

CITY OF ALBUQUERQUE

Environmental Health Department

Mary Lou Leonard, Director



August 29, 2012

Mallory Downs, Co-President
New Mexico Public Health Association
P.O. Box 26433
Albuquerque, NM 87125-6433

Send Via Email to: mdowns.nm@gmail.com

**RE: Albuquerque Environmental Health Department Response to Comments
for Air Quality Permit #0047-M2.**

Dear Ms. Downs:

Environmental Health Dept.

Air Quality Division

PO Box 1293

Albuquerque, NM 87103

www.cabq.gov

Thank you for submitting your comments regarding air quality minor (per 20.11.41 NMAC) stationary source permit application #0047-M2. Please find below a response to your comments submitted in your July 20, 2012 1:28 PM e-mail with an attached letter dated July 20, 2012 that you sent to Paul Puckett. The City of Albuquerque Environmental Health Department (Department) has provided a response to your letter and has numbered your comments to identify each comment and response..

- 1. The permit modification to utilize the full capacity of the facility will result in total Volatile Organic Compounds (VOCs) emissions of 0.165 tons per day, an increase from the currently permitted VOC emissions of 0.1 ton per day. When adding VOC emissions from Western Refining (located opposite of Vecenergy), the total VOC emissions amount to an overwhelming 0.365 tons per day.*

The air quality permitting requirements for stationary sources requires the Department to analyze each individual facility or "source". The regulatory process applicable to minor stationary source authority-to-construct permits or permit modifications does not include a scientific study of health effects, although the Department does consider a number of factors before making a decision regarding a pending permit application. The assessment of facilities is conducted on a case-by-case basis.

Concerns were raised at the June 26th, 2012 public information hearing regarding the cumulative effect of toxic air pollutants from multiple emission sources. Title III of the federal Clean Air Act Amendments of 1990, Hazardous Air Pollutants (HAPs), that includes provisions to address this issue. Title III required the Environmental Protection Agency (EPA) to regulate 189 specific HAPs, including such chemicals as benzene, by adopting Maximum Achievable Control Technology (MACT) emission standards for major sources of HAP emissions. To date, EPA has issued over 150 MACT

standards for a wide variety of industrial activities that have resulted in substantial reductions in HAP emissions. EPA estimates that HAP emissions have been reduced by approximately one million tons per year from these major HAP emissions sources beginning in 2002.

However, Congress also recognized that there may be still be a public health risk due to the cumulative exposure to HAPs from numerous, smaller area HAP emission sources and required EPA to develop a national strategy to reduce toxic air emissions. Congress specifically required EPA to evaluate the risk remaining after implementation of the major HAP source MACT standards (i.e., the “residual risk”) in order to evaluate the need for additional stationary source standards to protect public health and the environment. EPA was required to adopt additional HAP emission standards if the agency determined that the level of residual risk does not provide an ample margin of safety to protect public health.

In response to these Congressional mandates, EPA developed its Integrated Urban Air Toxics Strategy. To address the issue of residual risk and cumulative impacts, EPA is evaluating HAP emissions for 70 categories of industrial activities and has adopted additional area HAP sources Generally Available Control Technology (GACT) emission standards for over 30 industrial categories to date. Bulk gasoline terminals, including the Vecenergy Albuquerque Terminal, are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart BBBBBB (Hex B) area HAP source GACT emission standards. In summary, EPA’s Integrated Urban Air Toxics Strategy and GACT standards address the concern expressed in the public information hearing. Local Albuquerque-Bernalillo County Air Board Regulation 20.11.64 NMAC incorporated Hex B by reference, and the Department includes all applicable Hex B requirements in Vecenergy’s permit.

2. *There is no calculation provided on the total VOC emissions of area sources or the cumulative impact of the VOC emissions on the health, safety or welfare of residents living nearby – many of whom are already living under extremely stressful conditions which further compromise their immune systems.*

Please see the response to item #1 above regarding cumulative impacts.

3. *The VOC emissions estimates provided by Vecenergy for the vapor recovery unit (EUI) assumes 99.5 % control efficiency. However, the applicant has requested the Air Quality Division eliminate the requirement of control efficiency for the vapor recovery unit. If the request is granted by the Air Quality Division, the VOC emission from the vapor recovery unit will be greater than Vecenergy’s VOC emissions estimates (based on a 99.5% control efficiency). Therefore, the VOC emissions estimates provided in the permit modification application are inaccurate and unreliable.*

For the reasons described in this paragraph, changes to the conditions that apply to the Vapor Recovery Unit (VRU) at Vecenergy, and that have been included in the modified permit, there is no evidence that the efficiency of the

controls will be reduced. There is no federal, New Mexico, or local regulatory requirement that imposes a 99.5 percent VRU volatile organic compound (VOC) control efficiency. Vecenergy has requested a VRU VOC emissions limit of 10 milligrams per liter of gasoline (mg/L) or 0.0834 pounds per 1,000 gallons of gasoline (lbs/1,000 gallons), which is substantially more restrictive than federal or local requirements. Additionally, the Vecenergy loading rack VRU is currently equipped with an analyzer that continuously measures the VRU emission concentration. The Vecenergy permit complies with all requirements applicable to authority-to-construct permits, and incorporates an additional measure that the Department could not otherwise impose.

Vecenergy requested removal of the air permit condition that required a VRU VOC control efficiency of 99.5 percent because there is no federal, New Mexico or local regulation that requires a 99.5 percent control efficiency. The Department removed the 99.5 percent VRU VOC condition from the air quality permit because there is no regulatory requirement. The Vecenergy Albuquerque Terminal includes state-of-the art carbon adsorption VRU control technology that controls VOC emissions during the loading of gasoline tank trucks.

The recent application's VOC emissions are not calculated utilizing a VRU operating at 99.5 percent efficiency. The emissions were calculated utilizing a volumetric rate limitation of 10 mg/L (0.0834 lbs/1,000 gallons of gasoline). Emissions for this application and previous applications for Vecenergy and Chevron were never calculated utilizing a specific VRU VOC efficiency. The request to have the constant VRU VOC efficiency requirement of 99.5 percent removed from the permit does not affect the emissions represented in the application or the permit modification. All the other bulk gasoline storage facilities operated in Bernalillo County, including Western Refining, utilize a volumetric rate limitation as opposed to an efficiency requirement. The federal New Source Performance Standards (NSPS) and the federal National Emission Standard for Hazardous Air Pollutants (NESHAP) do not impose any requirements regarding efficiency of a VRU. The NSPS Subpart XX, Standards of Performance for Bulk Gasoline Terminals, utilizes a standard limitation of 35 milligrams per liter (0.292 lbs / 1,000 gallons) to control VOC emissions from loading racks. The NESHAP Subpart BBBBBB – Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities - utilizes a standard limitation of 80 milligrams per liter (0.66 lbs / 1,000 gallons) for Total Organic Compounds (TOC). Additionally, Air Board Regulation 20.11.65.13.B(1) NMAC imposes a requirement of 1.24 pounds of VOC per 1,000 gallons (148.6 mg/L). Because there is no regulatory requirement that authorized the Department to impose a 99.5 percent efficiency, and because Vecenergy requested a more stringent limitation than required by federal or local regulations, the Department has included the VRU VOC 10 mg/L limitation.

4. *The permit modification requests an increase in Hazardous Air Pollutants (HAPs) from less than 1 ton per year for total HAPs to less than 25 tons per year for total HAPs, and less than less than 1 ton per year for each individual HAP. Since there is no information provided, it is unclear what the actual total HAPs and individual HAPs for the facility will be.*

Vecenergy has requested an emission cap for HAPs of less than 25 tons per year of total combined HAPs and less than 10 tons per year for any individual HAP. Vecenergy provided in the air quality permit application package, information regarding HAP emissions for the gasoline distribution bulk terminal. The Vecenergy table summarizes the HAP emissions and is attached to this letter for your reference. Please note that during the Department's review of the application package, the Department identified a calculation error in the HAP totals. The Department's corrected calculations are provided in hand writing on the table. The corrected table shows total HAPs to be 2.77 and each individual HAP is less than 1 ton per year.

5. *The age the equipment dates back to 1954 (4-bay bottom loading rack and many of the storage tanks). The age of the storage units is the likely reason that Chevron, the former owner of the facility, did not use them. Given their age, the emissions estimates for these equipment units are probably underestimated since there is a far greater likelihood of leakage and vapor emissions.*

The Department air quality stationary source permitting process can address only air pollution issues and only to the extent authorized by the federal Clean Air Act (CAA), New Mexico Air Quality Control Act (NM Air Act), the City Joint Air Quality Control Board Ordinance (Ordinance) and applicable Albuquerque-Bernalillo County Air Quality Control Board (Air Board) regulations. Although the age of equipment and whether or not a company decides to utilize equipment are not addressed in the air quality stationary source permitting process, these issues are addressed by the New Mexico Environment Department Petroleum Storage Tank Bureau.

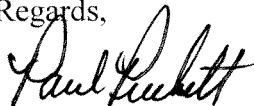
Based on Department communication with Vecenergy, Chevron (Vecenergy's predecessor at the facility) stopped using the tanks in question due to the lack of demand. Chevron only sold its own product, but other companies stored and sold products from other companies and conglomerates. The Department is informed that this approach limited Chevron to only servicing one branch of the market and, in turn reduced demand for Chevron's products, so Chevron did not need to have all tanks in service. These tanks were shut down due to lack of demand and not malfunction, age, or degradation. Whenever a tank is shut down and brought back into service the tank must meet the requirements of the American Petroleum Institute (API). These tanks may not be brought into service without being inspected externally and internally following the API requirements and methods. Moreover, there are specific requirements for a tank to be brought into service mandated by the API 653. The API 653 covers the maintenance, inspection, alteration and repair of steel, field-erected aboveground storage tanks built to API 650 or API 12C standards. The

inspections for API 653 must be performed by an independent certified API 653 inspector (not a Vecenergy employee) who assesses the condition of the above ground tank and determines its suitability for continued service. The API 653 inspection must be performed on tanks externally every five (5) years and internally every ten (10) years.

6. *The community most impacted by the expansion of Vecenergy's operations is San Jose, an environmental justice community because residents living there experience a disproportionate burden of environmental pollutants, are low-income (58% of the population lives below 150% of the Federal Poverty Level compared to 25% for Bernalillo County's population) and high minority (93% of San Jose's population compared to 46% of Bernalillo County's population). Further, 75% of residents living in San Jose speak Spanish as their first language, compared to 22% of residents living in Bernalillo County, making active participation in decisions that are heavily technical much more challenging.*

The minor stationary source air quality permitting process evaluates and considers other issues, including environmental justice. For example, the permitting process provides public notice to neighborhood associations and for the Vecenergy permit application the Department provided the public information hearing notification flyer in Spanish and provided a Spanish interpreter at the public information hearing. As explained in the August 15, 2012 letter to participants in the Vecenergy permitting process, the Department evaluated and considered air quality and other issues. Ultimately, the Department determined the permit application has met all requirements of the CAA, the NM Air Act, the Ordinance and applicable Air Board regulations. Because all required fuel throughput maximums, vapor recovery systems and work practice standards are included in Permit No. 0047-M2, the Department determined that there is no legal basis for the Department to deny the permit application.

Regards,



Paul Puckett.

Environmental Health Scientist

Permitting Division

Air Quality Programs

City of Albuquerque Environmental Health Department

Enclosure: Table 2. Vecenergy Albuquerque Terminal Potential VOC and HAP Emission Rate Summary with Department hand written correction to HAP totals.

cc: File
Jacque Garcia, Co-President, NMPHA
Jerry Montoya, Co-President-Elect, NMPHA
Lori Loera, Secretary, NMPHA
David Broudy, Treasurer, NMPHA

**Table 2. Vecenergy Albuquerque Terminal
Potential VOC and HAP Emission Rate Summary**

Process Equipment Description	Process Equipment ID Number	Potential VOC Emissions (tpy)	Potential HAP Emissions (lb/yr)				
			Benzene (lb/yr)	Ethylbenzene (lb/yr)	Hexane (-n) (lb/yr)	Isooctane (lb/yr)	
Loading Rack Hose Fugitives	2	23.8	427.7	47.5	760.3	380.1	
Loading Rack Vapor Recovery Unit (VRU)	3	18.3	329.0	36.6	584.8	292.4	
Floating Roof Storage Tanks	4	17.7	199.9	32.5	172.9	247.7	
Equipment Fugitives	8	0.6	9.9	1.1	17.6	8.8	
Totals (tpy)		60.3	0.4832	0.0588	0.7678	0.4645	

Process Equipment Description	Process Equipment ID Number	Potential HAP Emissions					HAP Totals	
		Cumene (lb/yr)	Toluene (lb/yr)	Xylene (-m) (lb/yr)	lb/yr	tpy		
Loading Rack Hose Fugitives	2	4.8	617.7	237.6	8475.7	1,615.6	0.8078	
Loading Rack Vapor Recovery Unit (VRU)	3	3.7	475.2	182.8	1904.5	1,242.8	0.6214	
Floating Roof Storage Tanks	4	9.2	290.9	151.7	1104.8	652.9	0.3265	
Equipment Fugitives	8	0.1	14.3	5.5	57.9	37.4	0.0187	
Totals (tpy)		0.0089	0.6991	0.2888	-3,548.8	-1,774.4		

5542.9 lb/yr
2,777 tpy

Sources: Vecenergy, 2012.
ECT, 2012.

Potential VOC and HAP Emission Rate Summary

Loading Rack Hose Fugitives

VOC Emissions = 23.8 tpy HAP Emissions = 2475.7 lb/yr 1.24 tpy

Loading Rack Vapor Recovery Unit (VRU)

VOC Emissions = 18.3 tpy HAP Emissions = 1903.7 lb/yr 0.95 tpy

Floating Roof Storage Tanks

VOC Emissions = 17.7 tpy HAP Emissions = 1122.5 lb/yr 0.45 tpy

Equipment Fugitives

VOC Emissions = 0.6 tpy HAP Emissions = 57.9 lb/yr 0.03 tpy

Total VOC Emissions = **60.3 tpy**

Total HAP Emissions = 5559.8 lb/yr **2.77 tpy**

