DEPARTMENT OF HOMELAND SECURITY

Office of the Secretary

6 CFR Part 31

[Docket No. DHS-2008-0076]

RIN 1670-AA00

Notice of Availability of Redacted Ammonium Nitrate Security Program Technical Assessments Report

AGENCY: Cybersecurity and Infrastructure Security Agency, DHS.

ACTION: Proposed rule; notice of availability of supplemental information.

SUMMARY: The Department of Homeland Security is publishing this notice of availability in connection with the proposed rule entitled “Ammonium Nitrate Security Program” that was published on August 3, 2011. Through this notice, DHS is making available a redacted version of a final technical report developed by Sandia National Laboratories titled “Ammonium Nitrate Security Program Technical Assessments.” The report documents Sandia National Laboratories’ technical research, testing, and findings related to the feasibility of weaponizing commercially available products containing ammonium nitrate. The redacted report has been added to the docket for the proposed rule. This notice solicits comments on the report and its application to the proposed definition of ammonium nitrate included as part of the Ammonium Nitrate Security Program rulemaking.

DATES: Comments are due by [INSERT DATE 90 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].
ADDRESSES: You may send comments, identified by docket number and/or RIN number, by any of the following methods:


Instructions: All comments received for the public docket will be posted without change to http://www.regulations.gov, including any personal information provided.

Do not submit comments that include trade secrets, confidential commercial or financial information, Chemical-terrorism Vulnerability Information (CVI), Protected Critical Infrastructure Information (PCII), or Sensitive Security Information (SSI) to the public regulatory docket. Please submit comments containing protected information separately from other comments on the technical report. Comments containing this type of information should be appropriately marked as containing such information and submitted by mail to the address provided above. DHS will not place comments containing protected information in the public docket and will handle them in accordance with applicable safeguards and restrictions on access. Additionally, DHS will hold them in a separate file to which the public does not have access, and place a note in the public docket that DHS has received such protected materials from the commenter. If DHS receives a request to examine or copy this information, DHS will treat it as any other request under the Freedom of Information Act (FOIA), 5 U.S.C. 552, and the
Department’s FOIA regulation found in part 5 of Title 6 of the Code of Federal Regulations (CFR).  

For detailed information on the types of comments sought and the types of comments that would be most useful to DHS, see the “Public Participation” heading of the SUPPLEMENTARY INFORMATION section of this document. 

Docket: For access to the docket to read the publicly available, redacted version of Sandia National Laboratories’ final technical report or comments received, go to http://www.regulations.gov. 

FOR FURTHER INFORMATION CONTACT: Craig Conklin, (703) 603-4805, Craig.Conklin@hq.dhs.gov. 

SUPPLEMENTARY INFORMATION: 

BACKGROUND 

Section 563 of the Fiscal Year 2008 Department of Homeland Security Appropriations Act (Pub. L. 110-161, Division E (2007)), amended the Homeland Security Act of 2002, and directs DHS to “regulate the sale and transfer of ammonium nitrate by an ammonium nitrate facility to prevent the misappropriation or use of ammonium nitrate in any act of terrorism.” See 6 U.S.C. 488a(a). As part of this responsibility, DHS must consult with the heads of appropriate Federal departments and agencies and seek public comment in developing and implementing ammonium nitrate regulations, including establishing a threshold percentage for ammonium nitrate in a substance that will be subject to regulation. 6 U.S.C 488a(b). The Department published an Advance Notice of Proposed Rulemaking (ANPRM) on October 29, 2008, seeking public comment on a Secure Handling of Ammonium Nitrate Program, which was
followed by a Notice of Proposed Rulemaking (NPRM) for the Ammonium Nitrate Security Program for public comment on August 3, 2011. 73 FR 64280 (October 29, 2008); 76 FR 46908 (August 3, 2011). Additionally, DHS held public meetings to seek public input on the proposed rule and questions raised in the NPRM. See 76 FR 62311 (October 7, 2011); 76 FR 70366 (November 14, 2011).

In the NPRM, 76 FR 46908 (August 3, 2011), the Department proposed a definition of ammonium nitrate that included a minimum weight of 25 pounds, a minimum threshold of 30 percent ammonium nitrate by weight for mixtures, and an exemption for cold packs. The Department developed the proposed ammonium nitrate definition by considering the security benefits gained from regulating a particular transaction and the economic impact of regulating the transaction. The Department’s proposal for the ammonium nitrate definition was informed by public comment received from the ANPRM; consultation with the Federal Bureau of Investigation’s (FBI) Explosives Unit and a variety of other Federal, State, and private sector entities; and on a review of detonability studies available at the time the NPRM was published.

After reviewing the public input received through the notice and comment process on the proposed definition of ammonium nitrate, DHS determined that it was appropriate to seek additional scientific data on the feasibility of weaponizing commercially available products containing ammonium nitrate before establishing a threshold percentage and quantity of ammonium nitrate that would be subject to regulation. DHS entered into an interagency agreement with the Department of Energy (DOE) on July 12, 2012 to obtain the technical expertise of Sandia National Laboratories (SNL) and to perform testing and collect data on the feasibility of weaponizing commercially available products,
chemicals, and mixtures containing ammonium nitrate. The Department initiated this activity to inform both the Ammonium Nitrate Security Program rulemaking and other DHS bombing prevention and chemical security initiatives.

SNL performed a literature review to determine areas in need of technical assessments. SNL then designed technical assessments to determine the effects of total mass, physical form, and dilution on the detonability of ammonium nitrate mixtures using materials and under conditions realistic to terrorism bomb design or otherwise favorable to support detonation. SNL’s technical assessments and results were reviewed on two occasions by a panel of subject matter experts, which included Federal employees from the Department of Homeland Security, the Department of Justice, the Department of Defense, the Department of State, and the Office of the Director of National Intelligence. SNL then produced a final technical report detailing the technical assessment test plans, performance, data, and a summary of the review and assessment of technical data performed by the panel.

The SNL test results showed that formulations of ammonium nitrate and pre-fabricated ammonium nitrate mixtures with various fuels would detonate with one pound of ammonium nitrate, the lowest mass tested. The results also showed that a minimum concentration level of 15% ammonium nitrate diluted with dolomite in a mixture containing a fuel detonated and that dilutions of ammonium sulfate detonated at a concentration level of 25% ammonium nitrate. When presented with the results of the testing, the panel of subject matter experts concluded that mixtures containing one pound of ammonium nitrate were detonable on the test diagnostics and that a minimum detonable level of 10% ammonium nitrate by weight could be technically defended,
providing a small margin of safety beyond the 15% level, which showed a weak
detonation.

The Department believes that release of SNL’s final report will provide important
information to those who manufacture, store, process, or engage in other transactions
involving ammonium nitrate. The Department is releasing SNL’s final report in a
redacted format to protect information that could reasonably be expected to harm national
security and/or endanger individuals’ lives or physical safety because it could allow
adversaries to develop effective, optimized improvised explosive devices (IEDs).

PUBLIC PARTICIPATION

As noted, the SNL technical report was developed to contribute to the
Department’s body of knowledge on the detonability of ammonium nitrate and to inform
the rulemaking process. The Department is therefore adding the report to the public
docket for the proposed rule and is requesting comment from the public on the report and
its potential application to the proposed definition of ammonium nitrate. The Department
is specifically requesting comment on the scientific methodology and test plans SNL
employed, technical data generated by SNL and test results, and factors affecting
detonability thresholds. The Department would also like comment on the appropriateness
of the proposed ammonium nitrate definition in light of the newly available evidence in
the report, such as whether the report supports changes to the proposed mixture and
weight thresholds, and the potential economic impacts of any changes to the proposed
definition.

Comments that will provide the most assistance to the Department will refer to a
specific section, appendix, figure, and/or table of the technical report, explain the reason
for any comments, and include other information or authority that supports such comments.

This Notice is issued under the authority of 6 U.S.C. 488a.


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