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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 12, 2023

MR GAINES WRIGHT
PLANT MANAGER
BAYTOWN ENERGY CENTER LLC
PO BOX 840
BAYTOWN TX 77522-0840

Re: Pollution Control Projects Air Quality Standard Permit
(Effective 2/9/2011)
Standard Permit Registration Number: 172517
Standard Permit Expiration Date: May 12, 2033
Baytown Energy Center LLC
Calpine Baytown Energy Center
Affected Permit: 41996
Baytown, Chambers County
Regulated Entity Number: RN100226067
Customer Reference Number: CN600376073

Dear Mr. Wright:

Baytown Energy Center, LLC submitted an application on April 13, 2023 to register construction related to Pollution Control Projects to be located at 8605 Fm 1405 Rd, Baytown, Chambers County. We understand that this registration is for emissions associated with the reduction of nitrogen oxide (NOx) annual allowable emissions from the existing turbines and the addition of a carbon capture system (CCS) to recover carbon dioxide (CO₂) emissions from the turbines.

The Texas Commission on Environmental Quality (TCEQ) has determined that your proposed emissions are authorized by this standard permit pursuant to Title 30 Texas Administrative Code § 116.602 and Texas Health and Safety Code § 382.05195, if constructed and operated as described in your registration. Authorized emissions are listed on the attached table.

You must begin construction or modification of these facilities in accordance with this standard permit no later than 18 months after the date of this letter. After completion of construction or modification, the appropriate TCEQ Regional Office must be notified prior to commencing operation and the facility shall be operated in compliance with all applicable conditions of the claimed standard permit.

You are reminded that 30 TAC § 116.615 requires that any construction or change authorized by this standard permit be administratively incorporated into the affected facilities' permit(s) at the next amendment or renewal.

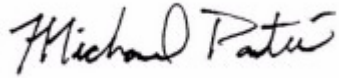
You are also reminded that these facilities must comply with all rules and regulations of the TCEQ and of the U.S. Environmental Protection Agency at all times.

If you need further information or have any questions, please contact Ms. Amber Ni at (512) 239-0198 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Mr. Gaines Wright
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Re: Standard Permit Registration Number 172517

Sincerely,

A handwritten signature in black ink that reads "Michael Partee". The signature is written in a cursive style with a large, looped initial "M".

Michael Partee, Manager
Rule Registrations Section
Air Permits Division
Texas Commission on Environmental Quality

cc: Air Section Manager, Region 12 - Houston

Project Number: 356343

Standard Permit Maximum Emission Rates Table
Permit Number 172517

The facilities and emissions included in this table have been represented and reviewed as the maximum emissions authorized by this standard permit registration.

Emission Point No.	Source Name	Pollutant	Authorized PCP Emissions	
			lbs/hr	tpy
CTG1, CTG2, CTG3, B-1, B-2	Turbine/HRSG No. 1-3, B-1, and B-2	NOx	--	326.13
		CO	--	1,354.91
		VOC	--	103.83
		PM/PM ₁₀	--	273.84
		SO ₂	--	35.79
		NH ₃	--	325.00
		H ₂ SO ₄	--	5.88
CCS1, CCS2	Carbon Capture Scrubber Stacks	NOx	58.60	217.44
		CO	456.00	903.27
		VOC	51.45	75.99
		PM/PM ₁₀ /PM _{2.5}	30.19	182.56
		SO ₂	56.40	23.86
		NH ₃	61.80	216.67
		H ₂ SO ₄	9.60	3.92
CWT-2	CCS Cooling Tower	PM	1.89	8.29
		PM ₁₀	1.17	5.12
		PM _{2.5}	0.004	0.02
CCSFUG	CCS Solvent Piping Fugitives	VOC	0.34	1.49
TK-1	Amine Tank 1	VOC	0.17	0.05
TK-2	Amine Tank 2	VOC	0.17	0.05
TK-3	Fresh Amine Tank	VOC	0.02	0.02
TK-4	Spent Amine Tank	VOC	0.01	0.02

- VOC - volatile organic compounds
- NO_x - total oxides of nitrogen
- CO - carbon monoxide
- PM - total particulate matter, suspended in the atmosphere, including PM₁₀ and PM_{2.5}, as represented
- PM₁₀ - total particulate matter equal to or less than 10 microns in diameter, including PM_{2.5} as represented
- PM_{2.5} - particulate matter equal to or less than 2.5 microns in diameter
- SO₂ - sulfur dioxide
- NH₃ - ammonia

Standard Permit Maximum Emission Rates Table
Permit Number 172517

H₂SO₄ - sulfuric acid

**Fugitive emissions are an estimate only and should not be considered as a maximum allowable

Date: May 12, 2023