

HEALTH & SAFETY

AMMONIUM NITRATE MANAGEMENT PLAN

1 PURPOSE

The purpose of the University of Melbourne (the University) Ammonium Nitrate Management Plan (Plan) is to:

- establish a process to comply with the High Consequence Dangerous Goods (HCDG) Regulations 2016 (Vic);
- outline a process to purchase, secure, store, handle, transfer and dispose of ammonium nitrate HCDG for teaching and research purposes.

2 **SCOPE**

The Plan applies to all staff, students and others at University of Melbourne campuses and workplaces using or handling ammonium nitrate for teaching and research purposes on any campuses.

The Plan only applies to the University of Melbourne and excludes the University of Melbourne subsidiaries and affiliates.

3 DEFINITION

Licence

HCDG licence to store and handle ammonium nitrate and it is regulated by WorkSafe Victoria.

Local area

Local area is a local area within the University. It can be a department, unit, a laboratory or a workshop.

Requester

A staff/student who submits a request form on ServiceNow to obtain a small amount of ammonium nitrate for their research/teaching purposes.

Specialist Stores

The University internal specialist stores that centrally stores ammonium nitrate. They dispense the necessary amount of ammonium nitrate required by the requester or order a specific grade of ammonium nitrate on behalf of the requester.

4 LICENCE

HCDG pose security risks associated with its sale, supply, storage and use.

These include:

- Ammonium nitrate;
- Calcium ammonium nitrate containing more than 45% ammonium nitrate; and
- Ammonium nitrate emulsions and mixtures containing more than 45% ammonium nitrate.

Although ammonium nitrate is commonly used to make fertilizers, it is also a key ingredient in explosives. Therefore, its use is tightly controlled through a licensing and permit system, with security and police checks.

In Victoria, tertiary education institutions are exempt from licensing requirements for small quantities if:

- i. The HCDG is for the purpose of educational instruction, research or testing; and
- ii. The total quantity held across the whole institution is no more than 3kg.

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The University of Melbourne holds less than 3 kg ammonium nitrate and does not hold a HCDG license. Therefore, total holdings of ammonium nitrate for the whole University must remain under 3kg.

To ensure this requirement is met:

- The purchase and procurement of ammonium nitrate is restricted;
- The storage of ammonium nitrate stock is managed by the University's Specialist Stores, and
- The use of ammonium nitrate is monitored.

5 **IMPLEMENTATION**

Ammonium nitrate is a chemical used at the University, for research and teaching purposes. It is usually used in small quantities as part of preparing chemical reagents or as one of the ingredients for plant/cell culture media.

The University restricts any direct purchase or procurement of ammonium nitrate. Only the Specialist Stores and the Chemical and Radiation Specialist are authorised to purchase ammonium nitrate for stock or on behalf of the local area's needs.

The University manages the storage of ammonium nitrate in the Specialist Stores. The Specialist Stores will dispense and distribute the required quantity of ammonium nitrate required by the local area.

Users must submit a <u>ServiceNow ticket</u> to obtain the amount of ammonium nitrate needed or request a purchase of specialised grade of ammonium nitrate. Only the amount needed per use can be obtained.

6 **RESPONSIBILITIES**

6.1 Chemical and Radiation Specialist

The Chemical and Radiation Specialist oversees the level of ammonium nitrate in the University by:

- Assessing requests of ammonium nitrate that potentially will exceed the University-wide threshold limit of 3kg;
- Regularly reviewing the purchasing reports ensuring no ammonium nitrate has been purchased directly from suppliers; and
- Regularly checking the stock of ammonium nitrate from Specialist Stores and any other approved sites.

If a local area proposed to exceed the University-wide threshold limit of 3kg of ammonium nitrate then the Chemical and Radiation Specialist will seek approval from the Director, Health and Safety. If a licence is required, local area requester will be required to provide information to the Chemical and Radiation Specialist who will then prepare the necessary application documentation.

6.2 Specialist Stores

The Specialist Stores holds ammonium nitrate supplies in a secured storage. The Specialist Stores is responsible for:

- Keeping stock of ammonium nitrate for use at the University;
- Dispensing the required amount of ammonium nitrate required by the requester;
- Ordering specialist grade ammonium nitrate after approval from the Chemical and Radiation Specialist;
- Keeping record of ammonium nitrate transaction, and
- Organising pickup/delivery of ammonium nitrate requested by the local area.

6.3 Local Area

Staff and student in local areas using ammonium nitrate area must comply with this Plan. Wherever possible substitution for ammonium nitrate should be considered before deciding if the use of ammonium nitrate is necessary.

6.3.1 Purchasing

Ammonium nitrate must not be purchased or procured directly from suppliers either via eMarket or other means. Staff must only obtain the necessary amount they require via <u>ServiceNow ticket</u> that will be fulfilled by the Specialist Stores.

Students cannot access ServiceNow, therefore they cannot obtain ammonium nitrate directly to the Specialist Stores. Students must request ammonium nitrate through their supervisor who will submit the request via <u>ServiceNow ticket</u>.

6.3.2 Usage

While ammonium nitrate is a HCDG, it is also a dangerous goods oxidising agent (DG 5.1) and a hazardous chemical. Local area should consult the safety data sheet for safe use and handling of this substance. The University' <u>Health & Safety: Risk</u> <u>management requirements</u> and <u>Chemical Management Guidelines</u> also apply.

6.3.3 Storage

Local areas are not permitted to store any ammonium nitrate, so it must be used immediately. Temporary storage of small quantities of ammonium nitrate may be permitted by written approval of the Chemical and Radiation Specialist.

6.3.4 Disposal

Any excess ammonium nitrate must be disposed in form of a solution. When the concentration of ammonium nitrate is <45%, it is not a restricted HCDG anymore. Once the solution is no longer a restricted HCDG, the local area can then dispose this solution as a chemical waste via University's approved contractor.

6.3.5 Audit

Regular audits are required to ensure ammonium nitrate is not accidentally stored in local area (unless it an approved additional site). This process can be included in the regular workplace inspection program. Excess ammonium nitrate must be disposed.

7 EMERGENCY RESPONSE

Emergency response due to spills, security breaches and other emergencies, follow the <u>Health and Safety: Emergency</u> <u>response and preparedness requirements</u>. All incidents must be entered into <u>ERMS</u>, following <u>Health and Safety: Incident</u>, <u>injury, hazard reporting and investigation requirements</u> and reported to the NRP.

8 USEFUL DOCUMENTS AND LINKS

HCDG Permit

National Police Check and ASIO Security Assessment form

Incident and hazard reporting guidance

Report an incident/hazard in ERMS

For further information, refer to https://safety.unimelb.edu.au/safety-topics/chemical-management or contact Health and Safety Services