­DEQ/DWR

**FACT SHEET FOR NPDES PERMIT DEVELOPMENT/Major Modification**

NPDES No. NC0004987

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| Facility Information |
| Applicant/Facility Name:  | Duke Energy – Marshall Steam Station |
| Applicant Address: | Water Management, Duke Energy, P.O. Box 1006, Charlotte, NC 28201 |
| Facility Address: | 8320 E. NC Highway 150, Terrell, NC 28682 |
| Permitted Flow | Not Limited |
| Type of Waste: | 100.0% Industrial |
| Facility/Permit Status: | Major Modification |
| County: | Catawba |
| Miscellaneous |
| Receiving Stream: | Lake Norman | Regional Office: | Mooresville |
| Stream Classification: | WS-IV & B CA | USGS Topo Quad: | Lake Norman North |
| 303(d) Listed?: | No | Permit Writer: | Sergei Chernikov, Ph.D. |
| Subbasin: | 03-08-32 | Date: | June 8, 2020 |
| Drainage Area (mi2): | NA |  |
| Summer 7Q10 (cfs) | Release (60 cfs) |
| Winter 7Q10 (cfs): | NA |
| 1Q10 (cfs): |  |
| IWC (%): | 23 |

##### SUMMARY

This permit is being modified to make the following changes:

1). Add the bottom ash purge to the list of the contributing sources of wastewater to the Lined Retention Basin. Per updated 40 CFR 423.13(k)(2)(i)(A), the discharge of [pollutants](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=0d89e8d7076bc1372976137880905986&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:N:Part:423:423.13) [in](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=1247a5bda9df81fc5540a565d259830e&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:N:Part:423:423.13) [bottom ash](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=bf43c2f27e26179a6a334dc617e7d2f7&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:N:Part:423:423.13) transport water from a properly installed, operated, and maintained [bottom ash](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=bf43c2f27e26179a6a334dc617e7d2f7&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:N:Part:423:423.13) system is authorized to maintain system water chemistry where installed equipment at the [facility](https://www.law.cornell.edu/definitions/index.php?width=840&height=800&iframe=true&def_id=c4adae0dbaa36c9a953568c5cd292e90&term_occur=999&term_src=Title:40:Chapter:I:Subchapter:N:Part:423:423.13) is unable to manage pH, corrosive substances, substances or conditions causing scaling, or fine particulates to below levels which impact system operation or maintenance.

2). To adjust the Technology Based Effluent Limits for Total Arsenic, Total Mercury, Total Selenium, and Nitrate/nitrite as N for Internal Outfall 006 (FGD wastewater) in accordance with updated 40 CFR 423.13(g)(1)(i). Please see the table below for details.

Both changes are based on the October 13, 2020 update to the 40 CFR 423 (BAT).

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| --- | --- | --- |
| **Pollutant** | **Existing monthly average - daily maximum limit** | **Modified monthly average - daily maximum limit** |
| Arsenic | 8.0 µg/L – 11.0 µg/L | 8.0 µg/L – 18.0 µg/L |
| Selenium | 12.0 µg/L – 23.0 µg/L | 29.0 µg/L – 70.0 µg/L |
| Mercury | 356.0 µg/L – 788.0 µg/L | 34.0 µg/L – 103.0 µg/L |
| Nitrate/Nitrite | 4.4 mg/L – 17.0 mg/L | 3.0 mg/L – 4.0 mg/L |

3). The pH limit for FGD wastewater was eliminated (Internal Outfall 006) to correct an error.

**All the remaining terms and conditions of the permit remain unchanged.**

#### PROPOSED SCHEDULE

Draft Permit to Public Notice: February 9, 2021 (est.)

Permit Scheduled to Issue: April 2, 2021 (est.)

### STATE CONTACT

If you have any questions on any of the above information or on the attached permit, please contact Sergei Chernikov at (919) 707-3606 or sergei.chernikov@ncdenr.gov.

CHANGES IN THE FINAL MODIFICATION

The optimization requirement and the reopener clause were added for the FGD Effluent Page in response to the SELC comments.