

#### **Joint Information Bulletin**

**Title:** (U) Renewed Terrorist Interest in Urea Nitrate

**Date:** January 26, 2005



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This is a joint DHS and FBI Bulletin. Reference FBI Intelligence Bulletin #163.

Based on this notification, no change to the Homeland Security Advisory System (HSAS) level is anticipated; the current HSAS national level is YELLOW-ELEVATED.

DHS and FBI encourage recipients of this Bulletin to report information concerning suspicious or criminal activity to the local FBI Joint Terrorism Task Force (JTTF) – the FBI regional phone numbers can be found online at <a href="http://www.fbi.gov/contact/fo/fo.htm">http://www.fbi.gov/contact/fo/fo.htm</a> – and the Homeland Security Operations Center (HSOC). The HSOC can be reached via telephone at 202-282-8101 or by email at <a href="https://www.fbi.gov">HSCenter@dhs.gov</a>. For information affecting the private sector and critical infrastructure, contact the National Infrastructure Coordinating Center (NICC), a sub-element of the HSOC. The NICC can be reached via telephone at 202-282-9201 or via email at <a href="https://www.fbi.gov/contact/">NICC@dhs.gov</a>. When available, each report submitted should include the date, time, location, type of activity, number of people and type of equipment used for the activity, the name of the submitting company or organization, and a designated point of contact (POC).

**ATTENTION:** Federal Departments and Agencies, State Homeland Security Advisors, Security Managers, State and Local Law Enforcement, and Information Sharing and Analysis Centers (ISACs).

# **OVERVIEW**

Urea nitrate, a chemical compound derived from common ingredients, has been an explosive of choice for terrorist groups; with respect to use of this material inside the United States terrorists used urea nitrate during the 1993 World Trade Center bombing. Although the U.S. Intelligence Community currently has no specific credible intelligence which indicates terrorists currently plan to use urea nitrate in any Homeland attack, there has been an increased interest in this

material amongst overseas terrorist groups. This bulletin provides security managers and companies engaged in the sales of precursor ingredients some background information and suggested protective measures to minimize risks.

#### **DETAILS**

The fertilizer most commonly associated with explosive applications is ammonium nitrate. Ammonium nitrate can be used "as is" for explosive applications. Ammonium nitrate releases approximately 22–60% of the energy of trinitrotoluene (TNT) upon detonation; however, when mixed with fuel oil, the amount of energy released upon detonation rises to 80–88%. An ammonium nitrate/fuel oil (ANFO) mixture was used in the Oklahoma City bombing.

In comparison, urea nitrate releases about 90% of the energy of TNT on a volumetric basis upon detonation, making it comparable in explosive power to ANFO. Urea nitrate is a colorless crystal or white powder that is stable, slightly soluble in water, and insensitive to electrostatic discharge, mechanical shock or friction; it is created by combining urea and nitric acid. It also may give off a strong ammonia or urine-like odor and is very acidic. Therefore, if packaged in metal containers for extended periods, the containers will likely corrode.

Urea nitrate is often used by Palestinian terrorists, and the Israeli Defense Forces recently found devices using urea nitrate in bomb-making laboratories located in the West Bank. On a smaller scale, urea nitrate can be made from concentrating urine and nitrating it. This technique has been used by criminals to create smaller bombs.

The precursor urea, which cannot be used as an explosive alone, is a constituent found in many brands of fertilizer available in Israel, the West Bank, and the Gaza strip. To make urea nitrate, Palestinian terrorists have manufactured nitric acid by using readily available chemicals, including compounds contained in car batteries. Many Middle Eastern countries have controls on urea; Jordan, for example, banned the import of the fertilizer in August 2004 because of its potential use as an explosive precursor. Urea is also used as a chemical deicer and is sold in large bags in retail stores in cold regions of the United States during the winter months. Finally, urea garners less attention among law enforcement and industry officials in the United States than ammonium nitrate.

In early 2004, Australian officials uncovered a terrorism plot against its energy sector where urea nitrate was the explosive of choice. According to court documents, two men who met at a terrorist training camp in Pakistan and belonged to the terrorist group Lashkar-e-Tayiba, a Pakistani-based Sunni extremist group whose members have worked with Al-Qaeda in the past, were preparing for an attack against Australia's energy supply network. One of the suspects is accused of using a false name while attempting to buy both a large quantity of urea nitrate from a commercial chemical company and maps of Australia's energy supply system. There are no known commercial producers of urea nitrate, it has to be made by a chemical reaction using precursors described in this report.

In late August 2004, a U.S. company received an inquiry from an overseas caller who requested a price quote for 150,000 tons of urea for shipment to Pakistan or Syria. A price quote was given, but the caller stated that a Ukrainian company had offered a lower price. The transaction with the U.S. company never occurred. Although the call seems suspicious, there is no indication that the caller had any ties to terrorist groups.

Urea is used by various U.S. industrial sectors, including for plastics manufacturing and agricultural purposes. Approximately 5.3 million tons of urea and 1.5 million tons of ammonium nitrate are consumed by the agricultural industry each year in the United States, representing 21% and 4.3% of the total U.S. fertilizer market respectively. Currently, there are no federal reporting requirements for the sale of either fertilizers. Farmers have been encouraged to report suspicious incidents and thefts of ammonium nitrate to the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) via telephone at (800) 800-3855 for the last several years, but there has been no similar effort undertaken for urea.

# SUGGESTED PROTECTIVE MEASURES

Persons and businesses involved with the legitimate sale and possession of urea, ammonium nitrate, and nitric acid should consider the following three steps to help keep these materials out of the wrong hands: know your customer, report suspicious persons, and have a security plan.

#### **Know Your Customer**

Look for any unfamiliar customer who:

- Does not know much about farming/fertilizer. For example, the customer does not answer questions about acreage, crops or soil composition in a specific and knowledgeable manner.
- Insists on purchasing only urea, ammonium nitrate, or nitric acid and will not consider alternative products even if recommended.
- Does not want product delivered. For example, the customer insists on taking the product immediately, and asks for it in bags, not bulk.
- Asks about methods or equipment to alter the material to forms not necessary for normal use, such as using a grinder to make prills into a powder.
- Hesitates or hedges when asked for information such as name, address, signature, or photo identification; provides apparently false identifying information.
- Acts nervous, for example avoids eye contact, appears jittery, acts uneasy or speaks vaguely when engaged in conversation.
- Pays in cash and refuses to write a check or use credit; has no credit account with your or other agribusinesses in the area.
- Orders a quantity that is not consistent with local conditions.
- Orders over the phone and requests delivery to a general non-agriculture storage site.

# **Report Suspicious Persons**

If someone seems out of place, jot down some notes on a piece of paper:

- Note their physical appearance.
- Note the make, model, color and license plate number of their vehicle.
- Save any paper on which they may have written a name or address; minimize the handling to help preserve it for fingerprints.

Help ensure urea, ammonium nitrate, and nitric acid stays in the right hands by reporting this and other suspicious activity to local and federal law enforcement officials.

# Have a Security Plan

Those who routinely sell, handle, or store these substances are encouraged to utilize a security vulnerability assessment tool. Your security plan should consider the quantities your facility handles, the location(s) of your storage area(s), and existing security measures, including physical security, personnel security and security training.

An effective security plan may require the implementation of layers of protection to include:

- awareness
- access
- alarms
- barriers
- inventory control
- lighting
- visibility
- vendors
- training
- surveillance
- signs
- locks

Protective measures against a vehicle-borne improvised explosive device (VBIED) attack involving urea, ammonium nitrate, or nitric acid include the following recommendations:

 All available antiterrorism measures should be rigorously reexamined, to include physical security perimeters and set back distances between security fences, key buildings, and barricades.

Facilities can be better protected against VBIEDs by considering the following general protective measures:

# **General Awareness Procedures**

- Review current contingency plans and, if not already in place, develop and implement
  procedures for receiving and acting on threat information, alert notification, terrorist incident
  response, evacuation, bomb threat, hostage and barricade situations, chemical, biological,
  radiological and nuclear (CBRN) attack, incident management procedures, accountability,
  and media relations.
- After implementing plans and procedures, conduct internal training exercises and invite local emergency responders (fire, rescue, medical and bomb squads) to participate in joint exercises.
- Coordinate and establish partnerships with local authorities and other business/facility owners to develop intelligence and information sharing relationships.

# **Security Personnel Procedures**

- Arrange for law enforcement vehicles to be parked randomly near entrances and exits.
- Increase the number of visible security personnel wherever possible.
- Institute/increase vehicle, foot and roving security patrols varying in size, timing and routes.
- Implement random security guard shift changes.
- Approach all illegally parked vehicles in and around facilities, question drivers and direct them to move immediately; if the owner cannot be identified, have the vehicle towed by law enforcement.
- Institute a robust vehicle inspection program, to include checking under the undercarriage of vehicles, under the hood, and in the trunk. Provide vehicle inspection training to security personnel.
- Be especially alert for signs of urea nitrate, such as a strong ammonia or urine-like odor, and for VBIED indicators, such as obvious overloading of a vehicle and cargo or containers that are unusual/out-of-place or inappropriate for the vehicle.

# **Physical Security Procedures**

- In addition to Jersey barriers and manned checkpoints, ensure appropriate use of ditching and berms to prevent vehicles from driving through perimeter fencing.
- Limit the number of access points and strictly enforce access control procedures.
- Rearrange exterior vehicle barriers, traffic cones, and road blocks to alter traffic patterns near facilities and cover by alert security forces.

- Consider installing telephone caller I.D.; record phone calls, if legal and necessary in local jurisdiction.
- Increase perimeter lighting.
- Deploy visible security cameras and motion sensors.
- Deploy explosive detection devices and explosive detection canine teams.
- Conduct vulnerability studies focusing on physical security, structural engineering, infrastructure engineering, power, water, and air infiltration, if feasible.
- Install special locking devices on manhole covers in and around facilities.
- Where practical, prevent vehicular traffic from having a straight approach to the security checkpoint. This measure will preclude vehicles from reaching high rates of speed and crashing through the checkpoint.
- Consider installing remotely controlled barrier gates, remove controls at potential entry points for a VBIED and reinstall at a remote secure site with closed circuit TV and phones to monitor access. This would help counter an attack where terrorists kill guards and activate the barrier devices themselves.
- Facilities deemed to be high risk may consider establishing off-site delivery facilities where all vehicles bring outside cargo for screening.
- Establish multiple, layered entry points at high risk facilities.
- Post signs stating that vehicles parked in unauthorized areas will be towed immediately.
- Identify key areas in and/or adjacent to a facility where a terrorist could park a vehicle and be in close proximity to large numbers of personnel.
  - Prohibit vehicular parking in these areas or thoroughly search vehicles parked there.
  - Monitor such areas with security cameras.
- Operators of commercial bus and truck parks should review current security procedures and consider counter-theft measures as appropriate.
- Ensure all levels of personnel are notified via briefings, email, voice mail and signage of any changes in threat conditions and protective measures.
- Encourage personnel to be alert and immediately report any situation that appears to constitute a threat or suspicious activity.
- Encourage and train personnel to take notice and report suspicious vehicles.
- Encourage personnel to know emergency exits and stairwells and the locations of rally points to ensure the safe egress of all employees.

Recipients should immediately report suspicious or criminal activities potentially related to terrorism to their local FBI Joint Terrorism Task Force and the Homeland Security Operations Center (HSOC). FBI regional phone numbers can be found online at http://www.fbi.gov/contact/fo/fo.htm. The HSOC can be reached via telephone at 202-282-8101 or by email at HSCenter@dhs.gov.

Note: This Intelligence Bulletin was written in collaboration with the Energetic Materials Group of the National Ground Intelligence Center (NGIC).

# ADMINISTRATIVE NOTE: LAW ENFORCEMENT RESPONSE

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Information on suspicious activities potentially related to terrorism should be forwarded immediately to the local FBI JTTF and the DHS HSOC as previously indicated.

For comments or questions related to the content or dissemination of this Information Bulletin, please contact the DHS/Information Analysis and Infrastructure Protection Directorate's Requirements Division at <a href="mailto:DHS.IAIP@DHS.GOV">DHS.IAIP@DHS.GOV</a>.