

## **GROUP AGAINST SMOG & POLLUTION**

Wightman School Community Building 5604 Solway Street, Suite 204 Pittsburgh, PA 15217 412-325-7382 www.gasp-pgh.org

VIA EMAIL

Sandra Etzel Chief Engineer Allegheny County Health Department Air Quality Program 301 39<sup>th</sup> Street Pittsburgh, PA 15201-1891 aqpermits@achd.net

July 26, 2011

Group Against Smog & Pollution Comments Regarding Synthetic Minor Operating Permit Renewal for Peoples Natural Gas Company, LLC. - Dice Compressor Station (0033)

Dear Ms. Etzel,

Please accept these comments regarding the synthetic ninor operating permit renewal for Peoples Natural Gas Company, LLC. - Dice Compressor Station (0033) on behalf of the Group Against Smog and Pollution.

If you have any questions or require any additional information please do not hesitate to get in touch.

Sincerely,

Joe Osborne, Esq.

Legal Director

Group Against Smog & Pollution

## GROUP AGAINST SMOG & POLLUTION COMMENTS REGARDING REGARDING SYNTHETIC MINOR OPERATING PERMIT RENEWAL FOR PEOPLES NATURAL GAS COMPANY, LLC. - DICE COMPRESSOR STATION (0033)

## 1. Dice Compressor Engine NOx Emissions are Drastically Higher than Emissions from Modern Natural Gas Compressor Engines

The NOx emissions rates for the natural gas compressor engines at the Dice facility are drastically higher than emissions from a modern engine.

**Table 1: Comparison of Dice Compressor Engine NOx Emissions with Recently Permitted Compressor Engines**<sup>1</sup>

	Dice P001	Dice P002	Dice P003	Shamrock Compressor Station <sup>2</sup>	Welling Compressor Station <sup>3</sup>
NOx lb/hr	11.7	9.02	9.32	1.52	3.49
NOx g/bhp-hr	13.27	6.82	7.05	0.50	0.80

NOx is a PM and ozone precursor. Because our region struggles to meet national ambient air quality standards for both of these pollutants, NOx reduction measures should be implemented at this facility.

## 2. Ambient Air Modeling Must be Conducted to Ensure Emissions from this Facility do not Violate the NO<sub>2</sub> NAAQS.

Recent Screen3 NO<sub>2</sub> modeling at the Shamrock compressor station resulted in hourly NO<sub>2</sub> concentrations of 94.21 ppb at the facility fenceline,<sup>4</sup> just under the 100 ppb NO<sub>2</sub> hourly NAAQS standard. Shamrock's modeled facility wide emissions were 2.124 g/sec, and modeled emission units were between 556.1 and 712.5 feet from the facility fenceline.<sup>5</sup> Maximum hourly facilitywide NOx emissions from the Dice Compressor Station are 4.505 g/sec. The dice compressor station property is 7.3 acres,<sup>6</sup> meaning the closest facility fenceline must be less than 300 feet from one or more emission units.

<sup>&</sup>lt;sup>1</sup> Dice emission rates derived from ACHD, Dice Station Appendix A – Emission Calculations (May 3, 2011); Shamrock emission rates derived from Attachment 1 - PADEP, Review of Plan Approval Application Shamrock Compressor Station (Nov. 12, 2010, Revised Nov. 23, 2010) p. 10; Welling emission rates derived from Attachment 2 - PADEP, Review of Plan Approval Application Welling Compressor Station (Dec. 29, 2010, Revised Jan. 12, 2011)) p. 9.

<sup>&</sup>lt;sup>2</sup> Attachment 3 – Laurel Mountain Midstream, Response to Comments, Shamrock Compressor Station (Jan 14, 2011) p. 7.

<sup>&</sup>lt;sup>3</sup> *Id*.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>5</sup> Id.

<sup>&</sup>lt;sup>6</sup> Peoples Natural Gas Company, LLC. - Dice Compressor Station Permit Application Form 1 (Feb. 8, 2006) p.2.

Given than the Dice NOx emission rate is over twice the g/sec emission rate of Shamrock and located on a smaller property, there is a strong possibility  $NO_2$  emissions from Dice are creating NAAQS exceedances beyond the facility fenceline, contrary to Article XXI §§ 2101.11.a.2, a.3, b.1 and 2103.12.a.E & a.F. Ambient air modeling must be conducted to ensure emissions from this facility do not violate the hourly  $NO_2$  NAAQS.