

EMBASSY OF CHILE

1732 MASSACHUSETTS AVENUE N.W.
WASHINGTON, D.C. 20036

Washington D.C., September 28, 2007

Susan E. Dudley
Administrator
Office of Information and Regulatory Affairs
Office of Management and Budget
EOB-262
1650 Pennsylvania Ave., NW
Washington, DC 20503
Fax number 202-395-6988

Dear Mrs. Dudley:

The Chilean Government wishes to express its concern regarding the inclusion of potassium nitrate and sodium nitrate in the proposed Appendix A to the interim final rule of the Department of Homeland Security (DHS), The Chemical Facility Anti-Terrorism Standard (CFATS), Docket No. DHS-2006-0073

Chile understands and recognizes the right of the United States to protect legitimate objectives such as its national security, but considers that the above mentioned regulation, if approved would be more restrictive than necessary to fulfill the desired objective, thus being inconsistent with article 2 of the WTO/Technical Barriers to Trade Agreement.

Article 2.2. states. "—For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfill a legitimate objective, taking account of the risks non-fulfillment would create. Such legitimate objectives are, inter alia national security requirements;... or the environment. In assessing such risks, relevant elements of consideration are: available scientific and technical information, related processing technology or intended end-uses of products."

In the case of the present draft regulation, and according to the arguments presented below, Chile considers that there is no valid reason for inclusion of Potassium and Sodium nitrates, which pertain to the family of alkali-nitrates, in the DHS security rule.

Alkali nitrates have been proven to be non-detonable even under extreme test conditions recommended by US National Academy of Science (Appendix H in Containing the Threat from Illegal Bombings: An Integrated National Strategy for Marking, Tagging, Rendering Inert, and Licensing Explosives and Their Precursors;" National Academy Press; 1998). In an evaluation of propagation of detonation of ammonium nitrate, sodium nitrate and potassium nitrate, mixed with diesel fuel, following the mentioned procedure, performed by the Energetic Materials Research and Testing Center of New Mexico Institute of Mining and

EMBASSY OF CHILE

1732 MASSACHUSETTS AVENUE N.W.

WASHINGTON, D.C. 20036

Technology, it was determined that only the ammonium nitrate and diesel fuel mixture detonated. The potassium nitrate and sodium nitrate and diesel fuel mixtures did not propagate a detonation.

Some alkali nitrates have been used as an additive in the manufacture of certain high explosives such as dynamites and emulsions. However, their contribution to high end explosives is not essential and its use is related to improved density in the mixtures or to serve as an oxygen balancing agent between the explosive and the fuel.

Similarly, alkali nitrates are well known components in black powder. Black powder has been studied by the National Academy of Sciences with the purpose of investigating the threat of black powder in terrorist incidents. The feasibility of the use was determined to be limited to the filling of pipes, tubes or bottles in the production of small bombs (Black and Smokeless Powders: Technologies for Finding Bombs and Bomb Makers, National Academy of Sciences US (1998)). Individuals wishing to produce these devices, however, would likely just purchase black powder in a store or online.

Moreover, listing some alkali-nitrates while exempting others is inconsistent with the risk based approach of the mandate. Indeed the alkali nitrates group include fertilizers different from potassium and sodium nitrate that have not been listed by DHS. This discrimination would be considered as inconsistent with the US obligations under WTO, introduces a biased competitive disadvantage against these products in the nitrogen and potassium specialty market.

It is of common knowledge that fertilizers like ammonium nitrate, and under certain conditions, urea, can be misused producing high explosives with large scale destruction power. The DHS proposal to include potassium and sodium nitrate in the rule together with fertilizers like ammonium nitrate, liquid and anhydrous ammonia and urea is disproportionate and misleading about the real properties of these products, introducing an unwarranted image burden stigma on these Chilean fertilizers and discriminating it from its competitors.

Since those fertilizers are an important source of plant nutrients long valued by agriculture and horticulture, listing potassium and sodium nitrate would mean higher costs for U.S. agriculture, horticulture and retail fertilizer consumers due to decreased competition and the use of less effective fertilizers. If the discrimination would be enforced in the U.S., these fertilizers would be unduly stigmatized, damaging market competition and U.S. agricultural markets on a global basis.

If approved, the DHS Rule would establish a crippling trade barrier for the sale of Chilean fertilizers in the U.S., and financially damage several Chilean fertilizer companies highly respected by U.S. farmers, nursery and greenhouse managers, and suppliers of fertilizer products for home lawns and plants for offices and homes. Hundreds of distributors and thousands of farmers would need to report the possession of these fertilizers to DHS and after that under consideration of DHS, they would need to comply with additional security standards. The U.S. national companies that include Chilean fertilizers in their blended product lines for various markets in the U.S would most definitely avoid them in favor of non-listed alternatives. Also, because nationwide chain stores and brands are very important in this market, the rule could have a further damaging effect on the Chilean fertilizer companies.

EMBASSY OF CHILE

1732 MASSACHUSETTS AVENUE N.W.

WASHINGTON, D.C. 20036

In conclusion, Chile would like to draw your attention to the fact that the adoption of the regulation as drafted, would not only be considered as inconsistent with the WTO obligations but it would also contradict the Chile-US Free Trade Agreement in which both parties declare their purpose "to create an expanded and secure market for the goods and services produced in their territories"; and "avoid distortions in their reciprocal trade."

The rulemaking would essentially ban Chilean nitrate from the United States - certainly not what the United States and Chile had in mind with their bilateral trade agreement.

For all of these reasons and more, the Government of Chile urges the Office of Management and Budget and the DHS to include potassium and sodium nitrate among the many other fertilizers it will exempt from this pending rulemaking.

Sincerely,



Mariano Fernández
Ambassador

Cc: Ambassador John K. Veroneau
Deputy US Trade Representative



The Fertilizer Institute

Nourish, Replenish, Grow

Total Fertilizer Consumed, United States Regions, Years Ending June 30, 2005 and 2006

*Quantity in Short Tons of Material

	2005	2006
Potassium Nitrate	47,932	45,993
Sodium Nitrate	21,353	17,219
Urea	5,211,665	5,369,913

AAPFCO, Commercial Fertilizers 2006

U.S. Imports of Selected Fertilizers, July-June 2005/2006, and 2006/2007

*Quantity in Short Tons of Material

	2005/2006	2006/2007
Potassium Nitrate	129,324	160,762
Sodium Nitrate	80,052	74,384
Urea	6,741,401	6,256,949

U.S. Department of Commerce, U.S. Census Bureau

U.S. Exports of Selected Fertilizers, July-June 2005/2006, and 2006/2007

*Quantity in Short Tons of Material

	2005/2006	2006/2007
Potassium Nitrate	n/a	n/a
Sodium Nitrate	2,040	3,817
Urea	700,252	408,769

U.S. Department of Commerce, U.S. Census Bureau

Estimated U.S. Production, Solid Urea, July-June 2006/2007

Estimated 3.0 – 3.2 million short tons material

Union Center Plaza
820 First Street, NE Suite 430
Washington, DC 20002

202.962.0490
202.962.0577 fax
www.tfi.org



The Fertilizer Institute

Nourish, Replenish, Grow

Ford B. West
President

May 8, 2007

VIA Electronic Submission

IP/CNPPD/Dennis Deziel
Mail Stop 8100
Department of Homeland Security
Washington, D.C. 20528-8610

RE: Docket No. DHS-2006-0073

Dear Sir:

The Fertilizer Institute (TFI), on behalf of its member companies, submits comments in response to the U.S. Department of Homeland Security's (DHS) Proposed Appendix A of the interim final rule entitled *Chemical Facility Anti-Terrorism Standards* (hereinafter referred to "CFATS"). The interim final rule was published in the *Federal Register* on April 9, 2007. (72 Fed. Reg. 17,688).

Statement of Interest

TFI represents the nation's fertilizer industry including producers, importers, retailers, wholesalers and companies that provide services to the fertilizer industry. Its membership is served by a full-time Washington, D.C., staff in various legislative, educational and technical areas as well as with information and public relations programs.

The proposed Appendix A lists several fertilizers including: anhydrous ammonia, aqua ammonia, ammonium nitrate, potassium nitrate, sodium nitrate and urea. In addition, the appendix lists chemicals which are utilized in the production of fertilizers or are created as an intermediate in a closed-loop process in the production of fertilizers, such as nitric oxide, sulfur dioxide and sulfur trioxide. As such, TFI and its members have an interest in DHS' efforts regarding Appendix A.

Summary

TFI commends DHS for recognizing that security is not a "one size fits all" problem, as well as for its risk-based approach to the regulation of chemical facilities and the thoughtful analysis by which the framework of the regulation was developed. TFI supports the underlying regulations, however, TFI believes that in DHS' quest to be "sufficiently inclusive of chemicals and quantities that might present a high level of risk," DHS has, actually, been "overly inclusive and

Union Center Plaza
820 First Street, NE Suite 430
Washington, DC 20002

202.962.0490
202.962.0577 fax
www.tfi.org

therefore [captures] facilities that are unlikely to present a high level of risk” (72 Fed. Reg. at 17,696). In keeping with DHS’ risk-based approach, TFI seeks to have several chemicals listed in Appendix A removed from the final appendix and seeks to have the Screening Threshold Quantities (STQ) of several chemicals increased. For some chemicals, TFI requests these changes due to the absence of evidence that fertilizer chemicals present a high, if any, level of security risk. For other chemicals, TFI requests consistency with existing regulatory or statutory lists and threshold quantities. Finally, TFI seeks clarification as to the applicability of the regulation based on the mere “possession” of a molecule of an Appendix A listed chemical when the corresponding STQ is “any amount” or when the chemical is present merely as an intermediate in a closed-loop production process.

Discussion

TFI provides specific comments on Proposed Appendix A: DHS Chemicals of Interest (Chemical of Interest) below.

I. General Comments

A. Applicability of Appendix A

The interim final rule requires any “chemical facility,” as defined by DHS in 25 C.F.R. § 27.105, in possession of a “Chemical of Interest,” as included in Appendix A, at the corresponding STQ to complete a Top-Screen. Therefore, “any establishment which possesses or intends to possess a chemical of interest, at any relevant point in time” will be required to complete the Top-Screen (72 Fed. Reg. at 17,730). The time frame in which a facility possesses a chemical of interest or the use of the chemical within the operational process does not exclude or exempt any establishment which possesses a chemical of interest at or above the STQ. If an establishment, for example, possesses a common innocuous fertilizer, above the corresponding STQ for any time period, including a day, the entity will be required to complete the Top-Screen, regardless of a chemical’s use even before a Top-Screen is completed, within the remaining sixty days.

TFI believes the regulation of many of the chemicals currently listed in Appendix A at the corresponding STQs will potentially result in the inclusion of hundreds of thousands of facilities required to complete the Top-Screen, including chemical manufacturers, retailers, distributors, wholesalers, farmers and ranchers.

In its comments to DHS following the initial publication of the CFATS advanced notice of rulemaking (ANRM), TFI requested that chemical facilities be regulated based on the specific chemical and quantity of chemical utilized at a given facility. At the time our comments on the ANRM were submitted, a specific list of chemicals was not proposed and it was difficult to consider the potential consequences of suggesting that chemical facilities be regulated in this manner. With Appendix A currently open for public comment, TFI will not suggest utilizing a different system, but requests that DHS remove, increase the STQ for, or provide qualifications for many of the chemicals listed in Appendix A. TFI believes that some chemicals have been

included without warrant, while others have been included at STQs so low that it will result in the regulation of establishments which do not necessarily exhibit the traits of a chemical facility or pose a legitimate threat to public security. This may include hospitals, colleges, universities, research or testing laboratories, airports, fish processing facilities, farms, ranches and homeowners.

In our initial comments, TFI asked that chemicals which have the potential to be used as a weapon or in the manufacture of a weapon should be included on the Chemicals of Interest list. TFI requested that DHS should include the U.S. Environmental Protection Agency's (EPA's) list of facilities that are required to file a Risk Management Plan (RMP). In addition, TFI also commented that the Chemical Weapons Convention (CWC) list should be included, with the exclusion of chemicals listed as Unscheduled Discrete Organic Chemicals (UDOCs). TFI explained that many of the chemicals listed as UDOCs do not provide an adequate level of threat or consequence to be regulated under this regulation.

TFI is therefore pleased to see a proposed list of chemicals open for public comment. TFI is disappointed, however, that many of the threshold quantities do not remain consistent with EPA's RMP. TFI is also disappointed that urea, which is listed as a UDOC on the CWC, has been included at a STQ of 2,000 pounds and that potassium nitrate and sodium nitrate, which pose no significant risk to be misused as high explosives, have been included at a STQ of 2,000 pounds too. TFI specifically addressed the inclusion of UDOCs and is disappointed to see that urea has been included, especially at such a low threshold quantity. In the interim final rule preamble, DHS fails to discuss TFI's prior comments relating to urea and justifying the inclusion of UDOCs in Appendix A.

B. DHS Does Not Provide the Regulated Community with Sufficient Information to Evaluate the Rationale Behind Appendix A

DHS fails to provide the regulated community with sufficient explanation regarding the development of Appendix A to provide meaningful comment. DHS states that Appendix A is based on "existing sources of information," including the RMP list of chemicals, the CWC list of chemicals, and the U.S. Department of Transportation's (DOT) list of hazardous materials (HAZMAT). (72 Fed. Reg. at 17,696). However, there is no discussion as to how DHS selected specific chemicals and, in turn, developed the corresponding STQs. The best discussion of DHS' methodology is set forth as follows:

[T]he Department has sought to be sufficiently inclusive of chemicals and quantities that might present a high level of risk under the statute without being overly inclusive and therefore capturing facilities which are unlikely to present a high level of risk.

DHS presumably evaluated the chemicals and associated thresholds (as applicable) from the RMP, CWC, and HAZMAT lists as part of its implementation of Section 550; however, DHS'

evaluation methodology and selection process is no where to be found in either the *Federal Register* preamble or the rulemaking docket materials. For example, we note that ammonium nitrate is not identified on either the RMP or CWC list, but is included in DOT's HAZMAT, and it is included in Appendix A at a threshold of 2,000 pounds. Urea is not present on the RMP and HAZMAT lists, and is only present as a UDOC on the CWC, but is identified in Appendix A with a STQ of 2,000 pounds. Nitric oxide is identified on the RMP and HAZMAT lists, but not the CWC list; however, the RMP threshold is 10,000 pounds and the Appendix A threshold is "any amount." Finally, sulfur dioxide and sulfur trioxide are both on the RMP and DOT HAZMAT lists, but DHS does not explain why both are identified in Appendix A. In addition the sulfur dioxide STQ is "any amount" when the RMP threshold is 5,000 pounds and the sulfur trioxide STQ is set at 7,500 pounds, when the RMP threshold is 10,000 pounds. While most of the DHS STQs appear to represent a 25 percent quantity reduction from the corresponding RMP thresholds, this is not true for ammonium nitrate and urea, which are not on the RMP list, and nitric oxide and sulfur dioxide, which are on the RMP list, but at higher thresholds than in the Appendix A.

Perhaps in trying to alleviate concerns that a chemical's presence on Appendix A is not the sole factor in concluding that a chemical facility possessing that chemical is a high risk facility, DHS concludes that Appendix A is "merely a baseline threshold requiring a facility to complete and submit a Top-Screen" (72 Fed. Reg. at 17,690). However, Appendix A is much more than a baseline threshold. Simply by identifying chemicals in Appendix A, facilities with chemicals at associated STQs will carry the stigma of being a possible terrorist target. Although, ultimately, the facility may not be deemed to present a high level of risk.

As noted by the U.S. Supreme Court, "[i]t is an axiom of administrative law that an agency's explanation of the basis for its decision must include 'a rational connection between the facts found and the choice made.'" *Bowen v. American Hospital Ass'n*, 476 U.S. 610, 626 (1986) (internal citations omitted). Further, while an administrative agency is afforded deference when it promulgates a regulation pursuant to a grant of statutory authority, that deference does not allow an agency to hide behind an assertion by the agency that there is "some rational basis within the knowledge and experience of the [agency]" that was used to discharge its statutory obligations. *United States v. Carolene Products Co.*, 304 U.S. 144, 152 (1938). TFI believes that the conclusory statement by DHS that "the Department has sought to be sufficiently inclusive of chemicals and quantities that might present a high level of risk under the statute without being overly inclusive and therefore capturing facilities which are unlikely to present a high level of risk" may not be sufficient to withstand judicial review of Appendix A. (See 72 Fed. Reg. at 17,696)

In order to provide meaningful comment on Appendix A, DHS must make publicly available for comment its rationale for the list of Appendix A chemicals and proposed STQs.

C. Applicability to Mixtures

At this time, without guidance, TFI understands Appendix A to include only the chemicals where the included Chemical Abstract Service (CAS) number is identified. Therefore, TFI does not

view the list as applying to mixtures where the identified CAS number is not included in Appendix A. TFI requests further guidance on this interpretation and, to the extent that DHS does not agree with TFI's interpretation, TFI expects DHS to explain its contrary interpretation in light of the ambiguous proposed regulatory language.

In addition, TFI questions whether the regulation applies to blends where the CAS number does not change. TFI's question arises out of the blending of fertilizer for use in direct application. Urea is often blended with other dry fertilizer products to meet appropriate agronomic requirements based on soil test results. For example, you may blend urea, at or above the STQ level, with phosphate and potash. If the blend contains urea above the STQ, our interpretation would be that the facility possessing the chemical of interest would be required to complete the Top-Screen. If TFI is correct in this conclusion, TFI requests that DHS explicitly exempt blended products from the final Appendix A. TFI needs DHS to address the specific application of this regulation to products which, when blended, do not have an altered CAS number.

D. Increase STQs to RMP Levels

TFI requests that DHS increase the STQ of all RMP chemicals to the RMP threshold quantity. It appears that DHS reduced RMP threshold quantities by 25 percent but, has not provided an explanation for the decrease in threshold quantities.

E. Intermediate Chemicals in a Closed-Loop Process

TFI requests that DHS consider the application of the regulation to chemicals in a closed-loop production process. If the rationale for the inclusion of a chemical in Appendix A is "theft or diversion", TFI requests that chemicals in a closed-loop process be exempted from the regulation. On the other hand, if inclusion of a chemical in Appendix A was for a reason other than theft or diversion, TFI requests that the STQ be consistent with EPA's RMP.

If DHS determines that "theft or diversion" chemicals in a closed-loop process should remain subject to regulation, TFI requests justification for the inclusion be provided in either the final rule preamble or response to comments document.

Examples of these types of intermediate chemicals in closed loop systems include nitric oxide in nitric acid plants, sulfur dioxide and sulfur trioxide in sulfuric acid plants and hydrogen, methane, and ethane in the synthesis gas loop of ammonia plants.

F. Combustion By-Products

TFI requests that combustion by-products be exempted from inclusion in the final Appendix A. Some examples would include carbon monoxide, sulfur dioxide, nitric oxide or other by-products of combustion.

G. Application to Laboratories

Fertilizer samples are frequently sent to laboratories for analytical testing. TFI believes that it was not DHS' intent to regulate laboratories that conduct regulatory analysis of fertilizers or other chemicals as chemical facilities. Therefore, TFI requests that regulatory laboratories at both the state and federal level, as well as laboratories at colleges and universities be exempted from the regulation. If DHS does not agree to grant this exemption, we request that DHS explain the rationale for same in either the final rule *Federal Register* preamble or DHS' response to comments document.

H. Consultation and Appeals

TFI suggests that DHS expand the consultation and appeals process already established in the interim final rule to include consultation and appeals resulting from the inclusion of innocuous chemicals in Appendix A. Where owner/operators have sufficient data proving the innocuous nature of a chemical listed in Appendix A, owner/operators should have the ability to present data warranting the removal of a chemical from Appendix A.

I. Guidance

TFI requests that DHS provide guidance on the application of Appendix A to mixtures whereby the CAS number is not altered when a chemical is altered or mixed.

J. Subsequent Rulemakings

TFI requests that DHS open for public comment any future additions, or changes to the current list, of chemicals to Appendix A. TFI further requests that if DHS determines it is necessary to pursue clarification of the applicability of the existing interim final rule and Appendix A (when finalized) to mixtures that it do so via notice and comment rulemaking.

II. Comments on Specific Appendix A Chemicals

A. Anhydrous Ammonia

TFI requests the STQ for anhydrous ammonia be consistent with EPA's RMP program, in which it is set at 10,000 pounds. TFI believes that overall uniformity between EPA's RMP threshold quantities and DHS' STQs will benefit both the regulator and the regulated community. Many TFI members are regulated under the RMP due to the possession of anhydrous ammonia at the 10,000-pound RMP threshold. The establishment of the RMP quantity has allowed some facilities to tailor their storage capacity to quantities less than RMP thresholds. Decreasing the threshold to 7,500 pounds will result in the addition of a great number of facilities being brought into the regulatory process. In addition, decreasing the STQ to 7,500 pounds will potentially bring in facilities not previously regulated by EPA's RMP program.

Furthermore, DHS provides no reason or analysis justifying the decrease of the threshold quantity by 2,500 pounds. Unless there is a security specific concern to justify the decrease, TFI requests that DHS increase the STQ for anhydrous ammonia to the RMP level.

TFI requests clarification on the application of CFATS to American farms and ranches possessing anhydrous ammonia in nurse tanks. An average nurse tank contains approximately 1,000 gallons, which is equivalent to more than two tons of anhydrous ammonia. An eighty-acre field would require the application of four nurse tanks of anhydrous ammonia, bringing into regulation a farm with an eighty-acre field. TFI believes it is impractical and beyond statutory intent to regulate a product in this manner, which is so widely utilized and available across the country. TFI therefore requests that nurse tanks located in a farm field prior to and during application be considered transportation with delivery and therefore excluded from these regulations.

Should DHS not agree with TFI's request, then TFI requests that DHS explain its rationale for same in either the final rule *Federal Register* preamble or DHS' response to comments document.

B. Ammonia (Concentration 20 Percent or Greater)

The threshold quantity proposed by DHS in Appendix A is 5,000 pounds less than EPA's RMP threshold quantity and therefore, TFI requests that the STQ for ammonia (concentration 20 percent or greater) be increased to 20,000 pounds.

As with TFI's other requests in our comments, should DHS not agree with TFI's request, then TFI requests that DHS explain its rationale for same in either the final rule *Federal Register* preamble or DHS' response to comments document.

C. Ammonium Nitrate (Nitrogen Concentration 28 Percent – 34 Percent)

TFI supports the inclusion of ammonium nitrate (nitrogen concentration 28 percent – 34 percent) at the 2,000 pound STQ set by DHS. TFI requests that DHS not alter the 2,000-pound STQ for ammonium nitrate (nitrogen concentration 28 percent – 34 percent) or the description of ammonium nitrate.

D. Nitric Oxide

TFI questions the proposed inclusion of nitric oxide on Appendix A at the STQ of "any amount." DHS fails to discuss why the RMP threshold of 10,000 pounds has been reduced to "any amount" for purposes of chemical security. In the fertilizer industry, nitric oxide is formed during the manufacture of nitric acid. Ammonia and air (consisting of nitrogen and oxygen) are sent across a platinum/rhodium catalyst, with the resultant formation of nitric oxide, nitrogen oxide and water. The nitric oxide is further oxidized in the absorption column into nitrogen dioxide with the addition of more air. Water is added and reacts with the nitrogen dioxide to

form nitric acid. Some nitric oxide slips through the entire process and is released into the atmosphere, along with small amounts of nitrogen dioxide and nitrous oxide.

The nitric oxide is present throughout the nitric acid production process, but is neither isolated nor collected and stored. Thus, while at any given point in time nitric oxide may be present at a facility producing nitric acid, this is a closed-loop system which does not present an opportunity for theft or diversion. As such, TFI requests that DHS clarify that chemical facilities producing nitric acid and having incidental nitric oxide molecules carrying through the nitric acid production process are not subject to the rule if the rationale for inclusion of nitric oxide in Appendix A is "theft or diversion." If inclusion of nitric oxide in Appendix A was for a reason other than theft or diversion, DHS may deem it appropriate to subject "closed loop systems" such as chemical facilities producing nitric acid to the regulation. However, if "closed loop systems" are included in the scope of the regulation, TFI requests that the STQ for nitric oxide be consistent with EPA's RMP.

E. Potassium Nitrate and Sodium Nitrate

TFI requests that both potassium nitrate and sodium nitrate be excluded from the final Appendix A. Although potassium nitrate and sodium nitrate are nitrate salts, they have far different and, therefore, relatively innocuous properties compared to ammonium nitrate. Alkali nitrate salts like potassium nitrate and sodium nitrate do not contain fuel in their molecular formulae as is the case for ammonium nitrate. That is the main reason why the risks associated with these products should not be compared with those of ammonium nitrate. Further, alkali nitrates have been associated with elaboration into black powder, yet black powder is a propellant and cannot be reasonably considered to lead to a risk of significant misuse in terrorism. Taking into consideration these two arguments and added to the fact that those types of fertilizers are ultimately found at agricultural supply distributorships and farms and not in chemical facilities, TFI believes that including potassium and sodium nitrate fertilizers is unwarranted, unnecessary and exceeds the regulatory mandate defined for CFATS.

Neither potassium nitrate nor sodium nitrate appear on the RMP or the CWC lists. Because of their weak oxidizer properties they are classified as HAZMAT (Class 5.1. oxidizer hazard class), however, it is easy to demonstrate that they readily fall out of this classification when tested.

It is important to clarify that sodium nitrate has been used as an additive in the manufacture of certain high explosives such as dynamites and emulsions. Still the non-detonable properties of potassium nitrate and sodium nitrate are well-known, and therefore sodium nitrates contribution to high end explosives is not essential but is related to improved density in the mixtures or to serve as an oxygen balancing agent between the explosive and the fuel.

Similarly, potassium nitrate is a well-known component in black powder. Black powder has been studied by the National Academy of Sciences (NAS) with the purpose of investigating the threat of black powder in terrorist incidents. The feasibility of the use was determined to be limited to the filling of pipes, tubes or bottles in the production of small bombs. Even then if an

individual would wish to produce such devices, he would likely purchase black powder in a sporting goods store or online.

Standard tests can be carried out to confirm the non-detonable properties of potassium nitrate and sodium nitrate. Several such tests even in large scale have already been performed. Indeed in a large scale evaluation of detonation propagation velocity of ammonium nitrate, sodium nitrate and potassium nitrate, mixed with diesel fuel, prescribed as standard protocol by NAS (*Containing The Threat from Illegal Bombings, 1998*) performed by the Energetic Materials Research and Testing Center of New Mexico Institute of Mining and Technology, it was determined that only the ammonium nitrate and diesel fuel mixture detonated. The potassium nitrate and sodium nitrate and diesel fuel mixtures did not propagate a detonation.

From another perspective, regulation of potassium and sodium nitrates would probably result in fertilizer substitution and the long-term result of such substitution has not been evaluated. The restrictions imposed for the users of these products, as presented in the proposed regulation, will force fertilizer formulators to replace these products with lower quality sources of potassium and nitrogen. Sellers to the industrial sector may be able to enforce these regulations, but the sole fact of the stigma attached to the products being listed as security controlled substances will make them shift to other non-listed alternatives of potassium and nitrogen sources. The substitution of potassium and sodium nitrate would not increase security for U.S. citizens, but would only mean higher costs for agriculture and horticulture because of decreased competition and the use of less effective fertilizers.

Provided with the opportunity to consult with DHS regarding the inclusion of potassium nitrate and sodium nitrate, TFI could provide extensive data showing the non-detonable properties of both potassium nitrate and sodium nitrate and their commercial applications. Further, without providing the basis for proposing both chemicals for inclusion on Appendix A, DHS' proposal does not allow for meaningful comment and, as such, violates the requirements of the Administrative Procedure Act.

F. Sulfur Dioxide and Sulfur Trioxide

TFI is concerned by DHS' proposed inclusion of sulfur dioxide and sulfur trioxide on Appendix A. To understand TFI's concern, a brief discussion of the phosphoric acid/phosphate fertilizer production process is necessary.

To produce phosphoric acid and phosphate fertilizers, the fertilizer industry mines phosphate rock-bearing materials. These materials are acidulated with sulfuric acid to produce phosphoric acid, some of which is then used to produce phosphate fertilizers. Some of the sulfuric acid used to acidulate phosphate rock is produced on-site. To produce sulfuric acid, solid sulfur is burned, producing sulfur dioxide, which in turn is converted to sulfur trioxide in a catalytic converter. The sulfur trioxide is then absorbed into sulfuric acid to make a "stronger" acid. The water in the weaker acid combines with the sulfur trioxide to make sulfuric acid, which raises the 93 percent acid to about 98 percent acid.

The sulfur dioxide produced from sulfur is neither captured nor stored prior to conversion to sulfur trioxide. Sulfur dioxide is identified on Appendix A at a threshold of "any amount." Arguably, this means that even a single sulfur dioxide molecule moving through the acid production process could subject a sulfuric acid plant to DHS' regulation. Similarly, such a conclusion would render any coal-fired power plant subject to DHS' regulation as sulfur dioxide is generated during the combustion of coal. Obviously, this was not DHS' intent when it promulgated its chemical facility security regulation. Thus, we request that DHS confirm in its final Appendix A list that by "any amount," DHS is not referring to molecules of sulfur dioxide that are passing through the sulfuric acid production process.

Similarly, there is no "storage" of sulfur trioxide during the sulfuric acid production process; however, sulfur trioxide passes within the confines of the duct work, converter, absorber and/or heat exchangers through which the gas stream passes during the production of sulfuric acid. As with sulfur dioxide, although molecules of sulfur trioxide are present, they are not being stored. When there are power outages or other stops in production, the gas stream is not moving so sulfur trioxide is trapped in the duct work until the system is restarted. Thus, while at any given point in time sulfur dioxide and sulfur trioxide may be present at a facility producing sulfuric acid; this is a closed-loop system, which does not present an opportunity for theft or diversion.

TFI requests that DHS clarify that chemical facilities producing sulfuric acid and having sulfur dioxide and sulfur trioxide molecules carrying through the sulfuric acid production process are not subject to the rule if the rationale for inclusion of those chemicals in Appendix A is "theft or diversion." If inclusion of sulfur dioxide and sulfur trioxide in Appendix A was for a reason other than theft or diversion, DHS may deem it appropriate to subject "closed loop systems" such as chemical facilities producing sulfuric acid to the regulation. However, if "closed loop systems" are included in the scope of the regulation, TFI requests that the STQ for sulfur dioxide and sulfur trioxide be consistent with EPA's RMP.

G. Urea

TFI believes that DHS may have included urea in Appendix A because of the risk of "theft or diversion" or "sabotage or contamination," however, this is mere speculation because DHS does not provide any rationale for its proposal to include urea on Appendix A. DHS writes that "certain chemicals or materials, if stolen or diverted, have the potential to be used as weapons or easily converted into weapons using simple chemistry" (72 Fed. Reg. at 17,696). Additionally, DHS states that it "believes that certain chemicals or materials, if mixed with readily-available materials, have the potential to create significant adverse consequences for human life or health." Although TFI acknowledges that urea can be mixed with nitric acid to make urea nitrate, which is an explosive, TFI does not agree that either of these justify the regulation of urea at establishments storing quantities above 2,000 pounds. Nitric acid, a component of urea nitrate, is not a readily-available chemical. Nitric acid is a regulated hazardous chemical, which is already included on Appendix A. Urea, on the other hand, is a safe, non-hazardous fertilizer, which is widely available and therefore, TFI believes it is more logical to put strong regulations on nitric

acid and not attempt to regulate a product which is sold at thousands of retail fertilizer and home and garden stores across the United States.

Urea is not present on the RMP or HAZMAT lists. Urea is only listed as a UDOC on the CWC. TFI does not believe urea's listing as a UDOC on the CWC warrants inclusion in Appendix A. UDOCs are discrete organic chemicals not listed under Schedules 1, 2 or 3 of the CWC, and are all carbon compounds, excluding common biological reservoirs and forms of carbon. UDOCs are to be reported and monitored by export controls under the CWC. The activity threshold for declarations of UDOCs is 200 metric tons aggregate, annually. This reporting threshold is 438,000 pounds greater than DHS' Appendix A reporting threshold.

Due to the extensive uses of urea and its wide application in American agriculture, TFI estimates that the inclusion of urea will result in tens of thousands, if not hundreds of thousands, of facilities being required to complete the Top-Screen. In Illinois alone, which only consumes 76,159 short tons of urea, TFI estimates the inclusion of 750 facilities, 100 of which would not be required to comply if urea was delisted from Appendix A. The inclusion of these 100 Illinois facilities due to the possession of 2,000 pounds of urea only considers fertilizer retail facilities; it does not include the number of farmers, home and garden retailers, feed dealers, golf courses, or airports which use or sell urea. Illinois is only the twenty-second largest consumer of urea. The number of retailers and farmers which would be required to complete the Top-Screen solely because of the use of urea differs greatly in South Dakota which consumes 592,000 short tons of urea and only 37,000 short tons of anhydrous ammonia and 873 short tons of ammonium nitrogen. Similar statistics exist for other states.

In 2005, farmers in the United States directly applied 5.2 million short tons of urea for agricultural purposes. A single short ton equals 2,000 pounds, the STQ set for urea in DHS' Appendix A. The amount of short tons applied annually is equal to approximately 10.4 billion pounds of urea. The largest consumer of urea, South Dakota, utilized 592,612 short tons in 2005. In the same time period, 18 states consumed over 100,000 shorts tons of urea.

Urea is not only sold in bulk for use in American agriculture, but also to golf courses, in bags at home and garden stores, for use as a deicer at airports across the country, to power plants for use as an emission control reagent, to feed dealers to include as a protein source and to the industrial market for use in shampoos, conditioners and lotions, dermatological products, ready-to-use cold compresses, plastics, glue, cigarettes and processing plywood. Although urea's use as a deicer has declined in the past twenty years, its use at airports still remains because urea proves to be the least corrosive to airplanes. Many airports in the Northeast and Northwest use urea as a deicer, including airports in the Washington, D.C., metropolitan area.

TFI does not support the inclusion of urea in Appendix A. TFI believes it is impractical and beyond statutory intent to regulate a product which is so innocuous, so widely utilized and available across the country in this manner. Urea is a commonly used fertilizer across the corn belt. For agricultural purposes, it is sold in bulk at fertilizer facilities in quantities often greater than 2,000 pounds and in 50 pound bags at home and garden stores across the country. Urea

IP/CNPPD/Dennis Deziel

May 8, 2007

Page 12

helps growing crops make essential proteins and as such is highly valued by our nation's farmers.

TFI does not believe DHS recognizes the enormity of the task of regulating urea. Further, DHS fails to discuss the need to include urea in Appendix A in light of TFI's comments to the contrary on DHS' ANRM. TFI, therefore, requests that urea be removed from Appendix A. Should DHS not agree with TFI's request, then TFI requests that DHS explain its rationale for same in either the final rule *Federal Register* preamble or DHS' response to comments document.

Conclusion

TFI is pleased to have the opportunity to submit these comments on the Proposed Appendix A of CFATS. As our comments demonstrate, we have serious concerns regarding the compilation of chemicals on Appendix A and the corresponding STQs. Should you have any questions regarding TFI's comments, please contact TFI Director of Government Relations Kris Ballweg of my staff via telephone at (202) 515-2701 or via e-mail at kballweg@tfi.org.

Sincerely yours,

A handwritten signature in cursive script that reads "Ford B. West".

Ford B. West
President