

June 3, 2015

Group Against Smog and Pollution
Joe Osborne
Legal Director
5135 Penn Avenue
Pittsburgh, PA 15224

Re: Comments on draft Plan Approvals 61-198B (Handsome Lake Energy, LLC).

Dear Mr. Osborne,

Thank you for your comment from the Group Against Smog and Pollution (GASP) regarding draft plan approval 61-198B for the Handsome Lake Energy, LLC, Kennerdell Facility. The comments were received by the Pennsylvania Department of Environmental Protection ("Department") on December 15, 2014.

COMMENT AND RESPONSE:

Comment: The 95 TPY NOx emission limit alone is insufficient to limit facility potential to emit.

Response: In response to your comment, the Department has included a throughput limit of natural gas of 2,243 MMscf/yr.

The natural gas throughput number of 2,243 MMscf/yr was derived from the calculations using a revised emission factor of 0.084 pounds per million standard cubic feet (lbs/MMscf) of natural gas use. This value is the maximum annual composite NOx emissions value from quarterly portable analyzer testing completed from years 2007 through 2013 at the facility. See Summary of Handsome Lake Energy Quarterly Portable Analyzer Test (2007-2013), attached. Emissions calculations completed using this emission factor are included in the attached Handsome Lake Energy Plan Approval Revision Request Emission Change Summary. Emissions calculated using a fuel throughput 2,243 MMscf/yr were used to determine NNSR and PSD applicability for application 61-198B. This limit will be used to demonstrate compliance with the facility site level emission limits. The Department has modified Section C, Condition #002 of Plan Approval 61-198B to reflect this change.

If you have any questions, please contact me at 814-332-6977 or epainter@pa.gov. If you would like to discuss your concerns in more detail, please provide me with an overview of the specific topics and your availability.

Sincerely,



Edward J. Painter
Air Quality Engineering Specialist
Air Quality Program

File: AQ/Facilities/Permits/PA 61-198B through E. Orris
Mr. Edwin Much, Environmental Programs Manager, 173 Cornplanter Lane, Kennerdell,
PA 16374

ATTACHMENT 1 - Handsome Lake Energy Plan Approval Revision Request Emission Change Summary

Pollutant	Current permit emission limits (based on 2111 MSCF/yr of natural gas use)			Revised emission estimates and limits (based on 2243 MSCF/yr of natural gas use)			Change in potential facility emissions, tons/yr
	Emission Factor, #/MMSCF	Emissions, lbs/hr (per turbine)	Emissions, tons/yr (facility total)	Emission Factor, #/MMSCF	Emissions, lbs/hr (per turbine)	Emissions, tons/yr (facility total)	
PM	0.0117	3.0	12.3	0.0117	3.0	13.1	0.8
PM10	0.0117	3.0	12.3	0.0117	3.0	13.1	0.8
SOx	0.00275	0.7	2.9	0.00275	0.7	3.1	0.2
CO	0.0646	18.3	68.2	0.0646	18.3	72.4	4.3
NOx	0.09	30.1	95.0	0.0847	30.1	95.0	0.0
VOC	0.00805	3.2	8.5	0.00805	3.2	9.0	0.5

Attachment 3 - Summary of Handsome Lake Energy Quarterly Portable NOX Analyzer Tests (2007 - 2013), lbs/MSCF

Unit	Portable Analyzer Tests - 2013				Portable Analyzer Tests - 2012				Portable Analyzer Tests - 2011				Portable Analyzer Tests - 2010				Portable Analyzer Tests - 2009				Portable Analyzer Tests - 2008				Portable Analyzer Tests - 2007			
	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q	1st Q	2nd Q	3rd Q	4th Q
1A	0.0820	0.0704	0.0611	0.1007	0.0847	0.0663	0.075	0.0976	0.0855	0.0828	0.0842	0.0927	0.0858	0.0644	0.0603	0.0855	0.0672	0.0479	0.0627	0.0794	0.0691	0.0651	0.0638	0.0725	0.0719	0.0864	0.0871	0.0638
1B	0.0839	0.0701	0.0611	0.0945	0.0839	0.0697	0.0842	0.0849	0.0661	0.0833	0.0879	0.0877	0.0874	0.0611	0.0644	0.0861	0.0674	0.0509	0.0624	0.0755	0.0717	0.0566	0.0674	0.0696	0.0648	0.0742	0.0793	0.0717
2A	0.0893	0.0819	0.0721	0.0869	0.0893	0.0606	0.0727	0.0895	0.0872	0.0823	0.083	0.0976	0.0804	0.0715	0.0704	0.0872	0.0677	0.0475	0.0516	0.081	0.0715	0.0702	0.0839	0.085	0.0837	0.0796	0.0793	0.0755
2B	0.0809	0.0715	0.0597	0.0886	0.0767	0.0532	0.0859	0.0879	0.1034	0.1062	0.0833	0.0841	0.0857	0.0658	0.0637	0.1034	0.0632	0.0508	0.0513	0.0744	0.0626	0.0722	0.0836	0.0854	0.0872	0.0922	0.0759	0.0703
3A	0.0655	0.0350	0.0737	0.1048	0.0821	0.0821	0.0722	0.0845	0.0897	0.0856	0.0896	0.0953	0.0837	0.0697	0.0711	0.0897	0.0674	0.0499	0.0567	0.0764	0.0633	0.0679	0.0627	0.0626	0.0831	0.0773	0.0817	0.0635
3B	0.0893	0.0741	0.0677	0.0882	0.0797	0.0613	0.0878	0.0901	0.0872	0.0833	0.0878	0.0932	0.0885	0.0765	0.0798	0.0872	0.0676	0.0581	0.0534	0.0724	0.0667	0.0624	0.0634	0.0615	0.0765	0.0775	0.0875	0.0667
4A	0.0795	0.0677	0.0640	0.0732	0.0762	0.0664	0.0839	0.0859	0.0651	0.0619	0.0907	0.0875	0.0649	0.065	0.0659	0.0672	0.0532	0.0529	0.0541	0.0698	0.0704	0.0676	0.0661	0.0814	0.0799	0.0934	0.0713	
4B	0.0874	0.0686	0.0668	0.0868	0.081	0.0677	0.0839	0.0868	0.1216	0.0764	0.0859	0.0919	0.0949	0.0693	0.0733	0.1216	0.0813	0.0571	0.049	0.0641	0.0683	0.0674	0.062	0.0696	0.0601	0.0801	0.0858	0.0685
5A	0.0786	0.0679	0.0626	0.0791	0.0815	0.0529	0.0666	0.0884	0.0799	0.0665	0.0521	0.0993	0.0829	0.0618	0.0569	0.0799	0.0608	0.0725	0.046	0.0688	0.0594	0.0587	0.0705	0.0609	0.0777	0.071	0.0736	0.0559
5B	0.0714	0.0617	0.0696	0.0812	0.0914	0.0714	0.0891	0.1031	0.0945	0.0767	0.0644	0.1003	0.0983	0.0728	0.0768	0.0946	0.0834	0.0828	0.0539	0.0803	0.0717	0.0684	0.0761	0.0864	0.0864	0.0864	0.0866	0.0755
Four quarter average	0.0772	0.0779	0.0760	0.0767	0.0765	0.0784	0.0823	0.0818	0.0828	0.0839	0.0805	0.0794	0.0792	0.0743	0.0717	0.0682	0.0644	0.0639	0.0661	0.0693	0.0645	0.0695	0.0729	0.0769	0.0775	0.0769	0.0754	0.0682
One quarter average	0.0838	0.0703	0.0658	0.0884	0.0842	0.0555	0.0687	0.0875	0.0921	0.0810	0.0725	0.0933	0.0886	0.0677	0.0682	0.0921	0.0693	0.0571	0.0542	0.0770	0.0674	0.0659	0.0667	0.0659	0.0793	0.0795	0.0830	0.0682

Max Annual Composite NOX (2011 - 2013)	0.0847
Max Annual Composite NOX (2007 - 2013)	0.0847