## Frequently Asked Questions

- 1. What is Ammonium Nitrate (AN)?
- Ans. Pure ammonium nitrate (NH4NO3) is a white, water-soluble, crystalline substance with a melting point of 170°C. The substance is classified as an oxidising agent Class 5.1 (UN1942). It is one of the base ingredients used in the manufacture of commercial explosives. Due to this reason Ammonium Nitrate has been declared as an explosives and defined in Rule 2(b) of the Ammonium Nitrate Rules, 2012.
- 2. Is ammonium nitrate classified as an explosive?
- Ans. Vide Notification No. G.S.R. S.O. 1678(E) dated 21/07/2011, Ammonium Nitrate having the chemical formula NH<sub>4</sub>NO<sub>3</sub> or any combination containing more than 45 percent of ammonium nitrate by weight including emulsions, suspensions, melts or gels (with or without inorganic nitrates) shall be deemed to be an explosive under the meaning of the Explosives Act 1884. Provided that such ammonium nitrate or any combination thereof shall not include those fertilizers from which ammonium nitrate cannot be extracted by any physical or chemical means.
- 3. What makes ammonium nitrate so explosive?
- Ans. Ammonium Nitrate is not an explosive by itself. However, it is one of the ingredients used for manufacture of explosives. It is classified as an oxidizer (5.1) as per UN classification for Dangerous Goods. Other ingredients like fuel, etc., have to be added to make it an explosive. For such explosive mixtures to explode, initiators like detonators are required.
- 4. Why is it necessary to regulate the use of ammonium nitrate?
- Ans. Ammonium Nitrate is a necessary major ingredient for manufacture of explosives and it has been declared as a deemed explosives vide Notification No. G.S.R. S.O. 1678(E) dated 21/07/2011. It has the potential to form an explosive mixture on the addition of ingredients like fuel etc., Hence, it is necessary to regulate the use of Ammonium Nitrate for which the Ammonium Nitrate Rules, 2012 have been framed.
- 5. Is it possible to explode a consignment of ammonium nitrate?
- Ans. Ammonium Nitrate does not explode by itself.
- 6. To what use can ammonium nitrate be put to?
- Ans. Ammonium Nitrate is used as an ingredient for manufacture of explosives, anaesthetic gases, fertilizers, cold packs, etc.
- 7. What are the Acts or Rules under which licenses are required to be obtained for activities related to ammonium nitrate?

- Ans. Manufacture, conversion, stevedoring and bagging, import, export, transport, possession for sale or use of Ammonium Nitrate is covered under Ammonium Nitrate Rules, 2012 framed under the Explosives Act, 1884. For manufacture of Ammonium Nitrate an Industrial licence is required under the IDR Act, 1951. A license under the Ammonium Nitrate Rules, 2012 is also required for any of the activities mentioned above.
- 8. What is the difference between Industrial licence issued under IDR Act and the licence issued by PESO under the Ammonium Nitrate Rules, 2012?
- Ans. Industrial licence is granted by DIPP under the IDR Act, 1951 for manufacture of Ammonium Nitrate.

  Licence for Manufacture, conversion, stevedoring and bagging, import, export,

transport, possession for sale or use of Ammonium Nitrate is issued by Petroleum & Explosives Safety Organization (PESO) under the Ammonium Nitrate Rules, 2012 covered under the Explosives Act, 1884. The objective of the Explosives Act is to prevent accidents i.e. safety and for accountal of ammonium nitrate consignments. There are also certain basic security provision like boundary-wall of the premises, locking of godowns, guards, escorting of consignments by guards, escorting in sensitive areas, etc. which have been provided under the said Rules.

- 9. How does one get a licence for carrying out activities related to AN under the Ammonium Nitrate Rules, 2012?
- Ans. For getting a licence under the Ammonium Nitrate Rules, 2012, Application form, fees and documents as specified in the rules have to be submitted to the licensing authority concerned, as specified in Schedule I. Prior approval before construction of facilities has to be obtained in accordance with Rule 30 of the Ammonium Nitrate Rules. Such approval shall not be necessary for the facilities of Ammonium Nitrate existing as on the date of publication of these rules. After construction of the facilities as per approval granted, application for grant of licence in accordance with rule 31 of the Ammonium Nitrate Rules, 2012 has to be submitted. If all documents are found in order, licence is granted and forwarded to the officer concerned for inspection of the premises. After inspection, the licence is endorsed and issued to the licensee. Status of applications can be viewed online in the public domain link at <a href="https://www.peso.gov.in">www.peso.gov.in</a>.
- 10. What are the documents required for obtaining licence under Ammonium Nitrate Rules, 2012?
- Ans. After the construction of premises, as per plan approved under rule 30, the applicant shall apply for grant of licence along with documents stated in rule 31 to the authority empowered to grant such licence as specified in Schedule 1.
- 11. What is the fee for applying for Ammonium Nitrate licenses?
- Ans. The fee for applying for Ammonium Nitrate licence is specified in Rule 29 of Ammonium Nitrate Rules, 2012 and depends on the scope and scale of activity.
- 12. What is the maximum period for which Ammonium Nitrate licence is granted under Ammonium Nitrate Rules, 2012? Is the licence renewable?

- Ans. The licensing authority may grant a licence for a period not exceeding five financial years from the date of issue of license, including or part thereof ending on the 31<sup>st</sup> March for all purposes, except for licence for import and export, which shall be valid for one year from the date of issue. The license is renewable.
- 13. Who is responsible for ensuring security of ammonium nitrate consignment in factories, storage depots and in transit?
- Ans. Under the AN Rules, assessment of the security provision is the responsibility of the district authorities concerned. At the time of applying for a license, a person intending to manufacture, convert, stevedore, bag, possess for sale or use, transport, import or export Ammonium Nitrate shall submit Safety and Security Management Plan to the licensing authority and to the District Authority with the security aspect duly vetted by the police authorities for approval.

District Authority here means - in towns having a Commissioner of Police, the Commissioner or Deputy Commissioner of Police and in any other place the District Magistrate or the Addl. District Magistrate.

Provision of security guards within factories and storage godowns is done by the license holder under Rule 12(1) & (2).

While being transported, the vehicles carrying Ammonium Nitrate shall be accompanied by at least two able bodied guards. A vehicle while transporting Ammonium Nitrate shall be adequately secured at the expense of the licence holder and if the consignment of Ammonium Nitrate is likely to pass through sensitive areas notified by the Ministry of Home Affairs, it should be escorted by armed police escort or guard, provided by the District Police Administration as specified in Rule 22(2) & 22(4).

As specified in the licensing conditions, losses, shortage or theft of Ammonium Nitrate shall be immediately reported by the licensee to the nearest police station and the district authority.

- 14. Who is responsible for ensuring security of AN consignment in sensitive areas/notified areas (specially in naxalite areas)?
- Ans. As per Rule 22(4), a vehicle while transporting Ammonium Nitrate shall be adequately secured at the expense of the licence holder and if the consignment of Ammonium Nitrate is likely to pass through sensitive areas notified by the Ministry of Home Affairs, it should be escorted by armed police escort or guard, provided by the District Police Administration.

Hence, security for consignments of ammonium nitrate is the responsibility of the licensee, police and District Authorities.

- 15. Whether police escorting is mandatory for vehicles transporting ammonium nitrate. If so, who will provide the police/ armed guards?
- Ans. At present police escorting is not mandatory for the vehicles carrying Ammonium Nitrate for movement in regular areas. However, it shall be accompanied by at least

two able bodied guards provided at the expense of the licensee. Only if the consignment of Ammonium Nitrate is likely to pass through sensitive areas notified by the Ministry of Home Affairs, it shall be escorted by armed police escort or guard, provided by the District Police Administration.

- 16. Who is responsible in case of breach of the provisions of the Rules? Who is responsible for taking action in such cases?
- Ans. Incase the violation of provision relates to the functional aspects within the premises of the license holder, the concerned license issuing authority- District Administration or PESO as the case may be, may suspend or cancel the license depending on the severity of the non compliance.

For cases of security which relate to thefts, pilferage, diversion, etc. the police authorities take appropriate penal action. In such cases the licensing authorities may also suspend or cancel the license. PESO's responsibility in the severest of cases, on such occasions, is limited to cancelling of license. For such cases the Ammonium Nitrate Rules 2012 by itself do not contain any penal provision. The District Administration may book the person under the Explosives Act 1884, The Explosive Substances Act 1908, or any other relevant act or rule.

- 17. Whether Central PSUs are also exempted from obtaining licence from the Ammonium Nitrate Rules.
- Ans. No. Central PSUs are not exempted from obtaining licence under the Ammonium Nitrate Rules, 2012. Exemption has been granted to Armed Forces of the Union and Ordnance Factories or other establishments of such Forces for own use in accordance with the rules or regulations made by the Central Government;
  - (a) The Indian Railways and its authorized carriers while acting as carrier;
  - (b) The Port authority;
  - (c) any person employed under the Central Government or State Government in exercise of any power under the Act or these rules.
- 18. Whether State PSUs are exempted from the requirement of obtaining Industrial Licence under IDR Act.
- Ans. No. As per the letter No. 2(2)/2013-Expls dated 06/06/2013 issued by DIPP, exemption has been granted for Central PSUs, but there is no reference of State PSUs.
- 19. Can Ammonium Nitrate be imported in India?
- Ans. Yes, Ammonium Nitrate can be imported in India.
- 20. What are total imports?
- Ans. No licence has been granted by this office for import of AN, hence, exact figures are not available with this office. It is estimated that approx. 20,000 MT of AN has been imported in this financial year.
- 21. What are the total domestic productions?

- Ans. The Ammonium Nitrate Rules have been notified in July 2012. Since there was no regulation on ammonium nitrate before that date, no verifiable data is available regarding its production. At present the licensing process is under way. As per the applications received for manufacture of Ammonium Nitrate the total installed capacity of the five major manufacturers in India is 1054830 MT. The manufacturing capacity for converters is 197400MT. The capacity for extraction of AN from sludge received from nuclear fuel complex is 11400MT.
- 22. How many manufacturers have applied for license under AN Rules 2012 and how many are pending for clearance?
- Ans. Out of five major manufacturers of AN in India, M/s. Gujarat Narmada Fertilizers and Chemicals Ltd., (GNFC) has been granted license to manufacture ammonium nitrate. Four others have also applied and are awaiting grant of NOC from respective district authorities.
- 23. What is the current regulation on import of AN?
- Ans. Import of Ammonium Nitrate is presently regulated under Ammonium Nitrate Rules, 2012. As per DGFT Notification No. 34(RE-2103)/2009-2014 dated 14/08/2013, the revised import policy of item 'Ammonium Nitrate' whether or not in aqueous solution' under Exim Code 3102 30 00 in Chapter 31 of the ITC(HS), 2012 Schedule I (Import Policy). As per the policy condition, import of Ammonium Nitrate having the chemical formula NH<sub>4</sub>NO<sub>3</sub> or any combination containing more than 45 percent Ammonium Nitrate by weight including emulsions, suspensions, melts or gels ( with or without inorganic nitrates) would require the approval of Chief Controller of Explosives (CCE/PESO). Ports for import of AN have also been notified by Ministry of Shipping vide Notification No. GSR2182(E) dated 16<sup>th</sup> July, 2013.
- 24. Does the AN Rules provide any penal provision of fine/ arrest etc.
- Ans. Penal provisions like fine/arrest etc. are not covered in the AN Rules.
- 25. In case of illegal activity relating to manufacturing, use, conversion of AN, theft or diversion, who is responsible to act- PESO or the police authorities?
- Ans. As per Rule 51 of AN Rules, 2012 Police and concerned District Authority are responsible to act against any of the illegal activity detailed above. The rules do not provide for any responsibility of PESO with respect to this aspect.
- 26. Where does AN find its maximum usage?
- Ans. AN find its maximum usage in Explosives Industry.
- 27. What is the total requirement of Ammonium Nitrate (AN) by the explosives industries in the country?
- Ans. The estimated requirement of AN by the explosives industries is approx. 600,000 MT annually.
- 28. What are the total imports and domestic production of ammonium nitrate?

Ans. As per the information available with the Petroleum Safety and Explosives
Organization (PESO) the level of indigenous manufacture and imports of ammonium
nitrate are as follows-

	<u>2011-12</u>	<u>2012-2013</u>
Imports	365700	226000
Domestic manufacture	389667	304000
Total	755367	530000
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<sup>\*</sup>all figures in tons

- 29. What is the existing manufacturing capacity of ammonium nitrate in the country?
- Ans. As per the applications received for manufacture of Ammonium Nitrate the total installed capacity of the five major manufacturers in India is 1054830 MT. The manufacturing capacity for converters is 197400MT. The capacity for extraction of AN from sludge received from nuclear fuel complex is 11400MT.
- 30. What are the health effects from ammonium nitrate?
- Ans. Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation (lung irritant). Slightly hazardous in case of skin contact (permeator). Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.
- 31. What steps has been taken recently by the Govt. of India to regulate the manufacture & use of Ammonium Nitrate?
- Ans. To regulate the manufacture & use of Ammonium Nitrate, Ammonium Nitrate Rules, 2012 have been notified vide G.S.R. NO. 553(E) dated 11/07/2012.