Restricted Components Regulations

Statutory authority
Explosives Act
Sponsoring department
Department of Natural Resources

REGULATORY IMPACT ANALYSIS STATEMENT

(This statement is not part of the Regulations.)

Description

The Explosives Regulatory Division (ERD) of Natural Resources Canada (NRCan) is responsible for the administration of Canada's *Explosives Act* (the Act) and *Explosives Regulations*. Amendments to the Act contained in the *Public Safety Act*, *2002* include regulation-making provisions to ensure the security of explosives and restricted components of explosives (restricted components). The Toronto area terrorist plot to use ammonium nitrate (AN) to build bombs which was foiled in early June of 2006 is a strong indication that regulatory controls are urgently needed to ensure that restricted components are protected from future attempts of acquisition for terrorist and criminal use.

A number of chemicals that are neither defined nor regulated as explosives can be readily used by terrorists and criminals to fabricate bombs. The two most significant bombing incidents in the United States in the 1990s involving New York City's World Trade Center and Oklahoma City's Murrah Federal Building, as well as the deadly attacks on the London mass transit system of last year, all involved explosives made from some of the chemicals that are targeted to be regulated as restricted components under these proposed Regulations.

The subject of restricted components was studied by the U.S. National Research Council (NRC) whose 1998 report *Containing the Threat from Illegal Bombings* contains a list of such chemicals. From a relatively long list they developed a short list of chemicals (nine) which appeared to pose the greatest risk and should therefore be considered for controls. The criteria that were used to condense this list were as follows:

- the chemical should be reasonably adaptable and available for making large bombs;
- the chemical should be an essential component in an explosive system with a potential for significant use as measured in deaths, injuries and property damage; and
- the chemical should be a critical precursor, i.e. one not easily replaced.

Although this was a U.S. study, the American investigators consulted internationally during the course of their work. Its conclusions also apply to Canada, as industry, products and markets in the two countries are similar.

In addition to the U.S. referenced study, an evaluation of historical data shows that the following nine chemicals have been routinely used in bomb and explosives fabrication and for that reason would become restricted components under the proposed Regulations:

- AN in solid form at a concentration of 28 to 34% nitrogen;
- nitric acid at a concentration of at least 68%;
- nitromethane;
- hydrogen peroxide at a concentration of at least 30%;
- potassium nitrate;
- sodium nitrate;
- potassium chlorate;
- sodium chlorate: and
- potassium perchlorate.

The proposed Regulations have been designed to protect restricted components from terrorist and criminal acquisition in a number of important ways without introducing burdensome impacts on legitimate commerce and end users such as farmers.

The key components of this regulatory framework for sellers of restricted components are

- enrolment on the list of sellers of restricted components;
- maintenance of a list of employees who have access to restricted components;
- examination of purchaser identification prior to sale;
- maintenance of detailed sales records;
- provision of secure storage;
- weekly inspection of stock to determine if there has been tampering, theft or loss and the reporting of thefts and attempted thefts to the Chief Inspector of Explosives and to local police; and
- denial of sale if there is a reason to believe the product will be used for a criminal purpose and reporting instances when a sale is denied to the Chief Inspector of Explosives and to local police.

As AN is widely used throughout Canada and is at greatest risk to be used for terrorist and criminal purposes, there are additional security requirements for sellers of this particular restricted component. These include

- implementation of a key control program for locks securing stocks;
- provision of security lighting for major points of access;
- provision of a safety and security plan;
- · ensuring that the means of shipment is securely locked;
- inspection of every incoming shipment to ensure there has been no tampering or loss of product;
- reconciliation of all incoming and outgoing quantities;
- denial of sale if the amount to be purchased is not proportional to the needs or if there is
 reason to believe that the product will be used for a criminal purpose and reporting instances
 when a sale is denied to the Chief Inspector and local police;
- using shippers who operate in conformance with the requirements of the *Transportation of Dangerous Goods Act*;
- informing purchasers in writing of storage security requirements and their responsibility to report any loss, tampering or theft; and
- provision of an annual inventory report to the Chief Inspector.

Alternatives

In the development of the policy for controlling sales of restricted components, several alternatives were considered.

- Status quo. Because the current program is wholly based on self-regulation, this was not considered adequate, as restricted components such as AN are inexpensive, readily available and easily converted into a powerful explosive. Furthermore, restricted components are often used by terrorists (Irish Republican Army bombings in the United Kingdom, the Oklahoma City bombing, the Bali bombing and the Toronto terrorist plot foiled in June of 2006). Many chemical industry groups abide by well-known codes of practice but these refer to the safety of the chemical itself and many security aspects are missing from those codes. Finally, the uncertainty of securing full cooperation for all restricted components combined with the level of residual security risks to the safety of the Canadian public has deemed this alternative to be unreasonable.
- Imposition of tight controls, such as licensing both buyer and seller. This would be a costly and burdensome requirement. Considerable opposition from legitimate end-users such as the farming community would be guaranteed. The effort required would be disproportionate in relation to the marginal improvement in security obtained.
- Prohibit the sale of AN. This is an important fertilizer. With nearly 180 000 tonnes used in Canada in 2004, banning it would cause major dislocation to suppliers and end-users, as well as extra cost, as no other alternative chemical is available.

It is felt that the measures reflected in the proposed Regulations strike the appropriate balance of providing adequate security without unreasonable dislocation.

Benefits and costs

NRCan is committed to ensuring public safety without burdening industry and end-users with unnecessary costs and restrictions. These amendments will not significantly increase costs for the affected industry, as consultation with the Canadian Fertilizer Institute (CFI), the Canadian Association of Chemical Distributors (CACD) and the Canadian Chemical Producers Association (CCPA) has determined that most have the security measures in place and only require formalization of existing systems. The enrolment requirements will only necessitate minimal upgrades to record-keeping processes and physical storage measures. The proposed Regulations will require that anyone who sells, acquires for sale or possesses for sale restricted components enroll with the ERD, comply with security measures, ensure accurate record-keeping practices and provide an annual report (ammonium nitrate only). The CFI has agreed that the projected compliance costs are reasonable and has estimated the total financial impact to their members at approximately \$120,000 one-time start-up costs, plus around \$20,000 annually. The cost to NRCan is estimated as \$710,000 over five years, including start-up.

Consultation

ERD has been consulting with stakeholders since the middle of 2002 while it was in the policy development phase. In May 2004, a survey was sent to all relevant stakeholders through the CFI, CACD, CCPA, Synthetic Organic Chemical Manufacturers Association (SOCMA), Forest Products Association in Canada (FPAC), Canadian Pulp and Paper Association (CPPA) and to racing fuel distributors. A total of 284 companies were surveyed with a response rate of 40%. The purpose of the survey was to inform as many stakeholders as possible and to understand how the restricted components are available in Canada (e.g. format). There have been no major objections raised. Various stakeholders came forward and expressed a desire to be consulted throughout the development. Since this time, ERD has met the following stakeholder groups:

Restricted component	Stakeholder group	Meetings
Ammonium Nitrate	CFI (Canadian Fertilizer Institute) CAAR (Canadian Association of Agri- Retailers)	Aug. 10/04, Sep. 24/04, Nov. 10/04, Jan. 18-19/05, March 10/05, April 26/05, Audit (April 26/05), July 14/05, Conference call Nov. 30/05, Conference call Feb. 24/06, April 4/06 At CFI conferences
	FSSC (Fertilizer Safety and Security Council)	Oct. 27/04 June 16/05 (<i>On Guard</i> launch)
	CFI (Annual Parliamentary Forum)	Nov. 2/05
Hydrogen Peroxide	HPP of ACC (Hydrogen Peroxide Panel of the American Chemistry Council)	Oct. 15/04
Sodium Chlorate	CPSA (Chlorate Producers Security Association)	Oct. 7/04 and Jan. 27/05
Nitric Acid	Nitrochem Corp.	March 3/05
All (Distributors)	CACD (Canadian Association of Chemical Distributors) (M. Hill, President only)	Oct. 13/04
	CACD (Regulatory Affairs Committee)	April 28/05
All (Potential Producers and Distributors)	TDG (Congress organized by CCPA)	Nov. 9/04

Both the CFI (for AN) and AET (for sodium chlorate) are currently working on the development of industry Codes of Practice. At this time, the CFI code for AN is near completion and a large

portion is reflected in these proposed Regulations.

Formal notification of these regulatory proposals will be conducted through publishing in Part I of the Canada Gazette, ERD's Web site (http://nrcan.gc.ca/mms/explosif/index.htm), as well as through communications with relevant associations and groups such as the CFI, CCPA and CACD. ERD is committed to conducting its regulatory consultations in a manner that encourages a positive engagement with the affected industries and stakeholders, while ensuring integrity and transparency.

Compliance and enforcement

Enrolment and annual reporting procedures and services will be provided by NRCan. This will be supported through compliance inspections conducted by the Canadian Food Inspection Agency in partnership with ERD. ERD's Enforcement and Compliance Policy, a public document, will be revised to identify the range of corrective actions that may be used to address noncompliance with respect to restricted components. The Chief Inspector would have the right to suspend a seller's enrolment where the Act or the Regulations are contravened. The Chief Inspector may cancel a seller's enrolment in situations where there has been a repeat history of non-compliance with the Act and Regulations or where the seller jeopardizes the security or safety of the public. In both cases the seller must be notified in writing and be given a reasonable opportunity to give reasons as to why suspension or cancellation is unwarranted. In cases where the Chief Inspector chooses to suspend or cancel a seller's enrolment, the seller may submit a request to the Minister within 15 days to review that decision. In absence of valid enrolment, the seller cannot sell and if found to be in violation, may be charged under the Act.

Contact

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PROPOSED REGULATORY TEXT

Notice is hereby given that the Governor in Council, pursuant to paragraphs $5(a.31)^a$, $(i.1)^b$ and (m) of the Explosives Act, proposes to make the annexed Restricted Components Regulations.

Interested persons may make representations concerning the proposed Regulations within 90 days after the date of publication of this notice. All such representations must cite the Canada Gazette, Part I, and the date of publication of this notice, and be addressed to Viviane Dewyse, Senior Inspector of Explosives, Acting Manager, Ontario Region Explosives Regulatory Division, Natural Resources Canada, 1431 Merivale Road, Ottawa, Ontario K1A 0G1 (tel.: 613-948-5183; fax: 613-948-5195; email: vdewyse@nrcan-rncan.gc.ca).

Ottawa, August 1, 2006

MARY O'NEILL Assistant Clerk of the Privy Council

a S.C. 2004, c. 15, s. 37(1)
 b S.C. 2004, c. 15, s. 37(5)
 c S.C. 2004, c. 15, s. 37(6)

RESTRICTED COMPONENTS REGULATIONS

INTERPRETATION

Definitions "Act" « *Loi* »

1. The following definitions apply in these Regulations.

"Act" means the Explosives Act.

"attend" « surveillance »

"attend" means to be alert and constantly watchful over a restricted component.

"Chief Inspector" «

inspecteur en chef » "Chief Inspector" means the Chief Inspector of Explosives.

"seller" « *vendeur* »

"seller" means a person enrolled on the list of sellers of restricted components under section 6.

RESTRICTED COMPONENTS

Components

- **2.** The following components of an explosive are prescribed for the purpose of the definition "restricted component" in section 2 of the Act:
 - (a) ammonium nitrate in solid form at a concentration between 28 and 34% nitrogen;
 - (b) hydrogen peroxide at a concentration of at least 30%;
 - (c) nitric acid at a concentration of at least 68%;
 - (d) nitromethane;
 - (e) potassium chlorate;
 - (f) potassium nitrate;
 - (g) potassium perchlorate;
 - (h) sodium chlorate: and
 - (i) sodium nitrate.

Prohibition

3. No person shall sell a restricted component except in accordance with these Regulations.

LIST OF SELLERS

Enrolment

4. Only persons enrolled on the list of sellers of restricted components may sell a restricted component.

Application requirements

- **5.** A person may be enrolled on the list of sellers by applying to the Chief Inspector in the form provided by the Department of Natural Resources. The application must include
 - (a) the name, address, telephone number, facsimile number and e-mail address of the applicant;
 - (b) the restricted components that the person intends to sell;
 - (c) the locations at which restricted components are to be stored or sold, and the storage capacity at each location for each component; and
 - (d) the name, telephone number, facsimile number and e-mail address of a contact person for each location at which the sale of the restricted component is to occur.

Enrolment

6. (1) The Chief Inspector must enrol the applicant on the list of sellers of restricted components on the basis of the information provided under section 5 and issue to the applicant a document that certifies their enrolment and sets out their enrolment number and the effective date of their enrolment.

Duration of enrolment

(2) An enrolment is effective for five years commencing on the date specified in the enrolment document.

Changes

7. A seller must inform the Chief Inspector in writing of any change to the information required under section 5 within seven days after the change.

Permitted activities

8. No seller shall store or sell a restricted component at any location other than one referred to in paragraph 5(c) or referred to in any changes to that information made under section 7.

Suspension

9. (1) The Chief Inspector may suspend an enrolment if a seller contravenes the Act or these Regulations.

Cancellation

- (2) The Chief Inspector may cancel an enrolment if a seller
- (a) contravenes the Act or these Regulations on more than one occasion; or
- (b) jeopardizes the security or safety of the public or the seller's employees.

Right to be heard

10. (1) Subject to subsection (2), before suspending or cancelling an enrolment, the Chief Inspector must provide the seller with written notification of the reasons for the suspension or cancellation, the effective date of the suspension or cancellation and an opportunity to give reasons why the enrolment should not be suspended or cancelled.

Exception

(2) A seller's enrolment is automatically suspended if the seller fails to provide the inventory required under section 32.

Review

11. (1) A seller may request a review of a decision to suspend or cancel an enrolment by applying to the Minister in writing within 15 days after the effective date of the suspension or cancellation.

Minister's power on review

(2) The Minister may confirm, revoke or amend the decision under review.

PART 1

SECURITY — RESTRICTED COMPONENTS OTHER THAN AMMONIUM NITRATE

Application

12. This Part applies in respect of restricted components other than ammonium nitrate.

Security

13. A seller must ensure that restricted components are kept in a locked facility when not attended.

Access

- 14. A seller must
- (a) post signs warning against unauthorized access to the restricted component;
- (b) ensure that only persons whom the seller authorizes have access to the restricted component; and
- (c) keep, and, at the request of an inspector, provide, a list of their employees at every location where the restricted component is stored or sold.

Stock management

15. (1) A seller must, on an ongoing basis, reconcile incoming and outgoing quantities of the restricted component by means of a stock management system.

Weekly inspection

(2) The seller must perform and keep a record of weekly inspections to ensure that the restricted component has not been tampered with or lost.

Losses

(3) The seller must keep a record of the cause of any loss of a restricted component.

Theft or tampering

(4) If the seller discovers that the restricted component has been stolen or tampered with, or that there has been an attempt to steal it, the seller must

immediately inform the local police, and, within

24 hours after the discovery, submit a written report to the Chief Inspector.

Sales

16. (1) No seller shall sell a restricted component if they have reasonable grounds to suspect that the restricted component will be used for a criminal purpose.

Report

(2) The seller must report any instances when they refuse to sell a restricted component as a result of complying with subsection (1) to the Chief Inspector and to the local police.

Identification

- nier inspector and to the local police.

 17. Before selling a restricted component, a seller must examine
- (a) if the restricted component is to be used as an explosive, the purchaser's licence, permit or certificate issued under the Act;
- (b) if the purchaser is a seller, proof of their enrolment on the list of sellers of restricted components; or
- (c) in all other cases, an identification issued by the Government of Canada, or a provincial or municipal government, that bears a photograph of the purchaser.

Record keeping

- **18.** (1) A seller must obtain and keep the following records for each sale of a restricted component:
 - (a) the name, address and telephone number of the purchaser;
 - (b) the date of the sale;
 - (c) the bill of lading, sales receipt or similar document;
 - (d) the type and number of the document examined under section 17;
 - (e) the trade name, quantity and package size of the component;
 - (f) a description of use of the component; and
 - (g) if the component is shipped, the date of delivery and the quantity received.

Access

(2) The seller must keep the records locked when they are not being used or are not attended and must make them available only to persons who need access in the course of their employment.

PART 2

SECURITY — AMMONIUM NITRATE

Application

19. This Part applies in respect of the restricted component, ammonium nitrate.

Security

- 20. (1) A seller must ensure that
- (a) all bin gates providing access to storage bins containing ammonium nitrate and all doors, windows and other points of access to buildings storing ammonium nitrate are locked when not attended;
- (b) a written key control plan is in place; and
- (c) all major points of access to buildings storing ammonium nitrate are lit at times outside of business hours.

Safety and security plan

(2) The seller must have a written safety and security plan that identifies the emergency procedures and the person responsible for carrying out each procedure, for all major risk events including security-related events. The plan must be reviewed and updated every 12 months.

Notice

(3) The seller must inform the local police in writing of all the locations at which the seller is storing ammonium nitrate.

Access

- 21. A seller must
- (a) post signs warning against unauthorized access to the ammonium nitrate;
- (b) ensure that only persons, including contractors, whom the seller

authorizes have access to the ammonium nitrate; and

(c) keep, and at the request of an inspector, provide, a list of their employees at every location where ammonium nitrate is stored or sold.

Receiving ammonium nitrate

- 22. When receiving ammonium nitrate, a seller must
- (a) compare the quantity of ammonium nitrate received with the quantity shipped, as recorded on the bill of lading;
- (b) record any signs of tampering on the vehicle or rail car delivering the ammonium nitrate:
- (c) record the cause of any loss of ammonium nitrate that is not attributable to moisture loss or mechanical abrasion; and
- (*d*) inform the person from whom the seller purchased the ammonium nitrate of any signs of tampering or loss not attributable to moisture loss or mechanical abrasion.

Stock management

23. (1) A seller must, on an ongoing basis, reconcile incoming and outgoing quantities of ammonium nitrate by means of a stock management system and perform an annual inventory audit reconciliation of the ammonium nitrate.

Weekly inspections

(2) The seller must perform and keep a record of weekly inspections to ensure that the ammonium nitrate has not been tampered with or lost.

Loss

(3) The seller must keep a record of the cause of any loss of ammonium nitrate that is not attributable to moisture loss or mechanical abrasion.

Theft or tampering

(4) If the seller discovers that any ammonium nitrate has been stolen or tampered with, or that there has been an attempt to steal it, the seller must immediately inform the local police and, within 24 hours after the discovery, submit a written report to the Chief Inspector.

Sales

- 24. (1) No seller shall sell ammonium nitrate
- (a) if the quantity to be purchased is not proportional to the needs of the purchaser; and
- (b) if they have reasonable grounds to suspect that the ammonium nitrate will be used for a criminal purpose.

Report

(2) The seller must report any instances when they refuse to sell ammonium nitrate as a result of complying with subsection (1) to the Chief Inspector and to the local police.

Identification

- 25. Before selling ammonium nitrate, a seller must examine
- (a) if the ammonium nitrate is to be used as an explosive, the purchaser's licence, permit or certificate issued under the Act:
- (b) if the purchaser is a seller, proof of their
- enrolment on the list of sellers of restricted components; or
- (c) in all other cases, proof of the purchaser's provincial pesticide licence, proof of the purchaser's Canadian Wheat Board number or an identification issued by the Government of Canada, or a provincial or municipal government, that bears a photograph of the purchaser.

Intermediary

26. A seller may sell to a purchaser with the assistance of another seller if the other seller provides written confirmation that they have verified the identity of the purchaser in accordance with section 25. The confirmation must include the type and reference number of the document shown to the other seller.

Records

- **27.** (1) The seller must obtain and keep the following records for each sale of ammonium nitrate:
 - (a) the name, address and telephone number of the purchaser;
 - (b) the date of sale;
 - (c) the bill of lading, sales receipt or similar document;
 - (d) the type and number of the document examined under section 25;

- (e) the trade name, quantity and package size of the ammonium nitrate;
- (f) a description of use of the ammonium nitrate;
- (\acute{g}) if the ammonium nitrate is shipped, the
- vehicle operator's licence number, the quantity of ammonium nitrate delivered and the estimated and actual date and location of delivery; and
- (h) if delivery is made at the time of purchase, a receipt signed by the purchaser containing the information required under paragraphs (a), (b),
- (d), (e) and (f).

Access

(2) The seller must keep these records locked when not in use or attended and must make them available only to those persons who need access in the course of their employment.

Shipments

- 28. When shipping ammonium nitrate, a seller must use
- (a) vehicle operators who have a training certificate issued under Part 6 of the *Transportation of Dangerous Goods Regulations*; and
- (b) transportation providers who have provided written confirmation, within two years before the shipment, that they have an emergency response assistance plan under the *Transportation of Dangerous Goods Act* for shipping ammonium nitrate.

Shipping

- 29. (1) When shipping ammonium nitrate, a seller must
- (a) ensure that all hatches, doors and outlets are locked on the vehicle immediately after the shipment is loaded on it; and
- (b) provide written notice to the operator of the vehicle that
 - (i) shipments should be attended at all times unless the load is parked in a secure location or the load is locked.
 - (ii) the operator of the vehicle should inspect all locks and, if seals are present, inspect all seals at each stop and the final destination, and
 - (iii) any signs of loss, tampering, theft or attempted theft must be documented and immediately reported to the seller.

Shipping by train

(2) When shipping ammonium nitrate by train, a seller must ensure all hatches, doors and outlets on the rail car providing access to the ammonium nitrate are locked and sealed immediately after the shipment is loaded on it and contact the train dispatcher daily for the location of the shipment until delivery occurs.

Notice

- **30.** A seller who sells ammonium nitrate to a person who is not a seller must provide the person with a written notice stating that
 - (a) the ammonium nitrate should be inspected on delivery to determine if there has been any tampering or loss;
 - (b) signs of theft, attempted theft, tampering or loss should be immediately reported to the seller;
 - (c) all bin gates providing access to ammonium nitrate and all doors, windows, and other points of access to buildings storing ammonium nitrate should be locked when not attended;
 - (d) all major points of access to buildings storing ammonium nitrate should be lit outside of business hours;
 - (e) if possible, perimeter security is recommended, such as lockable fencing with gates;
 - (f) any ammonium nitrate remaining in an applicator should be secured and the applicator itself parked in a secure location; and
 - (g) the reselling of ammonium nitrate is prohibited.

Notification of loss

31. If a seller is notified by a person who is not a seller that a quantity of ammonium nitrate has been lost, the seller must immediately notify the local police.

Annual Inventory

32. (1) Every seller must, in the form provided by the Chief Inspector, provide the Chief Inspector with an annual inventory of ammonium nitrate no later than March 31 of the year following the year covered by the inventory.

Contents

- (2) The inventory must include
- (a) the seller's enrolment number;

(b) the period covered by the inventory;(c) a detailed inventory of the ammonium nitrate, which must include, for each location where ammonium nitrate is stored or sold,

- (i) a starting inventory,(ii) the quantity manufactured,
- (ii) the quantity manufactured,
 (iii) the quantity acquired, specifying whether it was purchased or imported or stating how it was otherwise acquired,
 (iv) the quantity used, sold, exported, destroyed, stolen or lost, and
 (v) a year-end inventory;
 (d) the name, telephone number, facsimile number and e-mail address of

- the person responsible for completing the form; and (e) the historical normal range of losses due to moisture loss or mechanical abrasion.

PART 3

INFORMATION

Conservation of documents Information

- 33. A seller must keep the records and documents referred to in these Regulations for at least three years.
- **34.** Any information provided under these Regulations must be true, accurate and complete.

COMING INTO FORCE

Coming into force

35. These Regulations come into force on the day on which paragraphs 5(a.31), (i.1) and (m) of the Act come into force.

[32-1-0]