



TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

Division of Water Resources

William R. Snodgrass Tennessee Tower, 312 Rosa L. Parks Avenue, 11th Floor, Nashville TN 37243

1-888-891-8332 (TDEC)

Compliance Inspection for General NPDES Permit for Stormwater Discharges from Construction Activities (CGP)

Site/Project Name: Memphis Regional Megasite WWTP and Emergency Effluent Lagoon
NPDES Tracking Number: TNR122630
Date Coverage was Issued: 6-20-22
Street Address or Location: West of Fredonia Loop Road, south of Keeling Road
Start Date: 6-1-2022
Estimated End Date: 12-21-2023
Site Description: Construction of WWTP and emergency effluent lagoon
Latitude (dd.dddd): 35.4334385
Longitude (-dd.dddd): -89.4713148
County(ies): Haywood EFO: Jackson MS4 Jurisdiction:
Acres Disturbed: 39.01
Total Acres:

Name of Permittee (Developer/Operator): Megasite Authority of West TN

Name of Official Contact: Clay Bright Email: clay.bright@tn.gov Contact Phone:
Address: 312 Rosa L. Parks Ave City: Nashville State: TN Zip: 37243

Construction Phase: Site preparation Grading Construction Final Stabilization
Inspection Purpose: Routine Follow-up Complaint NOT

Have all construction activities stopped and 70% uniform permanent cover established? Yes No Comments

Notable impacts to waters as a result of site activities/discharges? Yes No Comments

Evidence of insufficiently treated stormwater discharges at outfall locations? Yes No Comments

Evidence of structural EPSC measure failure/absence? Yes No Comments

Evidence of non-structural EPSC measure failure/absence? Yes No Comments

Unauthorized discharges? Yes No Comments

Evidence of offsite impacts? Yes No

Evidence of construction buffer disturbance? Yes No Comments

Compliance Evaluation: Any Y = recommend NOV/EAR or follow-up - date:
Any Y = recommend follow-up (email, letter, inspection, etc.) - date:

Are copies of the SWPPP & inspection reports on site or made available? Yes No Comments

Has SWPPP been implemented & satisfactory? Yes No

Are 2/week inspections being performed? Yes No

Are inspection reports completed & signed? Yes No

Are inspection reports filled out by a qualified EPSC inspector? Yes No

Compliance Evaluation: Any N = recommend follow-up (email, letter, inspection, etc.) date:

Are there ARAP violations or unauthorized stream/wetland alteration? Yes No Comments

Compliance Evaluation: Y = perform follow-up ARAP inspection - date:

Notes: See comments below

On-Site Contact (if available)
On-Site Contact Name (Print): On-Site Contact Title: Signature: Date:

TDEC Personnel/Information
Inspector's Name (Print): Joellyn Brazile Signature: Date: 3/27/24 Time: 1:30pm
EFO: Memphis EFO 8383 Wolf Lake Drive Bartlett, TN 38133

Comments:

Routine compliance inspection conducted by DWR staff Joellyn Brazile, Gregg Overstreet and Kaylee Sabo. Meg Anderson from Brasfield & Gorrie accompanied DWR staff on-site.

Emergency Effluent Lagoon

Project area appeared mostly completed. Lagoon has been constructed and stabilized with vegetation (photo 1). Matting was installed along top of slope. Access road along top of crest covered with gravel. Minor bare areas noted, for example adjacent to spillway (photo 2). No rill or gully formation observed during inspection, but area should continue to be monitored to ensure sufficient stabilization remains to prevent sediment migration and rill/gully formation. Inspections in this area can be reduced to once/month until sufficient perennial vegetative cover is achieved and documented. Once area achieves permanent stabilization (perennial vegetative cover) inspections of the area can cease.

WWTP


Most of project area is under construction. Sediment basin installed on northern edge of the site needs maintenance. Porous baffles are installed within the eastern and western forebays, but forebays appear to be beyond 50% capacity with sediment accumulation (photos 3-4). Area surrounding sediment basin including banks/berm are not stabilized, which allows for internal sediment migration. Minor amount of sediment accumulation and sediment-laden water observed at Outfall 1 (photo 5). Area to the east of the basin, including the stockpile of sediment is not sufficiently stabilized, allowing sediment migration towards the silt fence installed east of the basin. However, the silt fence is not accurately installed (not entrenched) and/or failing. Sediment is migrating beyond the silt fence and limits of disturbance (as shown on the EPSC plans), by passing the sediment basin. No issues noted regarding Outfalls 2 or 3.


Twice weekly inspections being conducted. SWPPP is retained on-site in an electronic format. NOC maintained on-site.

Recommendations:


- Stabilize portions of the site that are at grade and/or temporarily inactive with temporary or permanent stabilization measures.
- Ensure sediment control measures (i.e. silt fence, sediment basin) are installed and maintained until vegetative cover is fully established. Long term/permanent goal of vegetative cover is perennial vegetation.
- Ensure twice weekly inspection forms are completed and signed by the inspector as well as the primary permittee (Megasite Authority of West TN) or a duly authorized representative of the primary permittee. Inspections can be reduced to once per month in the areas of the project that are or become inactive and temporarily stabilized. Inspection requirements do not apply to definable areas that are or become permanently stabilized. Justification of reducing inspections from twice weekly to once per month should be included in the SWPPP.
- Submit written response by **April 22, 2024**, describing the corrective actions taken in regard to the sediment basin and failing silt fence along the northern portion of the site.

Photographic Log

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|---|----------------------------|--|---|---|
| Project: Memphis Regional Megasite WWTP and Emergency Effluent Lagoon | | Site Location: West of Fredonia Loop Road, South of Keeling Road | | Permit No.: TNR122630 |
| Photo No. 1 | Date 3-27-24 | DIRECTION 356 deg (T) | 35.42838°N 089.47271°W | ACCURACY 9 m DATUM WGS84 |
| Description View of the emergency effluent lagoon looking north from the southern side of the lagoon. Vegetative cover appeared to be established across much of the lagoon, including the slopes and crest. Portions of the lagoon had matting installed. The top of the crest was a gravel access road. | |  | | |
| | | 2024-03-27 13:50:42-05:00 | | |

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| Project: Memphis Regional Megasite WWTP and Emergency Effluent Lagoon | | Site Location: West of Fredonia Loop Road, South of Keeling Road | | Permit No.: TNR122630 |
| Photo No. 2 | Date 3-27-24 | DIRECTION 204 deg (T) | 35.42834°N 089.47274°W | ACCURACY 7 m DATUM WGS84 |
| Description View of emergency effluent lagoon spillway. Bare soils observed at the top of the slope. | |  | | |
| | | 2024-03-27 13:50:47-05:00 | | |

Photographic Log


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| Project: Memphis Regional Megasite WWTP and Emergency Effluent Lagoon | | Site Location: West of Fredonia Loop Road, South of Keeling Road | | Permit No.: TNR122630 | |
| Photo No. 3 | Date 3-27-24 | DIRECTION 291 deg (T) | 35.43442°N 089.47267°W | ACCURACY 7 m DATUM WGS84 | |
| Description View of the western end of the sediment basin located north of the WWTP. The banks of the basin were not stabilized, which allows internal migration of sediment into the basin. The forebays at the western and eastern ends of the basin were beyond 50% capacity (see close-up view in photo 4). Sediment-laden water noted within basin. | |  | | | |
| | | 2024-03-27 13:58:24-05:00 | | | |

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| Photo No. 4 | Date 3-27-24 | DIRECTION 295 deg (T) | 35.43439°N 089.47275°W | ACCURACY 10 m DATUM WGS84 | |
| Description Close-up view of the forebay at the western end of the sediment basin. Porous baffles were installed, but forebay appeared to be filled with sediment greater than 50% capacity. | |  | | | |
| | | 2024-03-27 14:00:21-05:00 | | | |

Photographic Log

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| Photo No. 5 | Date 3-27-24 | Mar 27, 2024 at 2:01:07 PM Stanton, TN 38069 United States |
| Description | | |
| View of sediment basin discharge point at Outfall 1. Minor amount of accumulated sediment and sediment-laden water was observed downgradient of Outfall 1. | |  |

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|--|------------------------|--|
| Photo No. 6 | Date 3-27-24 | DIRECTION 35.43470°N 110 deg (T) 089.47149°W ACCURACY 7 m DATUM WGS84 |
| Description | | 2024-03-27 14:07:25-05:00 |
| View of stockpile on the northern side of the site, east of the sediment basin. Stockpile was not stabilized. Sediment migration from this area was observed discharging beyond the silt fence and limits of disturbance downgradient (see photo 7). | | |
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Photographic Log

| Project: | | Site Location: | | Permit No.: |
|---|---------|--|---------------------------|------------------------------|
| Memphis Regional Megasite WWTP and Emergency Effluent Lagoon | | West of Fredonia Loop Road, South of Keeling Road | | TNR122630 |
| Photo No. | Date | DIRECTION | 35.43475°N 089.47213°W | ACCURACY 13 m DATUM WGS84 |
| 7 | 3-27-24 |  | | |
| Description | | | | |
| Drainage from the northern portion of the site including the stockpile shown in photo 6 drains to the silt fence shown in this photo. The silt fence was not installed properly (not entrenched) and/or failing. Sediment accumulation was observed beyond the silt fence and limits of disturbance as shown on the EPSC plans. Sediment migration was towards Outfall 1, bypassing the sediment basin. | | | | |
| | | 2024-03-27 14:08:41-05:00 | | |