics such as total drainage area, disturbed area, average slope inclination, best management practices, and structure before outfall. The division of

outfalls will be defined in the Monitoring Plan and is shown in the permit limits table below. Within the group, the outfalls to be sampled will be rotated after each storm event. If an outfall within the group has not been subject to land disturbance or has been stabilized, it would not be included in the rotation. The criteria and order for sampling will be further defined in the permittee's Monitoring Plan.

Monitoring results based on the requirements from the following table should be reported on the Discharge Monitoring Report (DMR) Form provided in Attachment I. Monitoring results from outfalls in the representative groups shall be reported using the outfall numbers indicated in the following table (i.e., GRP1, GRP2, GRP3, GRP4, or GRP5). The permittee shall also make note in the comments section of the DMR of the outfall number of the physical outfall that was sampled for the representative outfall group (i.e., SW1, SW2, SW3, etc.). Should the monitoring results from the representative outfalls demonstrate that there is a significant amount of pollutant leaving the site in one or more of the outfall groups, the division maintains the right to require stormwater monitoring at each outfall in one or more of the representative groups. Should this happen, the division will notify the permittee in writing of this change.

- The Sample Evaluation and Follow-up requirements listed under section I.C.5 were incorporated into the Reopener Clause under subpart III.B, which now reads as follows:

If an applicable standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(B)(2), and 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation. Additionally, the effectiveness of the Stormwater Pollution Prevention Plan (SWPPP) required under part IV of this permit will be investigated after the results of the stormwater runoff monitoring from outfalls SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17, SW18, SW19, SW20, SW21, SW22, SW23, SW24, SW25, SW26, SW27, SW28, SW29, SW30, SW31, SW32, SW33, SW34, SW35, SW36, SW37, and SW38 (subpart I.A.) has been submitted. At that time, should the results so dictate, the division maintains the authority to institute specific numeric limitations for the monitored parameters or other appropriate control measures. The division also maintains the authority to require the permittee to review its SWPPP and make any modifications or additions to the SWPPP which would assist in reducing effluent concentrations, including a timetable for implementation. If required, the permittee must submit to the Memphis EFO a brief summary of the proposed SWPPP modifications (including a timetable for implementation). The division may also modify the permit to add additional requirements to comply with a new wasteload allocation if a sediment TMDL is developed and approved prior to permit expiration.

Permit modification or revocation and reissuance shall follow standard permitting procedures as shown in TDEC Rule 1200-4-5.

- 33. Comment: The description of allowed support activities should be expanded to include silviculture or timbering.**

Response: The suggested change has been made to the permit. The second paragraph in subpart I.A. now reads:

This permit also authorizes stormwater discharges from support activities (e.g., silviculture or timbering, concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas) provided:

- 34. Comment: A weekly site inspection by a professional engineer, a professional geologist, or a landscape architect, in addition to the twice weekly inspections, is too frequent. We request that this requirement be reduced to monthly and that it be changed to be listed as a quality assurance site assessment instead of an inspection. If the frequency of this requirement is more frequent than once per month we request that the language from subsection IV.8.b.i be added to allow for less frequent assessments for portions of the site that have been temporarily stabilized.**

Response: The permit requirements were changed to allow bi-weekly quality assurance site assessments by a licensed senior professional engineer, professional geologist, or landscape architect for outfalls draining 10 or more acres. In addition, language from subsection IV.8.b.i was added to allow for less frequent assessments for portions of the site that have been temporarily stabilized. The second paragraph from section IV.8.a now reads:

A licensed senior professional engineer, a professional geologist, or a landscape architect, licensed in the State of Tennessee, with either responsibility for the design of the SWPPP or familiar with the overall design and SWPPP, must perform quality assurance of erosion prevention and sediment controls by performing bi-weekly (one/two weeks) site assessments at the Memphis Regional Intermodal Facility project site. If requested by the Memphis EFO or indicated by site conditions, the frequency of site assessments will be increased to address the deficiency. At a minimum, site assessments shall be performed to verify the functionality and performance of the EPSC measures described in the SWPPP for all outfalls draining 10 acres or more. Site assessments should be performed with the site inspector, and should include a review and update (if applicable) of the site SWPPP. Quality assurance site assessments and inspections shall be documented according to the requirements of subsection IV.D.8.b.vii below. A monthly inspection/site assessment report shall be submitted to the Memphis EFO with the certification required under IV.D.8.c below; the monthly report shall include a summary of all required inspections and site assessments from the previous month.

Where sites or portion(s) of construction sites have been temporarily stabilized, or runoff is unlikely due to winter conditions (e.g., site covered with

snow or ice), such site assessment only has to be conducted once per month until thawing results in runoff or construction activity resumes. Site assessment requirements do not apply to definable areas that have been finally stabilized, as described in subpart IV.A above. Written notification of the intent to conduct only monthly site assessments and the justification for such request must be submitted to the Memphis Environmental Field Office.

Subsection IV.8.b.vii was also edited and now reads:

Inspections and site assessments shall be documented and include the scope of the inspection/site assessment, name(s) and title of personnel making the inspection/site assessment, the date(s) of the inspection/site assessment, major observations relating to the implementation of the SWPPP (including the location(s) of discharges of sediment or other pollutants from the site and of any control device that failed to operate as designed or proved inadequate for a particular location), and actions taken in accordance with section IV.D.8 above of this permit. Inspection/site assessment documentation will be maintained on site and made available upon request. Inspection/site assessment reports must be submitted to the division within 10 days of the request.

- 35. Comment:** To appropriately characterize site runoff for all phases of construction, a few additional outfalls should be added to the permit. These outfalls will be for the same total acreage included in the original proposal and will discharge to the same stream segments originally listed.

Response: Three additional outfalls were added to the final permit. Discharge monitoring requirements, shown in subpart I.A. of the permit apply. The outfalls and their topographic coordinates and receiving streams are listed below.

Outfall	Receiving Stream	Stream Segment ID	Effluent Description	Latitude	Longitude
SW39	unt to Wolf River	TN08010210004_0400	stormwater runoff	35.0040	-86.5738
SW40	unt to Wolf River	TN08010210004_0400	stormwater runoff	35.0204	-89.5822
SW41	unt to Wolf River	TN08010210004_0400	stormwater runoff	35.0357	-89.5722

The following comments were received from interested parties.

- 36. Comment:** All monitored data should be included in the DMR. The draft permit includes several parameters for which the applicant must monitor, but some of this data does not have to be reported. TCWN requests all parameters be reported in the DMRs. This includes the continuous in-stream monitoring conducted in accordance with Page 3 of the draft permit.

Some of the monitoring requirements must also be clarified. For example, the DMRs in Attachments III and IV require the reporting of aluminum and polyacrylamide residuals as a monthly average and a daily maximum. However, the monitoring frequency is only once per month. The permittee could not provide meaningful monthly average for these parameters. This problem also occurs in the reporting of TSS and flow for Attachments I and

II – monitoring required only once per month, but reporting of a monthly average also required.

In order to ensure the water quality of the receiving streams is not degraded by these new and significant discharges, the applicant should provide a thorough report of all pollutants for which monitoring is conducted.

TCWN also requests the language for flow be corrected in the DMRs by eliminating “in conduit or thru treatment plant,” as there is obviously no treatment plant involved.

Response: The in-stream monitoring data will need to be reported on a DMR. A DMR to report in-stream monitoring results has been provided as Attachment III.

The monitoring frequency listed on the DMRs is appropriate. While the permit may only require monthly monitoring for a given parameter, the permittee has the option of conducting more frequent monitoring. Should the permittee conduct additional monitoring they are required – per section I.F.3 (numbered I.G.3 in the draft permit), Additional Monitoring by Permittee – to report those results on the DMR form.

The Flow parameter is correctly listed on the DMR. Parameters names are defined by EPA. This is a standard parameter name and no change is necessary.

37. Comment: Compliance violations. Part I.C.2 (Page 6) contains language requiring the applicant to improve “controls, operations, and/or maintenance” if it is determined the facility has difficulty complying with the turbidity effluent limitation. TCWN request the facility be required to stop work if there is a pattern of non-compliance. This is an incredibly large facility with the potential to significantly impact waters of the state if permit requirements are not being met. If permit requirements can not be met the permittee should cease land moving and construction operations and temporarily stabilize the site until it has demonstrated the ability to comply.

Response: Due to a motion by EPA to partially vacate the final rule for the Construction ELG this section of the permit has been deleted, see response to comment 32.

38. Comment: Reporting requirements for turbidity sampling. Part I.C.4 (Page 6) should make clear there are both numeric and narrative turbidity standards which apply after August 1, 2011, not solely numeric standards. The next to last sentence in the first paragraph of subsection 4 should read “...one discharge event can be averaged for the purpose of establishing compliance with this *effluent limit*.” The narrative permit requirements on page 4 of the draft permit must also be met.

Response: Due to a motion by EPA to partially vacate the final rule for the Construction ELG this section of the permit has been deleted, see response to comment 32.

39. Comment: Sampling frequency. Part I.D.2 (page 8) states:

If the outfall discharges effluent at any time during the monitoring period, the permittee must provide at least one sampling result from the effluent of that outfall.

While this complies with EPA's *Final Rule: Effluent Guidelines for Discharges from the Construction and Development Industry*, it is at odds with Part I.C.2, Page 6, paragraph 2, which requires, at a minimum, sampling to be conducted during normal business hours. This contradictory language makes it unclear whether discharge events which occur outside of the project's normal business hours must be sampled. This language must be clarified. Given that the timing of a construction site's discharge is not linked to business hours, TCWN suggests you delete the above-referenced language from Part I.C.2.

TCWN also requests a minimum amount of time between samples. It would be inconsistent with the intent of EPA's *Effluent Guidelines* if samples were taken right after one another with only seconds between each collection. Should the discharge event not last long enough to account for the minimum elapse of time between samples, the permittee should be excused from the minimum of 3 samples requirement.

Response: Due to a motion by EPA to partially vacate the final rule for the Construction ELG this section of the permit has been deleted, see response to comment 32.

40. **Comment:** Construction stormwater monitoring report form. Attachment V contains the monitoring report form the permittee must use for turbidity sampling. This form and how it is used needs more explanation. In accordance with Part I.C.4, one form is to be used for each discharge event. However, a discharge event can occur more than once in a 24-hour period, but the turbidity effluent limit is a maximum daily average. Therefore, if multiple discharge events occur in one 24-hour period the permittee should average outfall samples from each event. This is not explained in the permit or the report form.

It is recommended the "acreage disturbed" column be removed and listed as a constant at the top. Since the total acreage, regardless of continuity, determines when turbidity effluent limits apply, the total acreage should be a constant factor on the form applicable to all outfalls.

Response: Due to a motion by EPA to partially vacate the final rule for the Construction ELG the turbidity monitoring that was to be associated with this form is no longer required. As such, the form that was contained in Attachment V has been deleted.

41. **Comment:** We would commend TDEC for including a number of provisions that in part allay some of our concerns. These include (1) continuous in-stream turbidity monitoring and weekly monitoring of suspended solids at designated locations, (2) continuous turbidity and weekly suspended solids monitoring for all sediment basins, (3) provision for new technology based effluent limitations to go in effect beginning August 2011, (4) bi-annual biological monitoring, and (5) application of polymers for all runoff.

Response: We appreciate all comments received during the public notice period. Our decision regarding permit issuance is ultimately based on protection of designated uses of receiving stream(s), rather than public support of any particular project.

42. Comment: Because of the amount of acreage that will be disturbed at one time, we believe that the permit writer must make a reasonable potential analysis to determine if Water Quality Based Effluent Limits (“WQBELs”) are needed. As explained in Chapter 6 of the EPA Permit Writer’s Manual

“In deciding whether or not WQBELs are needed to protect water quality, a permit writer must determine whether the discharge causes, has the reasonable potential to cause, or contributes to an excursion of numeric or narrative water quality criteria.”

We are aware that in other individual construction permits, the Division has determined that a reasonable potential to violate water quality exists because of the amount of land disturbance open at one time. Accordingly, it has imposed narrative water quality based effluent limits (WQBELs). It may be that some of the BMPs required are WQBELs, but it is not clear from the permit or the rationale. We would request that the Division conduct a reasonable potential analysis, or if it has done so and concluded a reasonable potential to violate water quality standards exists, to impose appropriate WQBELs.

Response: The division has determined that uncontrolled discharges from construction activities have a reasonable potential to cause or contribute to violation of narrative in-stream water quality standards. To ensure protection of the in-stream water quality standards the division has imposed several narrative WQBELs in this permit. Those WQBELs include the implementation of best management practices (BMPs) as described in the permittee’s stormwater pollution prevention plan (SWPPP), effluent monitoring, in-stream monitoring, macroinvertebrate biological monitoring, and narrative permit requirements, including:

The construction activity shall be carried out in such a manner that will prevent violations of water quality criteria as stated in the TDEC Rules, Chapter 1200-4-3-.03. This includes, but is not limited to, a requirement that there shall be no distinctly visible floating solids, scum, foam, oily slick, or the formation of slimes, bottom deposits or sludge banks of such size or character that may be detrimental to fish and aquatic life.

The stormwater discharges shall not contain pollutants in quantities that will be hazardous or otherwise detrimental to humans, livestock, wildlife, plant life, or fish and aquatic life in the receiving stream.

The stormwater discharge must not cause an objectionable color contrast in the receiving stream.

43. Comment: While we believe that effective Best Management Practices (“BMPs”) are good narrative effluent limitations, because of the size and uncertainty of

the construction, the Division should retain the right to impose numeric effluent limitations, particularly when in-stream monitoring shows increases in suspended solids and turbidity at the downstream locations in an amount that violates water quality criteria.

Response: Based on the monitoring results submitted for this permit, the division does maintain the authority to institute specific numeric limitations for the monitored parameters or other appropriate control measures. The following language is the permit's reopener clause, found in subpart III.B:

If an applicable standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(B)(2), and 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked and reissued to conform to that effluent standard or limitation. Additionally, the effectiveness of the Stormwater Pollution Prevention Plan (SWPPP) required under part IV of this permit will be investigated after the results of the stormwater runoff monitoring from outfalls SW1, SW2, SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17, SW18, SW19, SW20, SW21, SW22, SW23, SW24, SW25, SW26, SW27, SW28, SW29, SW30, SW31, SW32, SW33, SW34, SW35, SW36, SW37, and SW38 (subpart I.A.) has been submitted. At that time, should the results so dictate, the division maintains the authority to institute specific numeric limitations for the monitored parameters or other appropriate control measures. The division also maintains the authority to require the permittee to review its SWPPP and make any modifications or additions to the SWPPP which would assist in reducing effluent concentrations, including a timetable for implementation. If required, the permittee must submit to the Memphis EFO a brief summary of the proposed SWPPP modifications (including a timetable for implementation). The division may also modify the permit to add additional requirements to comply with a new wasteload allocation if a sediment TMDL is developed and approved prior to permit expiration. Permit modification or revocation and reissuance shall follow standard permitting procedures as shown in TDEC Rule 1200-4-5.

44. **Comment:** **Sediment Basins should be designed to contain the 5-year, 24-hour storm event. While the Construction General Permit requires the sediment basins to contain only the 2-year, 24-hour storm event, since this is an individual permit, we believe that it is necessary and appropriate to require larger basin sizing as a narrative WQBEL. The soils in the area are highly erodible, and the large amount of disturbance dictate larger basin sizing.**

Response: The division has no basis for requiring sediment basins to be designed to contain the rainfall and runoff from a 5-year, 24-hour storm event. In addition, the inclusion of polymer use and monitoring serves as a narrative WQBEL to help minimize the amounts of sediment that are eroded off-site.

45. **Comment:** **The permit should require a buffer zone for all streams and wetlands. While the Construction General Permit does not require stream buffering, since this is an individual permit, we believe that it is necessary and appropriate**

to require a stream buffer as a narrative WQBEL. While we are not familiar with the actual construction plans, we believe that all streams, but of particular concern to us, Stream 5, will be adversely impacted by allowing construction to proceed all the way to top of bank.

Response: The division considered requiring buffers on all stream and wetlands for this project. However, the permit applicant's engineers explained to the division that it would not be possible to maintain a buffer around all water features. The project design was developed to preserve as many streams and wetlands as possible. At times, while the applicant was able to preserve a water feature, the soil disturbance extended right up to the boundary of the water feature. If the division were to require buffers on all the water features the applicant would have gotten ARAP permit coverage for all the places that buffering was not possible. As this would not have resulted in any real protection for the water features the division decided not to require buffers on all streams and wetlands.

46. Comment: We believe that the basins should be equipped with a Faircloth skimmer to better filter fines from the basins.

Response: The division does not have the authority to mandate specific treatment practices. The permittee will be required to use BMPs that are appropriate for the site and that are based on the nature of construction activity.

47. Comment: We understand that the use of polymers and polyacrylamide are effective advanced BMPs when used appropriately. However, we would urge that the permit clarify that polymers not be used to treat sediment laden water in the basins.

Response: While the division understands the concern over application of polyacrylamide directly to the sediment basins, the division does not dictate application methods. The division has found that effective BMPs, specifically application methods for polymers, vary from region to region in the state.

The permittee will be required to monitor for the presence of polyacrylamide in the sediment basin discharge water if polyacrylamide is used in the sediment basin; see response to comment 21.

48. Comment: The Permit does not address post construction stormwater runoff volumes. We understand that the post-construction runoff will exceed pre-construction runoff by approximately 10%. We understand that the applicant intends to address this difference through two large permanent ponds to the west of the facility. Will the applicant be required to address post-construction runoff volumes? The Division must provide enforceable requirements for construction stormwater volumes in the Permit.

Response: This permit does not address post construction stormwater runoff volumes. As is stated in section IV.D.4:

This permit only addresses the installation of stormwater management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed, the site

has undergone final stabilization, and the permit has been terminated. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site. All permittees are encouraged to limit the amount of post construction runoff, if not required by local building regulations, in order to minimize in-stream channel erosion in the receiving stream.

Post construction stormwater management falls under the jurisdiction of a local municipal separate storm sewer system (MS4) program. There is not currently an MS4 program with jurisdiction over this site. However, if an authorized MS4 program is formed in the future, this site would be subject to its' jurisdiction.

49. **Comment:** **The applicant must demonstrate that the loss stormwater flow from the watershed draining Stream 5 will not adversely impact Pictsweet's Farm. The post construction stormwater runoff currently drained by Stream 5, and the source of the water in Stream 5, will be diverted to the west of the Site. We understand the watershed of the impacted portion of Stream 5 is approximately 100 acres. We further understand that the stream has flowing water during much of the year based on the presence of lotic obligate aquatic organisms. Thus, it is likely that this diversion of water will adversely impact our property and potentially impact the ability to maintain the wetlands we are required to address. Impacts must be addressed by restoring lost stormwater flow.**

Response: Following the comment period and review of the comments, Norfolk Southern added an additional permanent detention basin to the Stream 5 watershed to handle runoff from a portion of the parking area, with the remaining parking area designed to drain toward Stream 6 and its two permanent detention basins. The resulting post development drainage area for Stream 5 is approximately 934 acres, compared to the pre-development drainage area of 960 acres. Changes in surface conditions (i.e. land use changes resulting in decreased perviousness) will reduce the infiltration and increase runoff from this portion of the constructed facility. Overall, Norfolk's analysis indicates that the post-development Stream 5 watershed produces slightly lower peak flows than the pre-development watershed at the Norfolk Southern main line. Norfolk provided HydroCAD flow model output for Stream 5 that demonstrated minimal impact to Stream 5 water flows downstream of the Memphis Regional Intermodal Facility based on the comparison of pre- and post-construction conditions.

50. **Comment:** **The project is a significant Federal action and should be required to have a new Environmental Impact Statement prepared.**

Response: The State of Tennessee does not require Environmental Impact Statements (EIS). The Federal permitting authority (including, but not limited to, the U.S. EPA, U.S. Corps of Engineers, National Transportation Safety Board) may require an EIS if the intermodal facility proposal meets the definition of a "project that will cause a significant adverse effect on the environment" as defined under Section 771.115 of 23 CFR.

51. Comment: Paving over large areas will prevent the rain water from recharging the aquifer.

Response: Introducing a hardened surface does reduce the absorption of precipitation into groundwater and creates the opportunity for increased runoff during storm events. The recharge area of the Memphis sand aquifer is approximately 2,200 square miles in West Tennessee. The proposed site would occupy less than 0.03% of that surface area. Per the Ground Water Institute:

The Build Alternative 1 would disturb approximately 440 acres of the 650 acres of the property. Within the 380 acres facility on the property, 233 acres would be paved. These 233 acres would virtually shut off any recharge to the Memphis Sand immediately below. However, the GWI does not view this as a significant impact to the Memphis Sand as a whole. However, if this type of construction became widespread in Fayette County and adjacent counties to the north and south, the recharge could be significantly impacted.

In addition, Norfolk Southern's SWPPP provides information on what they will do if the Memphis Sands aquifer is exposed during construction. The SWPPP states that if the Memphis Sands is exposed anywhere on site that it will be "lined or covered with at least a 12-inch thick layer of clayey material, preferably a low plasticity clay (CL) or high plasticity clay (CH) material, and that the cover layer be compacted to 100% Standard Proctor per AASHTO T99. The liner or cover material will be placed at a moisture content of between -1% to +4% optimum moisture." This will help prevent any contaminants, including construction stormwater runoff, from entering the Memphis Sands aquifer.

52. Comment: Water quality should be protected by reducing stormwater runoff and siltation during and after construction.

Response: As part of the permit application the permittee had to submit a stormwater pollution prevention plan (SWPPP). The permit requires that the SWPPP:

- *identify all potential sources of pollution which are likely to affect the quality of stormwater discharges from the construction site;*
- *describe practices to be used to reduce pollutants in stormwater discharges from the construction site; and*
- *assure compliance with the terms and conditions of this permit.*

The SWPPP has to be prepared in accordance with good engineering practices and the latest edition of the Tennessee Erosion and Sediment Control Handbook. The handbook is designed to provide information to planners, developers, engineers, and contractors on the proper selection, installation, and maintenance of Best Management Practices (BMPs).

The SWPPP is meant to ensure that runoff from the site is not a significant source of pollution to the receiving stream. Finally, as site conditions change, the permittee will be required to update their SWPPP to ensure that appropriate BMPs are being used to control pollutants in stormwater discharges from the site.

After construction, this site's discharges to waters of the state may be protected through use of the division's "Tennessee Stormwater Multi-Sector General Permit for Industrial Activities" (TMSP). This permit requires that a permittee develop a SWPPP to "identify potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges associated with industrial activity from the facility. In addition, the SWPPP shall describe and ensure the implementation of practices that are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit."

53. Comment: Retention ponds should have extra capacity for flash floods and extraordinary rain events.

Response: The permanent basins would be required to be constructed to the 100-year rain event.

54. Comment: All stormwater should be captured and treated before being released into our streams.

Response: The permittee has prepared a comprehensive SWPPP that describes how the permittee will, to the extent practicable, prevent stormwater from becoming contaminated with sediment and if contaminated, how the permittee will treat the stormwater runoff to prevent degradation of receiving waters. Per subpart IV.A of the permit the SWPPP must:

- *identify all potential sources of pollution which are likely to affect the quality of stormwater discharges from the construction site;*
- *describe practices to be used to reduce pollutants in stormwater discharges from the construction site; and*
- *assure compliance with the terms and conditions of this permit.*

It is the division's belief that implementation of the project's SWPPP along with monitoring of stormwater runoff, in order to evaluate the effectiveness of the facility's BMPs, is the best method to deal with potential pollution from construction stormwater discharges from this site.

55. Comment: The Wolf River could be affected by the contaminant residues of thousands of trucks being passed along in runoff from the site. How would the applicant prevent those contaminants from reaching our streams?

Response: All stormwater would be routed into collection basins on the site. Site maintenance would be done over a maintenance pad and the runoff from this location passed through an oil-water separator before being discharged through the Rossville Sewer system for final treatment. The site would have a Spill Prevention Control and Countermeasures plan to manage contaminant spills at the facility.

56. Comment: Is there an emergency spill plan? How would the site handle spills and prevent intrusion into the aquifer?

Response: This permit does not contain the requirement for an emergency spill plan. This permit does address the proper on-site storage and maintenance of any construction and waste materials under IV.D.5. paragraph d, "Other Items Needing Control," which states:

The SWPPP shall include a description of construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP shall also include a description of controls used to reduce pollutants from materials stored on site, including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.

Post construction spill requirements are not regulated by this permit. The permittee will likely be required to obtain an industrial stormwater permit. The division regulates many industrial stormwater facilities under a general permit, the "Tennessee Stormwater Multi-Sector General Permit for Industrial Activities" (TMSP). The TMSP states that, "This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill." Should a spill occur when the facility becomes operational, the current site owner will be required to follow the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302. In addition, the TMSP requires that where a release containing a hazardous substance in an amount equal to or in excess of a reporting quantity established under either 40 CFR Part 117 or 40 CFR Part 302, occurs during a 24-hour period that the discharger is required to notify the National Response Center (NRC) at 1-800-424-8802, the Tennessee Emergency Management Agency (TEMA) at 1-800-262-3300, and the appropriate division's Environmental Field Office ... in accordance with the requirements of 40 CFR Part 117 and 40 CFR Part 302, as soon as he or she has knowledge of the discharge.

The permit section received several comments related to permit issued by the Division's Natural Resources Section which addressed issuance of a 401 Water Quality Certification. All such comments were forwarded to the Natural Resources Section for consideration and comment. Those comments are not addressed in this document.

In addition, the division received several comments that were not related to water quality concerns. While the division appreciates concerns expressed by the public, it does not have the authority to act outside of the scope of its program areas. Comments unrelated to water quality concerns are not addressed in this document.

Determination

In conclusion, the comments included in this notice of determination document were compiled based on their relevance to the permit content, intent and interpretation of this permit, rather than implementation of the permit conditions (e.g. penalty evaluations, appropriateness of various enforcement measures, development of TMDLs, etc.). Those questions or comments that became a moot point as a result of the changes made in the final permit were not included in this document.

The division's decision on this matter is to issue the NPDES Permit for Stormwater Discharges Associated with Construction Activity, Permit No. TN0081108.

DATE: 11/12/2010



Vojin Janjić
Manager, Permit Section