

APPLICATION BY

INVISTA S.a.r.l.
Nitric Acid Plant
Victoria, Victoria County

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BEFORE THE

TEXAS COMMISSION ON

ENVIRONMENTAL QUALITY

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY
2012 FEB 27 PM 2:49
CHIEF CLERKS OFFICE

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (Response) on the proposed application for renewal of Permit Number (No.) 809.

As required by Title 30 Texas Administrative Code Section 55.156 [30 TAC § 55.156], before an application is approved, the ED prepares a response to all timely, relevant and material, or significant comments. The Office of Chief Clerk received a timely comment letter from W. Todd Hoeffner, representing the following persons: Cynthia Brookhouser, H.D. Campbell, Barbara Chambers, Brandon Haskell Cook, Thomas Davidson, Johnny Denning, Sharon Harper, Robert and Diane Howell, Douglas Lawrence, Asa and Marilyn Logan, Marvin Patterson, Anton and Joanne Piegsa, Carmine Schifano, Arlene Schultz, Vernon Singleton, H.E. and Dianna Stevenson, Georgia Vega, and Forrest Volkert. This Response addresses all timely public comments received, whether or not withdrawn. If you need more information about this permit application or the permitting process please call the TCEQ Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.gov.

BACKGROUND

Description of Facility

The plant is located at 2695 Old Bloomington Road North, Victoria, Victoria County. Contaminants authorized under this permit include ammonia, nitric acid, nitrogen oxides, nitrous oxide, carbon monoxide, sulfur dioxide, and organic compounds. The plant produces nitric acid by oxidizing ammonia to nitric oxide and then directing the nitric oxide through a water scrubber. This renewal application proposes no changes to the emission rates in the current permit. This permit application is for a renewal that would not result in an increase in allowable emissions and would not result in the emission of an air contaminant not previously emitted.

Procedural History

E.I. DuPont de Nemours Company (DuPont) applied to the TCEQ for the renewal of a permit that will authorize the applicant to continue operating a nitric acid plant. The permit application was received on March 7, 2003, and declared administratively complete on May 23, 2003. The Notice of Receipt and Intent to Obtain an Air Quality

Permit (public notice) for this permit application was published on June 18, 2003, in the *Victoria Advocate* and on August 13, 2003, in *Revista de Victoria*. A copy of the permit application was placed at the Victoria Public Library in Victoria, throughout of the public comment period. The applicable comment period ended on August 28, 2003.

DuPont was granted a permit to construct the nitric acid plant at the Victoria chemical complex on May 9, 1973. The plant was issued its original operating permit on July 20, 1978. The plant sought and obtained an amendment that was approved on August 10, 1990, to expand the nitric acid plant. The plant sought and obtained a second amendment that was approved on March 17, 1992, to properly reflect the actual configuration of the plant. The permit was renewed once before, on June 4, 1993. As permit expiration again approached, the DuPont filed a second renewal application on March 7, 2003. Subsequent to filing the renewal application, DuPont sold the nitric acid plant to INVISTA S.a.r.l. (INVISTA). After purchase of the nitric acid plant by INVISTA, but prior to completion of the technical review, the Executive Director agreed to hold active review of this renewal for six months to allow the applicant to complete environmental audits of its newly acquired facilities at the Victoria complex. During technical review of this application, it was determined that the renewal could not be processed without a companion amendment to authorize certain ongoing emissions, primarily nitrous oxide (N₂O). Nitrous oxide is an air contaminant that has historically not been authorized in air quality permits, however, both the applicant and TCEQ concluded it was appropriate to include these emissions in the permit. INVISTA applied for such an amendment on December 30, 2005. Public notice was published in the *Victoria Advocate* on February 8, 2006. No comments were received and after technical review and modeling audits were completed, the amendment was issued on January 31, 2011. During pendency of this action, commission rules were changed effective in 2006, to require authorization of planned maintenance, startup and shutdown (MSS) emissions. On January 7, 2008 INVISTA applied to amend permit No. 809 to authorize MSS emissions from the nitric acid plant. Public notice was published in the *Victoria Advocate* on March 20, 2008. No comments were received as a result of this notice and the amendment was issued on January 31, 2011. The N₂O and MSS emissions added to permit #809 are existing emissions that did not require new construction. The renewal of this permit will not increase permit allowable emissions, i.e. those emissions already authorized in the amended permit. Further, the renewal will not result in an increase in emissions of any air contaminant not previously emitted. In accordance with state law regarding permit renewals (Texas Health and Safety Code, § 382.055(e)), the commission may not impose requirements that are more or less stringent than those of the existing permit.

Due to a change in commission policy, INVISTA was required to re-publish notice of the renewal, as previously amended. The Notice of Receipt and Intent to Obtain an Air Quality Permit (public notice) for this permit application was republished on October 1, 2010, in the *Victoria Advocate*. The public notice included notification of the amendment actions for N₂O and MSS emissions. Although not required by rule, TCEQ directed INVISTA to publish notice of the Executive Director's preliminary decision to

issue the renewal as amended in the *Victoria Advocate* on April 28, 2011. A copy of the permit application was placed at the Victoria Public Library in Victoria, throughout the public comment period. The applicable comment period ended on May 28, 2011. No additional comments or hearing requests were received.

COMMENTS AND RESPONSES

Mr. Todd Hoeffner, provided the following comments on behalf of the individuals listed above:

COMMENT 1: The DuPont (INVISTA) facility burns hazardous waste from uncontrolled stacks emitting heavy metals including barium, cerium, chromium, cobalt copper, lead, manganese and zinc. These heavy metals are contaminating his clients' property, air, plants and animals. The reason this has occurred is because DuPont has zero pollution control on these stacks. Using DuPont's (INVISTA's) own air modeling and utilizing actual feed rates reported by DuPont (INVISTA) demonstrates that we are being subjected to an unacceptable carcinogenic exposure level according to the BIF [sic] regulations. DuPont (INVISTA) has significantly underestimated the cancer risk. The DuPont (INVISTA) permit should be denied, or alternatively, TCEQ must require installation of pollution control equipment in order to eliminate continued invasion of property, health and livestock.

RESPONSE 1: The commenter appears to refer to the boilers and industrial furnaces (BIF) regulations and to emissions from Stacks 5, 6, and 7. These are the stacks for boilers numbers 1, 2, and 3, which are authorized in INVISTA Permit Nos. 812 and 813. These boilers are not part of the Nitric Acid plant that is the subject of this renewal. INVISTA's Nitric Acid plant is authorized under Permit No. 809. The facilities encompassed by Permit No. 809 do not emit carcinogenic or heavy metal compounds. As explained in more detail in response 3, the emissions from the Nitric Acid plant are subject to best available control technology, as required under the Texas Clean Air Act (Health and Safety Code, Chapter 382).

COMMENT 2: The commenter requested an independent environmental audit of plant emissions at DuPont's (INVISTA's) expense. The audit should consist of testing and modeling of heavy metal emissions and all emissions from uncontrolled stacks. This is necessary because of unreliable reporting of data to regulatory agencies.

RESPONSE 2: After INVISTA purchased the nitric acid unit and other units of DuPont's Victoria plant in 2004, TCEQ suspended further review of this renewal pending an environmental compliance audit of the newly acquired facilities. In addition, TCEQ and INVISTA agreed that emissions of nitrous oxide (N₂O), be controlled under permit No. 809. After several communications and modeling exercises, emission limits for N₂O meeting best available control technology requirements were established and the permit was amended after newspaper notice and

a public comment period. This renewal application as amended with the N₂O limits was published for comment again in subsequent years, culminating in the final notice that ended in May of 2011. Emissions from the nitric acid plant under permit No. 809 are controlled using best available control technology. To determine a level of emissions that is protective of human health and the environment, INVISTA was required to conduct modeling of ground level concentrations of several air contaminants including NO_x, CO and SO₂ to determine if federally established National Ambient Air Quality Standards (NAAQS) would be exceeded. This modeling was audited by the TCEQ Toxicology Division and determined to meet the NAAQS for these contaminants. Toxicology staff also determined that other contaminants levels such as ammonia and nitric acid did not surpass levels that would trigger health effects concern or further review.

COMMENT 3: At a federal jury trial claiming trespass on clients' property, evidence and testimony support denial of the renewal application. The commenter's clients reside in the maximum pollution impact area according to all dispersion modeling conducted at the facility. The DuPont (INVISTA) stacks have zero pollution control and DuPont (INVISTA) has trespassed and continues to trespass their properties with toxic heavy metals. Data received in June 2003 demonstrates that even breathing air inside residences are [sic] contaminated with heavy metals. Specifically, the residences of Cresent [sic] Valley were analyzed for heavy metals in the soil and air filters inside the homes. This data confirms that the pollution is widespread and inescapable. These heavy metals are entering their bloodstreams and further entering the bloodstreams of our livestock. These heavy metals are causing an extremely high incidence of tumors in the nearby animals. Specifically, the Stevensons' and Harper's properties are located at the maximum impact zone for DuPont's (INVISTA's) pollution. Seven out of nine of the Harper's animals had tumors. The Stevensons' horse had tumors the size of footballs on it; unlike any tumor that the Stevensons' veterinarian or DuPont's (INVISTA's) retained veterinarian had ever seen. While both vets concurred that heavy metal poisoning could cause such a rare tumor, DuPont's (INVISTA's) vet simply had no explanation for the real cause. As demonstrated from the sworn testimony of Dr. Horton, the long-time treating vet of the animals, these animals have tumors and respiratory illnesses from heavy metal poisoning. A pond on DuPont's (INVISTA's) property and located in close proximity to the Stevensons' and Harper's properties was tested for heavy metal poisoning of fish and plants. Both the fish and plants were contaminated with the same metals emitting from the stacks in question. Most importantly, the commenter's clients are exposed to substantial unnecessary cancer and health risks. Specifically, Dr. Rod O'Connor performed a risk assessment regarding the clients' exposure to chromium and manganese. Dr. O'Connor determined that the clients were exposed to chromium at levels at least five times greater than the acceptable limits established by the Agency for Toxic Substances and Diseases Registry (ATSDR) and eight times the level for manganese. Moreover, they are at very high risk for lung cancer from chromium and neurological damage from manganese.

RESPONSE 3: There are six emission points associated with the Nitric Acid Plant,

Permit No. 809. When Permit No. 809 is renewed, these emission points will be authorized to emit ammonia, nitric acid, nitrogen oxides, nitrous oxides, and products from the combustion of natural gas. Permit No. 809 will not authorize any emissions of toxic heavy metals. Permit No. 809 will not authorize any emissions of chromium or of manganese. Appropriate pollution control technology is applied to the six emission points.

Table 1

Emission Point No.	Source Name	Controls
14STK-001	AOP Main Stack	Selective Catalytic reduction (SCR) with tail gas nitrogen oxides (NO _x) concentration ≤ 60 ppmvd. No nitrous oxide (N ₂ O) abatement. This is economically reasonable and technically practicable considering the age of the facility and the impact of its emissions on the surrounding area. Best available control technology (BACT) applies.
14FLR-001A	AOP Flare	Flare meets Title 40 Code of Federal Regulations § 60.18 for a volatile organic compounds (VOC) removal efficiency ≥ 98%, ammonia (NH ₃) removal efficiency ≥ 98%. Unassisted. BACT applies.
14FUG	Fugitives	Fugitive NH ₃ controlled with the audio, visual, and olfactory program. VOC emissions are too small to require an inspection and maintenance program for VOC. BACT applies.
14LTR-001	Nitric Acid Truck Loading/Unloading Facility (fugitive only)	Loading emissions routed to control under Permit 812. Fugitives minimized by reducing connection and disconnection time. BACT applies.
14FUGMSS	Fugitives	Fugitive NH ₃ controlled with the audio, visual, and olfactory program. VOC emissions are too small to require an inspection and maintenance program for VOC. BACT applies.
14STK-002	Sample Sink Vent	A vent hood collects vapors resulting from

	Hood Stack	sampling various vessels and discharges them without controls through a stack outlet 30 feet above. This is economically reasonable and technically practicable considering the age of the facility and the impact of its emissions on the surrounding area. BACT applies.
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COMMENT 4: Dr. Arch Carson further concurred that they are at significant increased risk for lung cancer and neurological disease from DuPont's (INVISTA's) pollution. Dr. Carson also testified that actual air monitoring results at our property demonstrated that our mortality risk for lung cancer was increased by over 16% as a result of DuPont's (INVISTA's) actions.

RESPONSE 4: The emissions of ammonia, nitric acid, nitrogen oxides, nitrous oxides, and products from the combustion of natural gas will be authorized at levels that are not expected to cause an increased risk for lung cancer and neurological disease. Nitrogen dioxide (NO₂) emissions are subject to the 1-hour National Ambient Air Quality Standards (NAAQS). Modeling conducted by the applicant and submitted to TCEQ on November 9, 2010 and December 28, 2010 was audited by the TCEQ Air Dispersion Modeling Team (ADMT) on December 16, 2010 and January 3, 2011 respectively. The audits found the modeling conclusions acceptable and NO₂ emissions from the nitric acid plant will not exceed the NAAQS. Emissions of air contaminants not subject to a NAAQS were evaluated for acceptable effects in the Modeling and Effects Review Applicability Summary Form dated January 24, 2011.

CHANGES MADE IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Mark R. Vickery, P.G., Executive Director

Robert Martinez, Director
Environmental Law Division

A handwritten signature in black ink, appearing to read "John Minter", is written over a horizontal line.

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REPRESENTING THE
EXECUTIVE DIRECTOR OF THE
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

MAILING LIST
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AIR QUALITY PERMIT NO. 809

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