

From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; riley@omega-foundation.com
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: AI 12592 - MZX Tech LLC, Duke Facility
Date: Monday, October 6, 2025 3:39:34 PM

This Message Is From an External Sender

This message came from outside your organization.

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.
3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.
4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
 - indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)
 - show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
 - show the location and size of the buffer zone.
5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCN01 indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.
8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).
10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam

height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: AI 12592 - MZX Tech LLC, Duke Facility
Date: Friday, October 10, 2025 1:21:53 PM
Attachments: [MSR109658 Certificate.pdf](#)

This Message Is From an External Sender

This message came from outside your organization.

Good afternoon,

Attached please find the stormwater coverage certificate for the above referenced project. Please retain a copy of this certificate for your records. Let us know if you have any questions.

Thank you,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

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From: [Greg Carrico](#)
To: [Carrie Barefoot](#)
Subject: Project Duke - SWPPP and NOI
Date: Friday, September 19, 2025 2:34:56 PM

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Carrie,

Per our discussion this SWPPP and NOI submittal was going to exceed the 15 MB limit on the portal.

On behalf of MZX Tech, LLC, Pickering is submitting this SWPPP and NOI for coverage under Mississippi's Construction Storm Water General Permit.

The SWPPP and NOI can be downloaded from this link: <https://pickering.sharefile.com/d-s3e10d7e4baae49139c3615b3ea0d0d85> [pickering.sharefile.com]

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: [Greg Carrico](#)
To: [Pitt, Jennifer](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Thursday, October 9, 2025 7:28:55 PM
Attachments: [2025-10-09-AI 12592-MZX Tech LLC-Duke Facility-Sewer Will Serve Letter-SIGNED.pdf](#)

Please see the attached Sewer Will-Serve Letter. The updated SWPPP per the below comments can be downloaded here: <https://pickering.sharefile.com/public/share/web-s6f6b5a1dec0345f3910d3c86f489f54d>

- Comment #9: It is noted that you added references to a vegetative cover density of at least 70% to the final stabilization procedures. Please add a reference to 70% vegetative cover density in the last bullet of the implementation sequence as well per comment 9.
[Added to last bullet on page 3.](#)
- Comment #11: The Department agrees to decouple the storm water permit from the additional permits related to construction activities. Please confirm your understanding that you will be moving forward with construction at your own risk, and other permits are not guaranteed.
[The owner confirms their understanding](#)
- Comment #13: It is noted that you added a statement to remove sediment in the sediment basins when it reaches 50% capacity. Please add that sediment will be removed from structural BMPs when it reaches $\frac{1}{3}$ to $\frac{1}{2}$ the height of the control per the GP and comment 13.
[Note #18 on the plans has been updated to read as follows: "SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF THE STRUCTURAL BMP WHEN IT REACHES 1/3 to 1/2 THE HEIGHT OF THE CONTROL. THE BMP WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER."](#)
- The SWPPP plan mentions the use of hay bales. We discourage the use of hay bales; however, straw bales can be used.
[All references to hay bales have been replaced with check dams in the plan notes on sheet C0-140-00 and C0-141-00. Hay bales are not recommended to be used on-site.](#)

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>
Sent: Thursday, October 9, 2025 12:51 PM
To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Thank you, Greg.

While you are awaiting the will serve letter, we are providing follow-up comments to keep the process moving. Please let us know if you have any questions.

- Comment #9: It is noted that you added references to a vegetative cover density of at least 70% to the final stabilization procedures. Please add a reference to 70% vegetative cover density in the last bullet of the implementation sequence as well per comment 9.
- Comment #11: The Department agrees to decouple the storm water permit from the additional permits related to construction activities. Please confirm your understanding that you will be moving forward with construction at your own risk, and other permits are not guaranteed.
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- The SWPPP plan mentions the use of hay bales. We discourage the use of hay bales; however, straw bales can be used.

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

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From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Thursday, October 9, 2025 12:57 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>;

Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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I hope to have sewer will serve letter soon.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Thursday, October 9, 2025 11:54 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Received, thank you Greg.

From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Thursday, October 9, 2025 12:33 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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The MS4 acknowledgement is attached.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

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From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Wednesday, October 8, 2025 9:28 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

You are very welcome. We are reviewing the revised materials and will get back to you soon with any questions.

From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Tuesday, October 7, 2025 9:17 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

 **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. 

Jennifer,

Thank you for the quick review, my updated SWPPP can be found here:

<https://pickering.sharefile.com/public/share/web-s7f3af46d9487408b97dc0a01bef099ac>.

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.

[Brent Mayo is a responsible corporate officer.](#)

2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.

[This is a private isolated low point. There are no drainage connections to or from this water](#)

body.

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

An additional statement was added to section 4 of the SWPPP. And reads "Nitrogen, Phosphorus, and Organic Enrichment/ Low Dissolved Oxygen are not expected be affected by this construction project. The Sediment will be controlled by the following Erosion and Sediment Controls".

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows

Arrows added to new sheet C0-143-00

- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

call out for Horn Lake Creek has been added in SW Corner of site on sheets C0-140-00 and C0-141-00

- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)

the two existing buildings will be used for most on-site storage needs. If additional storage is required, the contractor shall follow all applicable rules and regulations for storage as appropriate

- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)

Laydown has been called out in existing gravel area in between existing building and one of the construction exits

- show the location and size of the buffer zone.

buffer has been added to possible stream in SW corner in plans

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

The buffers have been called out on the plans, no disturbance is planned within 50' of the tributary, and Horn Lake Creek is 360' away from the limits of disturbance.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

I will get you the information once I receive this from the City.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

I will get this to you as soon as I receive this from the City/County.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

I have included a drainage basin exhibit in the SWPPP showing the individual drainage basins. All basins that exceed 10 acres of drainage will have a sediment basin as required. There are some drainage basins that are less than 10 acres, that is why the totals do not add up to 114.4.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).

Section 4.A has been updated to include the following statement, "Vegetative cover must have a uniform density of at least 70%."

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their

expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.

Section 7 referenced these sections of the general permit. I have updated the language, and added the general permit as an attachment to the SWPPP so the contractors and permittees have it as a reference.

11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

There will be an industrial air permit and an industrial stormwater discharge permit. There is a large amount of tree clearing and earthwork that will take several months to complete, and the design on the other environmental permits has not even begun. In order to meet the necessary schedule of this project we need the permits to be decoupled, so this early earthwork and stabilization phase can begin.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

Written phasing has been added to the Limits of Disturbance exhibit.

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Additional notes added to plan sheets C0-140-00 and C0-141-00

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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6363 Poplar Avenue, Suite 300

Memphis, TN 38119

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Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

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1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
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50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

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Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com



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From: [Greg Carrico](#)
To: [Pitt, Jennifer](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Thursday, October 9, 2025 11:56:50 AM

I hope to have sewer will serve letter soon.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>
Sent: Thursday, October 9, 2025 11:54 AM
To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Received, thank you Greg.

From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Thursday, October 9, 2025 12:33 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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The MS4 acknowledgement is attached.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Wednesday, October 8, 2025 9:28 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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Sent: Tuesday, October 7, 2025 9:17 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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Jennifer,

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<https://pickering.sharefile.com/public/share/web-s7f3af46d9487408b97dc0a01bef099ac>.

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[Brent Mayo is a responsible corporate officer.](#)

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[This is a private isolated low point. There are no drainage connections to or from this water](#)

body.

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

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Arrows added to new sheet C0-143-00

- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

call out for Horn Lake Creek has been added in SW Corner of site on sheets C0-140-00 and C0-141-00

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- show the location and size of the buffer zone.

buffer has been added to possible stream in SW corner in plans

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Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

The buffers have been called out on the plans, no disturbance is planned within 50' of the tributary, and Horn Lake Creek is 360' away from the limits of disturbance.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

I will get you the information once I receive this from the City.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

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For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

I have included a drainage basin exhibit in the SWPPP showing the individual drainage basins. All basins that exceed 10 acres of drainage will have a sediment basin as required. There are some drainage basins that are less than 10 acres, that is why the totals do not add up to 114.4.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).

Section 4.A has been updated to include the following statement, "Vegetative cover must have a uniform density of at least 70%."

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their

expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.

Section 7 referenced these sections of the general permit. I have updated the language, and added the general permit as an attachment to the SWPPP so the contractors and permittees have it as a reference.

11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

There will be an industrial air permit and an industrial stormwater discharge permit. There is a large amount of tree clearing and earthwork that will take several months to complete, and the design on the other environmental permits has not even begun. In order to meet the necessary schedule of this project we need the permits to be decoupled, so this early earthwork and stabilization phase can begin.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

Written phasing has been added to the Limits of Disturbance exhibit.

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Additional notes added to plan sheets C0-140-00 and C0-141-00

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.
3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.
4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
 - indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)
 - show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
 - show the location and size of the buffer zone.
5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than

50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.
8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

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The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).
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11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to

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Voice: 410-902-3151

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From: [Greg Carrico](#)
To: [Pitt, Jennifer](#); brent@colossusx.com; riley@omega-foundation.com
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Thursday, October 9, 2025 11:33:19 AM
Attachments: [MS4 Acknowledgement Letter-City of Southaven-AI 12592-MZX TECH LLC- DUKE FACILITY.pdf](#)

The MS4 acknowledgement is attached.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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Memphis, TN 38119

Phone: 901.729.5516

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Additional notes added to plan sheets C0-140-00 and C0-141-00

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner

Senior Civil Engineer

Pickering Firm, Inc.

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Phone: 901.729.5516

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Sent: Monday, October 6, 2025 3:39 PM

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Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

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4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
 - indicate the location of housekeeping practices including areas for equipment

maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)

- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
- show the location and size of the buffer zone.

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.
8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the

implementation sequence (see definitions in ACT12, T-16).

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.
12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com



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From: [Greg Carrico](#)
To: [Pitt, Jennifer](#); brent@colossusx.com; riley@omega-foundation.com
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Tuesday, October 7, 2025 8:17:26 PM

Jennifer,

Thank you for the quick review, my updated SWPPP can be found here:

<https://pickering.sharefile.com/public/share/web-s7f3af46d9487408b97dc0a01bef099ac>.

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.

[Brent Mayo is a responsible corporate officer.](#)

2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.

[This is a private isolated low point. There are no drainage connections to or from this water body.](#)

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

[An additional statement was added to section 4 of the SWPPP. And reads "Nitrogen, Phosphorus, and Organic Enrichment/ Low Dissolved Oxygen are not expected be affected by this construction project. The Sediment will be controlled by the following Erosion and Sediment Controls".](#)

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows

[Arrows added to new sheet C0-143-00](#)

- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

[call out for Horn Lake Creek has been added in SW Corner of site on sheets C0-140-00 and C0-141-00](#)

- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents,

fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)

the two existing buildings will be used for most on-site storage needs. If additional storage is required, the contractor shall follow all applicable rules and regulations for storage as appropriate

- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)

Laydown has been called out in existing gravel area in between existing building and one of the construction exits

- show the location and size of the buffer zone.

buffer has been added to possible stream in SW corner in plans

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

The buffers have been called out on the plans, no disturbance is planned within 50' of the tributary, and Horn Lake Creek is 360' away from the limits of disturbance.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

I will get you the information once I receive this from the City.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

I will get this to you as soon as I receive this from the City/County.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The

capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

I have included a drainage basin exhibit in the SWPPP showing the individual drainage basins. All basins that exceed 10 acres of drainage will have a sediment basin as required. There are some drainage basins that are less than 10 acres, that is why the totals do not add up to 114.4.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).

Section 4.A has been updated to include the following statement, "Vegetative cover must have a uniform density of at least 70%."

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.

Section 7 referenced these sections of the general permit. I have updated the language, and added the general permit as an attachment to the SWPPP so the contractors and permittees have it as a reference.

11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

There will be an industrial air permit and an industrial stormwater discharge permit. There is a large amount of tree clearing and earthwork that will take several months to complete, and the design on the other environmental permits has not even begun. In order to meet the necessary schedule of this project we need the permits to be decoupled, so this early earthwork and stabilization phase can begin.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

Written phasing has been added to the Limits of Disturbance exhibit.

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

[Additional notes added to plan sheets CO-140-00 and CO-141-00](#)

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.
3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows
- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)
- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
- show the location and size of the buffer zone.

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCN01 indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.
8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the

plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).
10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.
12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com



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From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Monday, October 13, 2025 12:46:24 PM

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You are welcome!

From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Monday, October 13, 2025 12:35 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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Thank you all so much for getting this review completed so quickly, and the permit coverage issued. We greatly appreciate the effort.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>
Sent: Friday, October 10, 2025 1:22 PM
To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: AI 12592 - MZX Tech LLC, Duke Facility

Good afternoon,

Attached please find the stormwater coverage certificate for the above referenced project. Please

retain a copy of this certificate for your records. Let us know if you have any questions.

Thank you,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Friday, October 10, 2025 7:33:29 AM

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Received, thank you Greg.

From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Thursday, October 9, 2025 8:29 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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Please see the attached Sewer Will-Serve Letter. The updated SWPPP per the below comments can be downloaded here: <https://pickering.sharefile.com/public/share/web-s6f6b5a1dec0345f3910d3c86f489f54d> [pickering.sharefile.com]

- Comment #9: It is noted that you added references to a vegetative cover density of at least 70% to the final stabilization procedures. Please add a reference to 70% vegetative cover density in the last bullet of the implementation sequence as well per comment 9.
[Added to last bullet on page 3.](#)
- Comment #11: The Department agrees to decouple the storm water permit from the additional permits related to construction activities. Please confirm your understanding that you will be moving forward with construction at your own risk, and other permits are not guaranteed.
[The owner confirms their understanding](#)
- Comment #13: It is noted that you added a statement to remove sediment in the sediment basins when it reaches 50% capacity. Please add that sediment will be removed from structural BMPs when it reaches 1/3 to 1/2 the height of the control per the GP and comment 13.
[Note #18 on the plans has been updated to read as follows: "SEDIMENT WILL BE REMOVED FROM THE UPSTREAM FACE OF THE STRUCTURAL BMP WHEN IT REACHES 1/3 TO 1/2 THE HEIGHT OF THE CONTROL. THE BMP WILL BE REPLACED AS NECESSARY TO MAINTAIN A BARRIER."](#)
- The SWPPP plan mentions the use of hay bales. We discourage the use of hay bales; however,

straw bales can be used.

All references to hay bales have been replaced with check dams in the plan notes on sheet C0-140-00 and C0-141-00. Hay bales are not recommended to be used on-site.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Thursday, October 9, 2025 12:51 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Thank you, Greg.

While you are awaiting the will serve letter, we are providing follow-up comments to keep the process moving. Please let us know if you have any questions.

- Comment #9: It is noted that you added references to a vegetative cover density of at least 70% to the final stabilization procedures. Please add a reference to 70% vegetative cover density in the last bullet of the implementation sequence as well per comment 9.
- Comment #11: The Department agrees to decouple the storm water permit from the additional permits related to construction activities. Please confirm your understanding that you will be moving forward with construction at your own risk, and other permits are not guaranteed.
- Comment #13: It is noted that you added a statement to remove sediment in the sediment basins when it reaches 50% capacity. Please add that sediment will be removed from structural BMPs when it reaches 1/3 to 1/2 the height of the control per the GP and comment 13.
- The SWPPP plan mentions the use of hay bales. We discourage the use of hay bales; however, straw bales can be used.

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Thursday, October 9, 2025 12:57 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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I hope to have sewer will serve letter soon.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Thursday, October 9, 2025 11:54 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Received, thank you Greg.

From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Thursday, October 9, 2025 12:33 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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The MS4 acknowledgement is attached.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Wednesday, October 8, 2025 9:28 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

You are very welcome. We are reviewing the revised materials and will get back to you soon with any questions.

From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Tuesday, October 7, 2025 9:17 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

 **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. 

Jennifer,

Thank you for the quick review, my updated SWPPP can be found here:

<https://pickering.sharefile.com/public/share/web-s7f3af46d9487408b97dc0a01bef099ac> [pickering.sharefile.com].

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.

Brent Mayo is a responsible corporate officer.

2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.

This is a private isolated low point. There are no drainage connections to or from this water body.

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

An additional statement was added to section 4 of the SWPPP. And reads "Nitrogen, Phosphorus, and Organic Enrichment/ Low Dissolved Oxygen are not expected be affected by this construction project. The Sediment will be controlled by the following Erosion and Sediment Controls".

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows

Arrows added to new sheet C0-143-00

- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

call out for Horn Lake Creek has been added in SW Corner of site on sheets C0-140-00 and C0-141-00

- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)

the two existing buildings will be used for most on-site storage needs. If additional storage is required, the contractor shall follow all applicable rules and regulations for storage as appropriate

- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)

Laydown has been called out in existing gravel area in between existing building and one of the construction exits

- show the location and size of the buffer zone.

buffer has been added to possible stream in SW corner in plans

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

The buffers have been called out on the plans, no disturbance is planned within 50' of the tributary, and Horn Lake Creek is 360' away from the limits of disturbance.

6. The LCNOL indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

I will get you the information once I receive this from the City.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

I will get this to you as soon as I receive this from the City/County.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

I have included a drainage basin exhibit in the SWPPP showing the individual drainage basins. All basins that exceed 10 acres of drainage will have a sediment basin as required. There are some drainage basins that are less than 10 acres, that is why the totals do not add up to 114.4.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).

Section 4.A has been updated to include the following statement, "Vegetative cover must have a uniform density of at least 70%."

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.

Section 7 referenced these sections of the general permit. I have updated the language, and added the general permit as an attachment to the SWPPP so the contractors and permittees have it as a reference.

11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

There will be an industrial air permit and an industrial stormwater discharge permit. There is a large amount of tree clearing and earthwork that will take several months to complete, and the design on the other environmental permits has not even begun. In order to meet the necessary schedule of this project we need the permits to be decoupled, so this early earthwork and stabilization phase can begin.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

Written phasing has been added to the Limits of Disturbance exhibit.

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Additional notes added to plan sheets C0-140-00 and C0-141-00

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.
3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.
4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and

adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)
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- show the location and size of the buffer zone.

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.
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The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

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10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.
12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Thursday, October 9, 2025 12:50:43 PM

This Message Is From an External Sender

This message came from outside your organization.

Thank you, Greg.

While you are awaiting the will serve letter, we are providing follow-up comments to keep the process moving. Please let us know if you have any questions.

- Comment #9: It is noted that you added references to a vegetative cover density of at least 70% to the final stabilization procedures. Please add a reference to 70% vegetative cover density in the last bullet of the implementation sequence as well per comment 9.
- Comment #11: The Department agrees to decouple the storm water permit from the additional permits related to construction activities. Please confirm your understanding that you will be moving forward with construction at your own risk, and other permits are not guaranteed.
- Comment #13: It is noted that you added a statement to remove sediment in the sediment basins when it reaches 50% capacity. Please add that sediment will be removed form structural BMPs when it reaches 1/3 to 1/2 the height of the control per the GP and comment 13.
- The SWPPP plan mentions the use of hay bales. We discourage the use of hay bales; however, straw bales can be used.

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

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From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Thursday, October 9, 2025 12:57 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>

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Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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I hope to have sewer will serve letter soon.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Thursday, October 9, 2025 11:54 AM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

Received, thank you Greg.

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Sent: Thursday, October 9, 2025 12:33 PM

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Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

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The MS4 acknowledgement is attached.

Greg Carrico, PE
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Senior Civil Engineer

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southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

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Senior Civil Engineer

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4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
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 - show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
 - show the location and size of the buffer zone.
5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in

combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).
10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit

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12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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PLEASE NOTE: This message, including any attachments, may include privileged, confidential and/or inside information. Any distribution or use of this communication by anyone other than the intended recipient is strictly prohibited and may be unlawful. If you are not the intended recipient, please notify the sender by replying to this message and then delete it from your system.

From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; riley@omega-foundation.com
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Thursday, October 9, 2025 11:54:13 AM

This Message Is From an External Sender

This message came from outside your organization.

Received, thank you Greg.

From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Thursday, October 9, 2025 12:33 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

 **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. 

The MS4 acknowledgement is attached.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>
Sent: Wednesday, October 8, 2025 9:28 AM
To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

You are very welcome. We are reviewing the revised materials and will get back to you soon with any questions.

From: Greg Carrico <gcarrico@pickeringfirm.com>

Sent: Tuesday, October 7, 2025 9:17 PM

To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

⚠ **CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Jennifer,

Thank you for the quick review, my updated SWPPP can be found here:

<https://pickering.sharefile.com/public/share/web-s7f3af46d9487408b97dc0a01bef099ac> [pickering.sharefile.com].

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.

[Brent Mayo is a responsible corporate officer.](#)

2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.

[This is a private isolated low point. There are no drainage connections to or from this water body.](#)

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

[An additional statement was added to section 4 of the SWPPP. And reads "Nitrogen, Phosphorus, and Organic Enrichment/ Low Dissolved Oxygen are not expected be affected by this construction project. The Sediment will be controlled by the following Erosion and Sediment Controls".](#)

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows

[Arrows added to new sheet C0-143-00](#)

- identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)

call out for Horn Lake Creek has been added in SW Corner of site on sheets C0-140-00 and C0-141-00

- indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)

the two existing buildings will be used for most on-site storage needs. If additional storage is required, the contractor shall follow all applicable rules and regulations for storage as appropriate

- show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)

Laydown has been called out in existing gravel area in between existing building and one of the construction exits

- show the location and size of the buffer zone.

buffer has been added to possible stream in SW corner in plans

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

The buffers have been called out on the plans, no disturbance is planned within 50' of the tributary, and Horn Lake Creek is 360' away from the limits of disturbance.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

I will get you the information once I receive this from the City.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

I will get this to you as soon as I receive this from the City/County.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -
For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

I have included a drainage basin exhibit in the SWPPP showing the individual drainage basins. All basins that exceed 10 acres of drainage will have a sediment basin as required. There are some drainage basins that are less than 10 acres, that is why the totals do not add up to 114.4.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).

Section 4.A has been updated to include the following statement, "Vegetative cover must have a uniform density of at least 70%."

10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.

Section 7 referenced these sections of the general permit. I have updated the language, and added the general permit as an attachment to the SWPPP so the contractors and permittees have it as a reference.

11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.

There will be an industrial air permit and an industrial stormwater discharge permit. There is a large amount of tree clearing and earthwork that will take several months to complete, and the design on the other environmental permits has not even begun. In order to meet the necessary schedule of this project we need the permits to be decoupled, so this early earthwork and stabilization phase can begin.

12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

[Written phasing has been added to the Limits of Disturbance exhibit.](#)

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

[Additional notes added to plan sheets C0-140-00 and C0-141-00](#)

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of

this waterbody, and note if there are drainage connections to or from the waterbody.

3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.

4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:

- include drainage pattern arrows
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- show the location and size of the buffer zone.

5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCN01 indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.

7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

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Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

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From: [Pitt, Jennifer](#)
To: [Greg Carrico](#); brent@colossusx.com; riley@omega-foundation.com
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Wednesday, October 8, 2025 9:27:45 AM

This Message Is From an External Sender

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Sent: Tuesday, October 7, 2025 9:17 PM
To: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>; brent@colossusx.com; riley@omega-foundation.com
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility

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[Brent Mayo is a responsible corporate officer.](#)

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12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.

Written phasing has been added to the Limits of Disturbance exhibit.

13. Please provide additional information regarding BMP maintenance. The General Permit states that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Additional notes added to plan sheets C0-140-00 and C0-141-00

Please feel free to give me a call if you need to discuss any of this or need more information.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

Cell: 901.481.3066

From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>

Sent: Monday, October 6, 2025 3:39 PM

To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; riley@omega-foundation.com

Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>

Subject: AI 12592 - MZX Tech LLC, Duke Facility

Hello Mr. Carrico, Mr. Mayo and Mr. White,

I work for Tetra Tech under contract to MDEQ, and I am providing the following comments/Notice of Deficiency on behalf of MDEQ.

We have reviewed the Large Construction Notice of Intent (LCNOI) and Storm Water Pollution Prevention Plan (SWPPP) for the proposed Duke Facility project to be located on Stanton Rd, Southaven, MS. Based on our review of the LCNOI and the SWPPP, we have the following comments:

1. The signatory (Brent Mayo) is not listed as a registered agent, officer, or director on the state of Mississippi's Secretary of State website of business listings for MZX Tech LLC. Please confirm that the signatory is a responsible corporate officer for the LLC and add his title to the form.
2. According to the quad map and the USGS TopoBuilder site, a ponded waterbody is present in the northwest portion of the project area. Please confirm the characteristics and function of this waterbody, and note if there are drainage connections to or from the waterbody.
3. You indicated that TMDLS for Total Nitrogen, Total Phosphorous, Organic Enrichment/Low Dissolved Oxygen, and Sediment have been established for the receiving waters. Please add a statement to your SWPPP that explains how the project will not contribute to the impairment of the waterbody because of specific BMPs.
4. ACT5, T-13 of the general permit lists items to be included on the sites maps and drawing. Please revise your drawings/erosion control plan to include the following items:
 - include drainage pattern arrows
 - identify the location of sensitive areas, such as wetlands, perennial streams and adjacent receiving water bodies (if the receiving waterbody is not depicted on the map, the name and direction must be listed in text form on the map)
 - indicate the location of housekeeping practices including areas for equipment maintenance and repair; waste receptacles for regular collection of waste; adequately maintained sanitary facilities; protected storage areas for chemicals, paints, solvents, fertilizers, pesticides, herbicides, detergents and other potentially toxic materials (if offsite, please indicate that on drawing)
 - show the location of laydown area where tools, materials, equipment, and vehicles are stored temporarily when they are not in use (if offsite, please indicate that on drawing)
 - show the location and size of the buffer zone.
5. Paragraph (6) under Condition T-3 of the MSR10 general permit states the following:

(6) Provide and maintain a 50-foot undisturbed natural buffer around waters of the United States; or provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Please indicate the size of the buffer zone to Horn Lake Creek and the tributary outside the southeast corner of the project on the erosion control plan. Whenever the buffer zone is less than 50 ft., please update your SWPPP to denote what additional controls are being added

due to this (e.g. double row silt fence, etc.). Where the receiving waters are outside the scale of the drawings, please indicate the buffer distance in text.

6. The LCNOI indicates an existing municipal or commercial system will provide sanitary sewage disposal services. The submittal must include either the plans and specifications for the collection or an approval letter from the collection system which indicates that the flows generated from the proposed project can and will be transported and treated properly. The letter must include the estimated flow. Please provide the required documentation.
7. DeSoto County is covered under Mississippi's Small Municipal Separate Storm Systems (MS4) Storm Water General Permit. Please provide documentation or additional information as to how this project is being coordinated with the DeSoto County MS4 program coordinator.

8. The Large Construction Storm Water General Permit Condition ACT5 T-6(a) requires -

For drainage locations (a drainage point at boundary of land disturbing activity) that serve an area with ten (10) or more disturbed acres at one time, a temporary (or permanent) sediment basin providing at least 3,600 cubic feet (133 cubic yards) of storage per acre drained shall be provided until final stabilization of the site...The capacity of the sediment basin, acreage draining to sediment basin, location on the plan, as well as the diagram of outflow structure shall be provided.

The total capacity required for 114.4 acres is 411,840 cf. The four proposed sediment basins provide a total capacity of 242,386.5 cf. Please indicate the total acreage draining to each basin and demonstrate each basin meets the capacity requirements.

9. ACT5, T-18 of the general permit requires a description of the procedures to achieve final stabilization of all disturbed areas of the project site, including vegetative cover with a density of at least 70%. Please include this requirement in the SWPPP and reference the 70% in the implementation sequence (see definitions in ACT12, T-16).
10. ACT5, T-20 and T-21 of the general permit contain specific requirements for storm water training, and the SWPPP does not address any of these. Please incorporate storm water training and recordkeeping requirements and designate a Storm Water Team and their expectations. Employee training documentation shall be maintained on-site with the SWPPP and made available to MDEQ personnel for inspection upon request.
11. It is noted that an air permit is required for this project. Also verify that no other environmental permits will be needed for the construction and/or operation of this facility. Such permits could include NPDES discharge wastewater permits, pretreatment permits, or a Dam Safety permit (if the impoundment has an emergency spillway and/or levee or dam height of 8 ft. or more). It is the policy of the Department to process all permits related to construction activities simultaneously. If the applicant wishes to decouple these permit actions, a written request must be received with justification.
12. For the phasing of the construction to stay below 50 acres at one time, please include a written description of how each phase will be stabilized (in detail) before moving on to the next phase.
13. Please provide additional information regarding BMP maintenance. The General Permit states

that sediment will be removed from structure BMPs when it has reached $\frac{1}{3}$ to $\frac{1}{2}$ height of the control (in addition to the 50% capacity of sediment basins).

Please email me your response to the above comments. Once we have received your response, we will resume our review. Please be advised that the discharge of storm water without written notification of coverage or issuance of an individual National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is a violation of state law.

Sincerely,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

Tetra Tech | 10711 Red Run Blvd., Suite 105 | Owings Mills, MD, 21117 USA | www.tetrattech.com [tetrattech.com]



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From: [Greg Carrico](#)
To: [Pitt, Jennifer](#); brent@colossusx.com; [Riley White](#)
Cc: [Carrie Barefoot](#); [Montie Hardaway](#); [Currey, Gregory](#)
Subject: RE: AI 12592 - MZX Tech LLC, Duke Facility
Date: Monday, October 13, 2025 11:35:35 AM

Thank you all so much for getting this review completed so quickly, and the permit coverage issued. We greatly appreciate the effort.

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

Service & Good Work, Our Foundation, Our Future

6363 Poplar Avenue, Suite 300

Memphis, TN 38119

Phone: 901.729.5516

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From: Pitt, Jennifer <Jennifer.Pitt@tetrattech.com>
Sent: Friday, October 10, 2025 1:22 PM
To: Greg Carrico <gcarrico@pickeringfirm.com>; brent@colossusx.com; Riley White <riley@omega-foundations.com>
Cc: Carrie Barefoot <cbarefoot@mdeq.ms.gov>; Montie Hardaway <mglenn@mdeq.ms.gov>; Currey, Gregory <Greg.Currey@tetrattech.com>
Subject: AI 12592 - MZX Tech LLC, Duke Facility

Good afternoon,

Attached please find the stormwater coverage certificate for the above referenced project. Please retain a copy of this certificate for your records. Let us know if you have any questions.

Thank you,

Jennifer Pitt | Tetra Tech Inc., Center for Ecological Sciences

Voice: 410-902-3151

Jennifer.Pitt@tetrattech.com

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From: [Carrie Barefoot](#)
To: [NOIs](#)
Cc: [Greg Carrico](#)
Subject: RE: Project Duke - SWPPP and NOI
Date: Friday, September 19, 2025 2:38:00 PM

Received. Thank you.

[@NOIs](#) – Lin, Will you please log this one in? It goes on AI 12592. Please let me and Greg, copied on this email, know if you cannot access the link below for the LCNOI and SWPPP.

Thank you,
Carrie

Carrie Barefoot, P.E.
Manager, 401/Stormwater Branch
MDEQ – Environmental Permits Division
P.O. Box 2261, Jackson, MS 39225
515 E. Amite Street, Jackson, MS 39201
Office: (601) 961-5249

From: Greg Carrico <gcarrico@pickeringfirm.com>
Sent: Friday, September 19, 2025 2:35 PM
To: Carrie Barefoot <CBAREFOOT@mdeq.ms.gov>
Subject: Project Duke - SWPPP and NOI

This Message Is From an External Sender

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Carrie,
Per our discussion this SWPPP and NOI submittal was going to exceed the 15 MB limit on the portal. On behalf of MZX Tech, LLC, Pickering is submitting this SWPPP and NOI for coverage under Mississippi's Construction Storm Water General Permit.
The SWPPP and NOI can be downloaded from this link: <https://pickering.sharefile.com/d-s3e10d7e4baae49139c3615b3ea0d0d85> [pickering.sharefile.com]

Greg Carrico, PE
Principal Owner
Senior Civil Engineer

Pickering Firm, Inc.

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