

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN ZONE BENCH
AT CHENNAI**

OA No.253 of 2024

IN THE MATTER OF:

SRI CHAITANYA SRAVANTHI

..... Applicant

Vs

SECRETARY, MINISTRY OF SHIPPING, PORTS AND WATERWAYS AND OTHERS

.... Respondents

REPORT FILED BY THE APPCB 8th RESPONDENT

DATE- 10.12.2024



**M/s MADHURI DONTI REDDY
ADVOCATE**

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL SOUTHERN
ZONE, CHENNAI IN CONNECTION WITH

Original Application No. 253/2024

In the matter of:

Sri Chaitanya Sravanthi, Andhra Pradesh.

...Applicant(s)

With

Secretary

Ministry of shipping, New Delhi and Ors.

...Respondent(s)

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It is certified that all the documents contained in the above annexure are true copies.

Place: Visakhapatnam
Date: 11.11.2024


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Report in compliance with the Hon'ble NGT, Southern Zone, Chennai vide Order dated 12.09.2024 in Original Application No. 253 of 2024(SZ) filed by Sri Chaitanya Sravanthi, in the matters of import of Ammonium Nitrate by M/s. Visakhapatnam Port Authority:

It is to submit that Sri Chaitanya Sravanthi, D.No.48-8/12, Dwarakanagar, Visakhapatnam has filed an application before the National Green Tribunal Southern Zone, Chennai in O.A.No. 253 of 2024(SZ) in the matters of import of Ammonium Nitrate by M/s. Visakhapatnam Port Authority.

The Hon'ble NGT, Delhi in its order dated 12.09.2024 in Original Application No. 253/2024(SZ), stated that

- "1. Let notice be issued to the respondents through the Tribunal as well as privately.*
- 2. Mrs. Madhuri Donti Reddy, the learned counsel accepts notice on behalf of Respondents No.6, 7 and 8.*
- 3. Post the matter on 12.11.2024. Meanwhile, the respondents are directed to file their respective replies/reports."*

Copy of the Hon'ble NGT, New Delhi Order dated 12.09.2024 is submitted as **Annexure-I.**

A Notice dated 18.09.2024 issued to respondent(s) seeking an order on injunction restraining the respondents from receiving imports of Ammonium Nitrate ("AN") through Visakhapatnam Port Authority and thereby strictly implement the office memorandum issued by the Government of Andhra Pradesh on 06.01.2023 and 10.08.2023. The application came up for admission before the Hon'ble National Green Tribunal, Southern Zone on 12.09.2024. Upon hearing the matter, the Hon'ble Tribunal was pleased to direct issuance of notice to all respondent(s) and directed to be present before the Hon'ble Tribunal on 12.11.2024 either in person or through a counsel, failing which the matter will be heard by the Hon'ble Tribunal in absence of respondent(s).

In this regard, the following are submitted for kind perusal:

The Government of Andhra Pradesh(GoAP) vide letter dated 28.01.2021 has decided that "No Ammonium Nitrate shall be allowed to stock in the vicinity of residential areas of the Visakhapatnam city and further Visakhapatnam Port Authority(VPA) shall not be allowed import of Ammonium Nitrate into the


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Visakhapatnam city". The copy of the Govt. of AP vide letter dated 28.01.2021 is submitted as **Annexure-II**.

In accordance to the instructions received from EFS&T Dept. GoAP vide letter dated 28.01.2021, the Andhra Pradesh Pollution Control Board (APPCB) issued a directions to the VPA, Visakhapatnam vide letter dated 01.06.2022 under the Rule 18 (3(A)) of the Manufacture, Storage and Import of hazardous Chemical Rules, 1989(MSIHC Rules) "**Not to allow import of Ammonium Nitrate into the Visakhapatnam City until further orders**" in the interest of safe guarding public health and Environment. The copy of the APPCB letter dated 01.06.2022 is submitted as **Annexure-III**.

The EFS&T Dept, Govt. of AP vide memo dated 20.07.2022 constituted this committee with the following members to examine the whole issue and to find a Solution pertaining to import of Ammonium Nitrate in Visakhapatnam Port.

1. Chief Environmental Engineer, AP Pollution Control Board, Vijayawada,
2. Petroleum and Explosive Safety Organization, Visakhapatnam,
3. Joint Chief Inspector of Factories, Visakhapatnam,
4. Senior Representative of VPT,
5. Representative of Coal India Limited.,
6. Representative of EMWA,
7. Zonal Officer, APPCB, Visakhapatnam (*Convener*).

The copy of the EFS&T Dept, Govt. of AP vide memo dated 20.07.2022 is submitted as **Annexure-IV**.

Further, the EFS&T Dept, Govt. of AP vide memo dated 11.08.2022, the Chairman and the Member Secretary, A.P. Pollution Control Board, Vijayawada requested to furnish interim report / action taken in the matter to the Government. The copy of the EFS&T Dept, Govt. of AP vide memo dated 11.08.2022 is submitted as **Annexure-V**.

The Committee have made a detailed study and after detailed deliberations, the Committee recommended to allow import of Ammonium Nitrate through VPA for 1 more year along with set of recommendations. After careful examination of the then Committee report, the Government have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment. In the interim period,


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the import of the Ammonium Nitrate through the Visakhapatnam Port is allowed temporarily for a period of 3 months, subject to clear understanding that the alternative arrangement will be made by the importers through the other ports at the earliest and subject to compliance with all the conditions proposed by the Committee by the Visakhapatnam Port Authority and other concerned.

Based on the recommendations from the Committee, the matter was examined by the GoAP and issued instructions from time to time to APPCB vide memos dated. 20.07.2022, 29.09.2022, 24.11.2022 & 06.01.2023 to allow VPA to temporarily import Ammonium Nitrate with specific conditions. Accordingly, the Board vide orders dated.21.07.2022, 21.10.2022, 28.11.2022, 06.01.2023 and 06.05.2023 issued directions to VPA to import Ammonium Nitrate temporarily for specified period along with specific directions to comply by the VPA, Visakhapatnam.

While informing the same, the EFS&T Dept., GoAP addressed the Secretary (Shipping), Ministry of Ports, Shipping and Water ways (ports wing), Govt. of India vide letter dated 15.09.2023 to identify other ports, which are located away from the habitations, for import of Ammonium Nitrate. It was also requested that the exercise may be initiated at the earliest so that the import of Ammonium Nitrate is completely phased out through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment. The copy of the EFS&T Dept, Govt. of AP vide memo dated 15.09.2023 addressed to the Ministry Of Ports, Shipping & Waterways, GOI, New Delhi is submitted as **Annexure-VI**.

The Ministry of Ports, shipping & waterways addressed letter to the Spl. Chief Secretary, EFS&T, GoAP on 10.03.2023, wherein the Ministry of Coal have informed that Coal India Limited and Singareni Collieries Company Limited consume large quantities of Explosives for their daily operations. The decision of Government of Andhra Pradesh to phase out handling of Ammonium Nitrate through VPA will be detrimental to the Coal and Fertilizer industry and will derail the process of Mining as well as fertilizer manufacturing if the supply of cargo is put under uncertainty. Thus, the Ministry of Ports, shipping and waterways requested the Government of Andhra Pradesh to reconsider the decision of phasing out import of Ammonium Nitrate through VPA in light of the request of Ministry


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of Coal and VPA. The copy of the Ministry Of Ports, Shipping & Waterways, GOI, New Delhi dated 10.03.2023 is submitted as **Annexure-VII**.

In turn the EFS&T Dept., Govt. of A.P. informed to GoI that the request of Government of India is not feasible and once again requested to identify other ports, which are located away from habitations for import of Ammonium Nitrate and to phase out import of Ammonium Nitrate through the Visakhapatnam Port. A letter was also addressed to Ministry of Ports, Shipping and Waterways, GoI on 24.03.2023 informed that the Govt. of AP is of the view to phase out import of Ammonium Nitrate through the Visakhapatnam Port as Visakhapatnam Port is located within the Visakhapatnam Municipal Corporation limits and is surrounded by thickly populated habitations. The copy of the EFS&T Dept., Govt. of A.P. vide letter dated 24.03.2023 submitted as **Annexure-VIII**.

The Special Secretary to Government, EFST Dept. on 13.06.2023 addressed letter to Chairman, Visakhapatnam Port Authority requesting to submit action plan for phasing out of import of Ammonium Nitrate through the Visakhapatnam Port as per the recommendation of the committee, and further requested expeditious action vide letter dated: 12.10.2023. After careful consideration of the recommendations of the committee, the GoAP vide letter dated 10.08.2023 issued instructions to APPCB to further extend permission to VPA to import Ammonium Nitrate through Visakhapatnam Port temporarily for the period upto 05.01.2024, and it was specifically instructed that no further extension shall be given in this regard after expiry of the period i.e., 05.01.2024. The copy of the EFST Dept., GoAP letter dated 10.08.2023 is submitted as **Annexure-IX**.

Accordingly, the APPCB vide letter dated 12.08.2023 issued directions to VPA allowing import of Ammonium Nitrate for a period upto 05.01.2024 subject to compliance with all the conditions recommended by the committee and procedures as fully enumerated in the Govt. Memo. Dated 06.01.2023 to be implemented by Visakhapatnam Port Authority and other concerned. The copy of the APPCB letter dt.12.08.2023 is submitted as **Annexure-X**.

The Ministry of Ports, Shipping and Waterways, Gol vide letter dated 12.10.2023 & 01.11.2023 once again requested to reconsider the decision and allow Vishakhapatnam Port Authority to continue handling Ammonium Nitrate beyond


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05.01.2024 as the imposition of ban or prohibition of handling Ammonium Nitrate through VPA will severely impact the Coal Industry, Major Power Producers and Fertilizer Industry. The copy of the Ministry of Ports, Shipping and Waterways, Gol vide letter dated 12.10.2023 & 01.11.2023 is submitted as **Annexure-XI**.

The Special Chief Secretary to GoAP, Infrastructure and Investment (Port) Dept., GoAP vide letter dated 28.11.2023 forwarded the letters received from the CMD, Singareni Collieries Company Ltd., and representation of EMWA, and requested to take necessary action and to intimate the action taken to the GoAP.

The Board received representations received from the Chairperson, VPA vide letter dated 29.11.2023 and Compliance status to the recommendations of the committee furnished by the Traffic Manager, Traffic Department, VPA.

While forwarding the above, the EFS&T Dept., GoAP vide letter dated. 07.12.2023 requested the APPCB to examine the request of the Ministry of Ports, Shipping and Waterways, Gol and representations received from the other stake holders and to offer specific remarks/report to Government as early as possible. The gist of the representations received from various stake holders is as follows:

S. No.	Date of representation	Letter received from	Description
1.	14.11.2023	Chairman Managing Director, Singareni Collieries Company Ltd., Hyderabad	& Requested the Department of Promotion of Industry and Internal Trade (DPIIT), Delhi to advise the Government of AP for allowing continuously, imported Ammonium Nitrate to Vizag port reaching through various ships until Paradip port is fully developed.
2.	23.11.2023	President, Indian Ammonium Nitrate Manufacturers Association (IANMA), Mumbai	Risks with import of Ammonium Nitrate through Vizag Port and requested to take necessary steps to restrict / stop import of highly Hazardous Ammonium Nitrate at Vizag port.


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3.	28.11.2023	Special Secretary to Government, Infrastructure & Investment (Port) Dept., GoAP	Chief Secretary to Government, Hyderabad Forwarded the representation dt. 14.11.2023 received from the CMD, Singareni Collieries Company Ltd., Hyderabad to advise the Government of AP for allowing continuously, imported Ammonium Nitrate to Vizag port reaching through various ships until Paradip port is fully developed.
4.	29.11.2023	Under Secretary to GoI, Ministry of Ports, Shipping & Water ways, GoI, New Delhi	Requested the Government to re-consider the decision and allow VPA to continue handling Ammonium Nitrate beyond 05.01.2024
5.	05.12.2023	President, Indian Ammonium Nitrate Manufacturers Association (IANMA), Mumbai	Stopping of import of Ammonium Nitrate through Visakhapatnam Port and to restrict the parcel size of the vessels bringing imported Ammonium Nitrate to 5000 tons in a single vessel and other issues.
6.	07.12.2023	Special Secretary to GoAP, EFS&T Dept.,	Forwarded representations received from the M/s. Regenesis Industries Pvt. Ltd., M/s. Solar Industries Ltd., M/s. EMWA, M/s. Ideal Industrial Explosives Ltd., M/s. Singareni Collieries Company Ltd., and M/s. IANMA and requested to offer specific remarks to the GoAP.
7.	12.12.2023	Chairperson, Visakhapatnam Port Authority, Visakhapatnam	Requested for expeditious action on import of Ammonium Nitrate through VPT for a further period beyond 05.01.2024, to continuously handle the consignments of Ammonium Nitrate at VPA
8.	14.12.2023	President, Indian Ammonium Nitrate Manufacturers Association (IANMA), Mumbai	Safety risks to India's strategic petroleum reserve and HPCL refinery at Visakhapatnam due to import of Ammonium Nitrate through VPT
9.	14.12.2023	President, Indian Ammonium	Safety risks to Vizag Airport at Vizag due to import of Ammonium Nitrate through Visakhapatnam Port.

10.	21.12.2023	President, Explosives Manufacturers Welfare Association (EMWA), Secunderabad	Requested to Continue import of Ammonium Nitrate through Visakhapatnam port for another 1 year.
11.	22.12.2023	Traffic	Furnished compliance status to the recommendations of the committee and requested that the restrictions imposed by GoAP and APPCB in import and handling of Ammonium Nitrate may be relaxed for an appropriate further period of 1 year or more beyond 05.01.2024.
12.	28.12.2023	Secretary to Government of India, MPS Section, Ministry of Coal, GoI	Requested to continue import of Ammonium Nitrate through VPT which is essential for Coal India Limited to meet its production targets, essential to meet the energy demands of the Nation.

The compliance to the recommendations made by the Committee constituted by EFS&T Dept, Govt. of AP vide memo dated 20.07.2022 is submitted below:

S.No	Recommendations/ Suggestions	Compliance
1	The import of Ammonium Nitrate (AN) through VPT may be allowed temporarily for a period of one year only after compliance of the following:	
	a. Compliance by VPT with all the recommendations made by Safety Audit Team of DGFASLI at para no. 10 (field observations and recommendations) of the safety audit report and certified by Dock Safety Inspectorate.	Complied. The safety audit report
	b. Strict compliance of Ammonium Nitrate Rules, 2012 under the supervision of PESO and Dock Safety Inspectorate.	PESO is looking after compliance of Ammonium Nitrate Rules, 2012.
	c. Compliance by VPT & Importers with modalities and SOPs submitted by VPT to PESO.	The modalities and SOPs submitted by VPA are being verified by PESO.
	d. Conditions stipulated by District Magistrate / Commissioner of Police from time to time.	--


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2	The VPT shall be directed to prepare QRA and consequence modelling for handling Ammonium Nitrate at port site to elaborate the scope of safety at work as recommended in the Safety Audit report by DGFASLI, within two months.	The VPA submitted Quantitative Risk Assessment (QRA) for Ammonium Nitrate handling at VPA prepared by IRCLASS Systems and Solutions Private Limited.
3	QRA and consequence modelling and Onsite emergency plan shall be prepared by CONCOR for storage and transportation AN as AN stuffed in containers is kept at the site of CONCOR for 1-3 days. The staff of CONCOR and railway staff shall also to be trained and apprised of safety aspects.	<p>CONCOR has not submitted QRA and consequence modelling and Onsite emergency plan but submitted a letter dated 28.12.2023 stating that they are strictly ensuring all the safety and security measures towards transportation, handling, stacking of containers at their yard till the entire cargo is moved out to various destinations of importers is completely complied with as per the set norms as below:</p> <ol style="list-style-type: none"> 1. Planning and arrangement for sufficient containers by CONCOR is made well in advance before the arrival of each and every vessel. CONCOR ensures that ample of containers are available as per the requirement of Importers for stuffing the cargo without any disruption or delays during the discharging of vessel. 2. Stuffing of Ammonia Nitrate at port, movement of containers from port to CONCOR yard thereafter from CONCOR MMLP to various destinations is a continuous operation. CONCOR ensures that the containers are continuously moved out as early as possible with minimum holding time at Vizag Port as well as CONCOR yard. 3. Mostly containers are immediately loaded onto the rake as soon as they arrive at our yard. In case

		<p>due to some reason rake is not available, for the time being they are stacked in an isolated area specifically designated for cargoes like Ammonia Nitrate. Containers are not mixed with other cargoes/containers as per the PESO norms.</p> <p>4. CONCOR is well equipped with firefighting and fire extinguisher equipment's. A special team of task force is also formed for taking immediate safety measures in case of any adverse conditions.</p> <p>5. CONCOR always ensure that the containers are moved out from CONCOR yard within a period of 24-48 hours immediately after arrival from port. The allocation of rakes is intimated well in advance to railways for various destinations as indented by Importers in order to avoid any hassles.</p> <p>6. CONCOR ensures that all the rules and regulations for transportation of Ammonia Nitrate are strictly being complied as per the AN rules framed by PESO.</p> <p>7. CONCOR has been conducting the entire operation smoothly and efficiently with a minimum lead time for the last 20 years without a single adverse incident.</p> <p>8. The stuffed and sealed containers are escorted with the guards provided by the Importers till arrival of CONCOR premises.</p>
4	The safety issues of handling of AN in VPT shall be reviewed in the District Crisis Group constituted	The safety issues of handling of AN in VPT are not reviewed in the District Crisis

	under the Chemical Accidents (<i>Emergency Planning, preparedness and Response</i>) Rules 1996.	Group constituted under the Chemical Accidents (<i>Emergency Planning, preparedness and Response</i>) Rules 1996.
5	PESO may be requested to furnish a report on adequacy of existing safety measures within the port and by the importers for handling the AN as per AN Rules.	<p>PESO has not submitted report on adequacy of existing safety measures within the port and by the importers for handling the AN as per AN Rules. The APPCB addressed a mail to PESO on 28.12.2023 requesting to submit the compliance regarding furnishing of report on adequacy of existing safety measures within the port and by the importers for handling the AN as per AN Rules.</p> <p>The Chief Controller of Explosives, PESO submitted reply on 29.12.2023 stating that the Dy. Chief Controller of Explosives, Visakhapatnam vide his office letter no. AN/Genl/2022 dated 26.10.2022, intimated the matter to the Chairman, Visakhapatnam Port Authority. Further, PESO, Nagpur forwarded the Instructions received from Andhra Pradesh Pollution Control board vide letter No 724/APPCB/HO/ERM/TF/VS P/2023-866 Dt 17.01.2023 to the Chairman, Visakhapatnam Port Authority for strict compliance of the same vide letter of even no dt 08.02.2023.</p>
6	The Ministry of Shipping and Explosives Manufacturers Welfare Association (<i>EMWA</i>) shall identify other ports which are located away from habitation for import of AN immediately and shall ensure that the imports will start from other ports within one year	The Ministry of Shipping and Explosives Manufacturers Welfare Association (<i>EMWA</i>) not yet identified alternate port.


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The Board received mail from the Traffic Manager, Traffic Department, VPA on 02.01.2024, wherein it was informed that the vessel m.v. LADY AYANA carrying 19800 MT of Ammonium Nitrate in bags on account of M/s. Solar Industries India Ltd., is calling at Visakhapatnam port before the restriction date 05.01.2024 and same shall be handled at compatible berth at Visakhapatnam Port. Copy of the mail received from Traffic Manager, Traffic Department, VPA dated 02.01.2024 is submitted as **Annexure-XII**.

The EE, RO, Visakhapatnam vide letter dt. 11.01.2024 reported that the Board Officials inspected the Port premises and Ammonium Nitrate handling area on 09.01.2024 and observed that there is no handling of Ammonium Nitrate in the port premises. The Traffic Manager, VPA has informed that One vessel i.e., M.V LADY AYANA carrying 19853.373 MT of Ammonium Nitrate in bags has arrived Visakhapatnam port on 04.01.2024 at 05:00 Hrs to unload Ammonium Nitrate, which was received on account of Solar industries Ltd. The vessel arrived into outer harbour of VPA prior to the cut-off date i.e., 05.01.2024 and same was anchored in the outer harbour. Further informed that the request of the Traffic Manager, VPA to unload the Ammonium Nitrate from the said vessel i.e., M.V LADY AYANA may be permitted stipulating a condition that the VPA should strictly follow the SOPs recommended by the Committee to avoid any untoward incidents while handling Ammonium Nitrate as the vessel has already reached outer harbour before 05.01.2024 and as there are no further instructions from the Government on this matter. Copy of the APPCB report dated 11.01.2024 is submitted as **Annexure-XIII**.

After careful consideration of the representation from the Traffic Manager, Traffic Department, VPA; recommendations of the EE, RO, Visakhapatnam; arrival of the vessel before 05.01.2024 and considering the environment & safety issues concerned for idling of the AN carrying vessels at outer harbor of Visakhapatnam Port, the Board under the powers vested under Rule 18 (3A) of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules) hereby temporarily permits the Visakhapatnam Port Authority for one time berthing of vessel m.v. LADY AYANA carrying 19800 MT of Ammonium Nitrate in bags on account of M/s. Solar Industries India Ltd., subject to compliance with all the conditions recommended by the committee and procedures as fully enumerated in the Govt. Memo. Dated 06.01.2023 to be implemented by Visakhapatnam Port Authority and other concerned.


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APPCB issued a letter dated 11.01.2024 addressed to M/s. Visakhapatnam Port Authority stating that “if any further vessels received after this permission, APPCB cannot accord any permissions. Further it is to note that that no further extension shall be given in this regard for import of Ammonium Nitrate through Visakhapatnam Port or berthing of the vessels or any other activities associated with handling of AN at Visakhapatnam Port, till further orders received from the Government”. Copy of the APPCB letter dated 11.01.2024 issued to the VPA is submitted as **Annexure-XIV**.

The Committee constituted by the EFS&T Dept, Govt. of AP vide memo dated 20.07.2022 has submitted observations and recommendations vide letter dated 12.02.2024 to the Member Secretary, wherein it was reported that Visakhapatnam Port Authority has not prepared any plan of action for shifting Ammonium Nitrate to other ports; No dedicated berth was allocated for dispatch of Ammonium Nitrate; dense population is existing around Visakhapatnam port and any mishap incident result in extreme impact on human habitation inspite of any number of safety measures taken and further observed that the VPA has not complied with earlier recommendations of the committee besides non-compliance to safety Audit conducted (October, 2022) by Directorate General of Factory Advice Service & Labour Institutes (DGFASLI), GoI. Accordingly, the detailed report of the Committee was furnished by GoAP vide letter dated 04.04.2024 to Ministry of Shipping; Ministry of Coal; Ministry of Environment (MoEF&CC); CPCB and Visakhapatnam Port Authority to take necessary further action. The copy of the EFS&T letter dated 04.04.2024 submitted as **Annexure-XV**.

The CPCB vide letter dated 23.04.2024, while communicating its opinion to Government informed to direct the VPA to invariably comply with the recommendations of the committee at the earliest in order to avoid any chances of a major accident and consequential environmental damage. Further informed to request the Dock Safety Inspectorate Department to submit a report on the adequacy of the safety measures being adopted by Visakhapatnam Port. The copy of the CPCB letter dated 23.04.2024 submitted as **Annexure-XVI**.

The GoAP vide letter dt: 14.05.2024, the Board vide letter dt. 25.06.2024 requested the Asst. Director (Safety), Inspectorate Dock Safety, Visakhapatnam to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate


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through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion for taking further action in the matter.

The APPCB vide letter dated 19.07.2024 requested the Director General, DGFASLI, Mumbai to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action in the matter. The copy of the APPCB vide letter dated 19.07.2024 is submitted as **Annexure - XVII**.

The Chairperson, Visakhapatnam Port Authority, Visakhapatnam vide letter dated 30.07.2024 once again represented to the Board along with remarks on the observations/ recommendations of the committee, for relaxation in restrictions imposed by GoAP and APPCB in import and handling of Ammonium Nitrate for a further period beyond 05.01.2024 to continuously handle the consignments of Ammonium Nitrate at VPA.

The APPCB once again requested the Director General, DGFASLI vide letter dated 14.08.2024 to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action at Government level and APPCB in the matter.

APPCB vide letter dated 14.08.2024, requested the Chairperson, Visakhapatnam Port Authority, Visakhapatnam to pursue the matter with the Directorate General Factory Advice Service & Labour Institutes (DGFASLI), Mumbai to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date for taking further action at Government level and APPCB in the matter. The copy of the APPCB letter dated 14.08.2024 is submitted as **Annexure-XVIII**.

In this regard, it is to inform that the Chief Inspector of Dock Safety, Directorate General Factory Advice Service & Labour Institutes (DGFASLI), Mumbai vide letter dated 09.09.2024 forwarded detailed report on status of the safety measures adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam, wherein it was reported that


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Regional Office, Visakhapatnam

"Overall, these findings highlight a systemic failure to implement effective safety, security, and emergency response measures for handling Ammonium Nitrate, posing significant risks to both personnel and surrounding community". A copy of the report dt. 09.09.2024 received from the DGFASLI, Mumbai is submitted as **Annexure-XIX**.

The Member Secretary, APPCB vide letter dated 25.09.2024 has communicated the DGFASLI safety report dt: 09.09.2024 to the Chairperson, VPA and requested to take all necessary measures as recommended in the report and get the VPA reinspected by DGFASLI and get compliance certificate from DGFASLI on adequacy of the safety measures adopted by Visakhapatnam Port Authority for handling of Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam and submit compliance to GoAP and APPCB at an early date to take further action in the matter. The copy of the APPCB letter dated 25.09.2024 is submitted as **Annexure-XX**.

Visakhapatnam Port Authority yet to submit the compliance certificate from DGFASLI on adequacy of the safety measures adopted by Visakhapatnam Port Authority for handling of Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam to GoAP and APPCB. After receipt of the report from Visakhapatnam Port Authority further action will be submitted to the Hon'ble NGT.

Further it is also submitted that there are no importers of Ammonium Nitrate through Visakhapatnam Port Authority in Andhra Pradesh.

This report is submitted to the Hon'ble National Green Tribunal in due compliance of the directions issued by the Hon'ble Tribunal. The APPCB will abide by all such directions, as the Hon'ble Tribunal may deem fit and appropriate.

Place: Visakhapatnam
Date: 11.11.2024


Environmental Engineer,
APPCB, Regional Office,
Visakhapatnam
Environmental Engineer
A.P. Pollution Control Board
Regional Office, Visakhapatnam

Item No.3:-**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

(Through Video Conference)

Original Application No.253 of 2024 (SZ)

IN THE MATTER OF

Sri Chaitanya Sravanthi,
Andhra Pradesh.

...Applicant(s)

WithSecretary
Ministry of Shipping,
New Delhi and Ors.

...Respondent(s)

Date of hearing: 12.09.2024.

CORAM:

HON'BLE Smt. JUSTICE PUSHPA SATHYANARAYANA, JUDICIAL MEMBER**HON'BLE Dr. SATYAGOPAL KORLAPATI, EXPERT MEMBER****For Applicant(s):** Mr. Satish Parasaran, Sr. Adv. a/w.
M/s. Madhan Babu, Vishnu Mohan,
K. Sanjay & Vishnu Manoharan.**For Respondent(s):** Mrs. Madhuri Donti Reddy for R6 to R8.

ORDER

1. Let notice be issued to the respondents through the Tribunal as well as privately.
2. Mrs. Madhuri Donti Reddy, the learned counsel accepts notice on behalf of Respondents No.6, 7 and 8.
3. Post the matter on **12.11.2024**. Meanwhile, the respondents are directed to file their respective replies/reports.

Sd/-**Smt. Justice Pushpa Sathyanarayana, JM****Sd/-****Dr. Satyagopal Korlapati, EM**

O. A. No.253/2024 (SZ)
12th September, 2024. Mn.

E 4276746

GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPT.

Letter.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated.28/01/2021

From
The Secretary to Government,
EFS&T Department,
A.P.Secretariat,
Velagapudi.



To
1. The Chairman,
A.P. Pollution Control Board,
Vijayawada.

2. The Member Secretary,
A.P. Pollution Control Board,
Vijayawada.

Sir,

Sub:-EFS&T Dept. - APPCB - M/s. Sravan Shipping Services Pvt. Ltd., Warehousing Complex, Chukkavanipalem, Visakhapatnam District - Storage and handling facility of Ammonium Nitrate at S.R. 18P, 19P & 21P of Chukkavanipalem Village, Gajuwaka, Visakhapatnam - Non compliance with EC conditions and Consent conditions of the Board - Risks involved in bulk storage of Ammonium Nitrate - Public Safety and Environment- Information called for - Reg.

Ref:-1.From the Chairman, APPCB, Lr.No.588/APPCB/HO/UH-II/VSP/2020-187, Dt. 17.08.2020.
2. Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I , Dated.09/09/2020.

&&&

I invite your attention to the references cited and to inform you that you are requested to take action against M/s. Sravan Shipping Services Pvt. Ltd., Warehousing Complex, Chukkavanipalem, Visakhapatnam District as per relevant Law, Rules and Guidelines for violation of EC conditions / CFO conditions and furnish action taken report to Government immediately, in the reference 2nd cited. But, no report has been received so far.

2. Further, I am to inform that the Government have examined the issue and it has been decided that "no Ammonium Nitrate shall be allowed to stock in the vicinity of residential areas of the Visakhapatnam city and further, Vizag port shall not be allowed import of Ammonium Nitrate into the Visakhapatnam city".

3. I, therefore, request you to take further action accordingly and furnish action taken/detailed report to Government, immediately.

4. This may be treated as MOST URGENT.

Yours faithfully,

for Secretary to Government.

*See
Pl put up
chronological
history and
whether APPCB
is competent
to take action*

*AGB
Pl. put up
as per
Bndk
11/2/2021*

Annexure-III



ANDHRA PRADESH POLLUTION CONTROL BOARD

D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Center,
Chalamalavari Street, Kasturibaipet, Vijayawada – 520010
Phone: 0866-2463200, Website: <https://pcb.ap.gov.in>

Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-

01/06/2022

To
The Chairman,
Visakhapatnam Port Trust,
Port Area,
Visakhapatnam.

Sir,

Sub: APPCB – HO - UH-II – M/s. Visakhapatnam Port Trust - Instructions of the GoAP - No ammonium nitrate shall be allowed to stock in the vicinity of residential areas of Visakhapatnam city and Vizag Port shall not be allowed import of ammonium nitrate into the Visakhapatnam city – Legal hearing held on 06.05.2022 - Directions to stop the import of ammonium nitrate – Reg.

Ref:

1. Order No.588/APPCB/HO/UH-II/TF/VSP/2020, dated 14.08.2020.
2. The GoAP instructions through letter dated 28.01.2021.
3. The ZO, Visakhapatnam vide letter dt 19.05.2021.
4. External Advisory Committee (Task Force) meeting held on 06.05.2022.

The APPCB issued directions Dt. 17.08.2020 to M/s. Sravan Shipping Services Pvt. Ltd., a Warehousing Complex located at Sy.R.18/P, 19/P & 21/P of Chukkavanipalem (V), Gajuwaka (M), Visakhapatnam District, the only facility permitted by the Board to handle and store ammonium nitrate of 20000T, to immediately stop further operations of stevedoring activities associated with storage and handling of Ammonium Nitrate until further orders from APPCB..

The APPCB also issued a direction on 14.08.2020 to the VPT not to engage M/s. Sravan Shipping Services Pvt. Ltd., in further operations of stevedoring activities associated with storage and handling of ammonium nitrate until further orders of the Board.

The GoAP through letter dated. 28.01.2021 addressed APPCB that the Government has decided “no Ammonium Nitrate shall be allowed to stock in the vicinity of residential areas of Visakhapatnam city and further Visakhapatnam Port Trust (VPT) shall not be allowed import of Ammonium Nitrate into the Visakhapatnam city”.

The Rule 18(3(a)) of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules) which stipulates that “In case the concerned authority of the State is of the opinion that the chemical should not be imported on safety or on environmental considerations, such authority may direct stoppage of such import”. As per the provisions of Rule 18 & Sl.No.3 of Schedule-5 of MSIHC Rules, 1989, A.P. Pollution Control Board is the competent authority in the State for verification of safety concerns associated with the imported chemicals covered in MSIHC Rules, 1989 either at intermediate storage or at the destination in the State after the import of the hazardous chemical.

Vide reference 4th cited, the Board reviewed the status of Import of ammonium nitrate by VPT during the EAC (TF) meeting held on 06.05.2022. The representatives of the M/s. VPT attended the meeting through VC. During the hearing it was informed to the VPT about the instructions of the Government not to allow import of Ammonium Nitrate into the Visakhapatnam city.

After detailed review, the committee recommended to direct the VPT to stop further import of ammonium nitrate at Visakhapatnam port, Visakhapatnam and opined to address the other stakeholders, not to issue any permissions for the storing of ammonium nitrate in the city.

Accordingly, the APPCB hereby issue directions to the Visakhapatnam Port Trust, Visakhapatnam under Rule 18(3(a)) of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules) **"not to allow import of ammonium nitrate into the Visakhapatnam city until further orders"**, in the interest of safe guarding public health and environment.

This has the approval of Member Secretary.

Yours faithfully

Mohan Rajasekhar
JOINT CHIEF ENVIRONMENTAL ENGINEER

Copy to:

1. The Collector and District Magistrate, Visakhapatnam for information and necessary action.
2. The Commissioner of Police, Visakhapatnam for information and necessary action.
3. The Commissioner, Visakhapatnam Municipal Corporation, Visakhapatnam for information and necessary action.
4. The Dy. Chief Controller of Explosives, Visakhapatnam for information and necessary action.
5. The Inspector of factories, Visakhapatnam for information and necessary action.
6. The GMDIC, Visakhapatnam for information and necessary action.
7. The Joint Chief Environmental Engineer, Zonal Office, A.P.Pollution Control Board, Visakhapatnam for information and necessary action.
8. The Environmental Engineer, Regional Office, A.P.Pollution Control Board, Visakhapatnam for information and necessary action.

**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT**

Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated:20.07.2022.
Computer No: 1218399

Sub:-EFS&T Dept. - APPCB - Ammonium Nitrate - Restrictions on storage and import of Ammonium Nitrate into Visakhapatnam Port - Instructions - Reg.

- Ref:-1.From the Chairman, APPCB, Lr.No.588/APPCB/HO/UH-II/VSP/2020-187, Dt. 17.08.2020.
2. Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated. 28/01/2021.
3.APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-, dt.01.06.2022.
4.From the Chairman, Visakhapatnam Port Authority, Lr.No.ITRA/SHP/FMIN, dt.08.06.2022 & 29.06.2022.
5.From the Chairman-Cum-Managing Director, Coal India Limited, Kolkata, dt.08.06.2022.
6.Govt. Lr. No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated 13.06.2022.
7.From the Member Secretary, APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-281, dt.13.07.2022.
8.Govt. Memo. No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated: 20.07.2022.

&&&

Attention of the Chairman and the Member Secretary, A.P. Pollution Control Board is invited to the restrictions imposed by the Andhra Pradesh Pollution Control Board vide its letter dated 01.06.2022 in the reference 3rd cited.

2. In the reference 4th and 5th cited, representations have been received by the Government informing that the ammonium nitrate is an important ingredient for explosive industry and explosives are very much necessary for Coal industry which is used power generation etc. Hence, any restriction on ammonium nitrate would affect the other industries adversely and requested to kindly re-visit the directions issued vide letter dated 01.06.2022 of APPCB so as to continue import and handling of Ammonium Nitrate in bags in the larger interest of the country.
3. In the reference 7th cited, the Member Secretary, A.P. Pollution Control Board, Vijayawada while forwarding the various representations received in the matter, has requested to examine the issue and pass necessary orders in the matter. In the reference 8th cited, certain interim directions have been issued to APPCB.
4. Further to find a solution in the above issue, it is directed that a Committee be constituted with (1) Chief Environmental Engineer, APPCB, (2) Petroleum and Explosive Safety Organisation, Visakhapatnam Office, (3) Joint / Additional Director of Factories, Visakhapatnam, (4) Senior Representative of Visakhapatnam Port Authority, (5) Representative of Coal India Limited, (6) Representative of EMWA and (7) Zonal Officer, APPCB, Visakhapatnam (Convenor) to examine the whole issue in detail and submit a report to Government within 15 days.
5. The Chairman and the Member Secretary, A.P. Pollution Control Board, Vijayawada shall ensure that the committee submits its report within the stipulated period with full details.

**NEERABH KUMAR PRASAD
SPECIAL CHIEF SECRETARY TO GOVERNMENT**

To
The Chairman, A.P. Pollution Control Board, Vijayawada.

(PTO)

:: 2 ::

The Member Secretary, A.P. Pollution Control Board, Vijayawada.

Copy to:-

The Chief Environmental Engineer, APPCB, Vijayawada.

The Petroleum and Explosive Safety Organisation, Visakhapatnam.

The Joint / Additional Director of Factories, Visakhapatnam,

The Chairman, Visakhapatnam Port Authority, Visakhapatnam.

The Chairman, Coal India Limited, Kolkata.

The EMWA, Dhansar, Dhanbad.

The Zonal Officer, APPCB, Visakhapatnam.

SF/SC.

// FORWARDED::BY ORDER //


SECTION OFFICER

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GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT
Memo.No. EFS01-ENVOPEST(CPRO)/22/2020-SEC-I **Dated:11.08.2022**
Computer No.1218399

Sub:- EFS&T Dept. - APPCB - Ammonium Nitrate - Restrictions on storage and import of Ammonium Nitrate into Visakhapatnam Port - Report called for - Reg.

- Ref:- 1.From the Chairman, APPCB, Lr.No.588/APPCB/HO/UHII/VSP/2020-187, Dt. 17.08.2020.
 2.Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt.28/01/2021.
 3. APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-, dt.01.06.2022.
 4.From the Chairman, Visakhapatnam Port Authority, Lr.No.ITRA/SHP/FMIN, dt.08.06.2022 & 29.06.2022.
 5. From the Chairman-Cum-Managing Director, Coal India Limited, Kolkata, dt.08.06.2022.
 6.Govt. Lr. No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated 13.06.2022.
 7.From the Member Secretary, APPCB, Lr.No.724/APPCB/HO/UH.II/TF/VSP/2022-281, dt.13.07.2022.
 8. Govt. Memo. No. EFS01-ENVOPEST (CPRO)/22/2020-SEC-I, Dated:20.07.2022.

The attention of the Chairman and the Member Secretary, A.P. Pollution Control Board are invited to the references cited and inform you that in the reference 8th cited, the APPCB has been directed to allow the present procedure being followed by the Visakhapatnam Port Authority of unloading of ammonium nitrate cargo from the ship to the wharf and direct loading on to containers or trucks for transportation to the final destination by the railways / lorries **for a period of one month**, subject to condition that the Visakhapatnam Port authorities shall follow all the prescribed safety protocols of PESO, APPCB & Director of Factories and the Visakhapatnam Port Authority shall certify the same with full liability on its part. There shall be no storage of ammonium nitrate in any godown at Visakhapatnam Port or in the Visakhapatnam city.

2. Further, to find a solution in the above issue, it is directed that a Committee be constituted with (1) Chief Environmental Engineer, APPCB, (2) Petroleum and Explosive Safety Organization, Visakhapatnam Office, (3) Joint / Additional Director of Factories, Visakhapatnam, (4) Senior Representative of Visakhapatnam Port Authority, (5) Representative of Coal India Limited, (6) Representative of EMWA and (7) Zonal Officer, APPCB, Visakhapatnam (Convener) to examine the whole issue in detail and submit a report to Government within 15 days. But, report in the matter is awaited.

3. The Chairman and the Member Secretary, A.P. Pollution Control Board, Vijayawada are therefore requested to furnish interim report / action taken in the matter to Government.

4. This may be treated as MOST URGENT.

Dr P V CHALAPATHI RAO
SPECIAL SECRETARY TO GOVERNMENT

To
 The Chairman, A.P. Pollution Control Board, Vijayawada.
 The Member Secretary, A.P. Pollution Control Board, Vijayawada.

// FORWARDED::BY ORDER //


SECTION OFFICER

Annexure-VI

REMINDER

**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT**

Letter No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, Dated : 15.09.2023
Computer No :1218399

From
The Special Secretary to Government,
Environment, Forests, Science & Technology Department,
Andhra Pradesh Secretariat, Velagapudi.

To
The Secretary (Shipping),
Ministry of Ports, Shipping and Waterways,
Government of India,
Parivanan Bhawan, Parliament Street,
New Delhi - 110001.

Sir,

Sub :- E.F.S.&T. Dept. - Import of Ammonium Nitrate - Identifying other ports, other than Visakhapatnam Port located away from the habitations for the import of Ammonium Nitrate - Request to phase out import of Ammonium Nitrate through Visakhapatnam Port - Reminder - Reg.

Ref :- 1.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020,dated 30.01.2023.
2.From the Under Secretary to GoI, Ministry of Ports, Shipping and Waterways (Ports Wing), F.No.PD-190177/2022-PDV/III, dated 10.03.2023.
3.From the Chairman, Visakhapatnam Port Authority, Visakhapatnam, Lr.No.ITRA/SHP/FAMN-7232, dated 02.03.2023.
4.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020,dated 24.03.2023.
5.From the Chairperson, Visakhapatnam Port Authority (MoP,S & W, GoI),Visakhapatnam,No.ITRA/SHP/FAMN, Letter, dated 03.07.2023.
6.Govt.Memo.No.EFS01-ENV0PEST(CPRO)/22/2020, dt : 10.08.2023.
7.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-1, dt :10.08.2023.

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Kind attention is invited to the references cited. As you are aware, the Government of Andhra Pradesh after due consideration of all the aspects, have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment and also requested you to identify other ports, which are located away from habitations for import of Ammonium Nitrate.

2. In this regard, I am to inform that orders have been issued extending permission upto 05.01.2024, (i.e. upto one year) for importing of Ammonium Nitrate through Visakhapatnam Port, subject to compliance with all the conditions proposed by the Committee and procedures as fully enumerated in the Government Memo, dated 05.01.2023 by the Visakhapatnam Port Authority and other concerned. It was also informed to the Visakhapatnam Port Authority and the other concerned that no further extension shall be given after expiry of the one year period i.e., 05.01.2024.

(P.T.O)

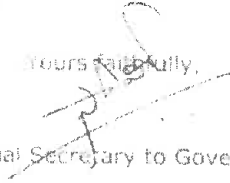
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ASO/EP1

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3. Therefore, you are requested to take immediate further action to identify other ports and take immediate necessary action for import of Ammonium Nitrate from other ports and phase out imports through the Visakhapatnam Port by 05.01.2024.

4. I request for an early reply in the matter.

Yours faithfully,


for Special Secretary to Government

Copy to :-

The Joint Secretary, Government of India, Ministry of Environment and Forests,
3rd Floor, Indira Paryavaran Bhavan, Jor Bagh, New Delhi - 110003.

The Member Secretary, Central Pollution Control Board, Parivesh Bhawan,
East Arjun Nagar, New Delhi-110032.

The Member Secretary, A.P. Pollution Control Board, Vijayawada.

The Chairman, Visakhapatnam Port Authority, Visakhapatnam.

The PS to Addl. Secy. to CM.

The PS to M. (Energy, EFS&T, M&G).

The PS to Spl. CS (EFS & T)

SF/SC.

Annexure-VII

F No. PD-19017/7/2022-PD-VIII
Government of India
Ministry of Ports, Shipping and Waterways
(Ports Wing)

Transport Bhawan,
1 Parliament Street, New Delhi -110001
Dated 10th March, 2023

To

The Special Chief Secretary to Government
Environment, Forests, Science & Technology Department
4th Block, 1st Floor, Room No. 268, Andhra Pradesh Secretariat
Velagapudi, Amaravati-522503, Andhra Pradesh

Subject: E.F.S. & T. Department – Import of Ammonium Nitrate – request to identify other Ports other than Visakhapatnam Port - Reg

Sir,

I am directed to refer to your letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I dated 30.01.2023 and Chairperson Visakhapatnam Port Authority (VPA) letters No. ITRA/SHP/FMIN dated 23.01.2023 and 10.02.2023 (copies enclosed) on the subject cited above and to say that Ammonium Nitrate imported through VPA is used by major Coal and Power Producers of the country viz. Coal India Ltd., The Singareni Collieries Co. Ltd., NTPC, Neyveli Lignite Ltd. etc.

2. Ministry of Coal have informed that Coal India Limited and Singareni Collieries Company Limited consume large quantities of Explosives for their daily operations. The decision of Government of Andhra Pradesh to phase out handling of Ammonium Nitrate through VPA will be detrimental to the Coal and Fertilizer industry and will derail the process of Mining as well as fertilizer manufacturing if the supply of cargo is put under uncertainty.

3. It is to apprise that short supply of Ammonium Nitrate will seriously impact production of coal which in turn affects power generation. The demand of explosives cannot be met through domestic production and the shortage of Ammonium Nitrate may prevail for next several years.

4. You are, therefore, requested that Government of Andhra Pradesh may reconsider their decision of phasing out import of Ammonium Nitrate through VPA in light of the above stated position (as requested by Ministry of Coal and VPA).

(contd. 2)

PD-19017/7/2022-PD-V

1954467/2023/PD-III

-2-

5 This issues with the approval of Joint Secretary (Ports)

Yours faithfully,



(Rameshwar Kumar)

Under Secretary to the Govt. of India

Tel: 23358123

e-mail: rameshwar.k@nic.in

Encl: As above

Copy to:

1 Special Secretary, Department for Promotion of Industry and Internal Trade, Vanija Bhawan, Akbar Road, New Delhi, w.r.t. D.O No. P-13033/115/2021-EXPLOSIVE dated 3rd November, 2022.

2 Secretary, Ministry of Coal, Shastri Bhawan, New Delhi, w.r.t. D.O. No. CPAM 13020/13/2017 -CPAM dated 6th March, 2023 (Kind Attn.: Shri M. Nagaraju, Additional Secretary and Nominated Authority)

Copy also to: Chairperson, VPA for information and further follow up with Govt. of Andhra Pradesh.



GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT
Letter No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, Dated : 24.03.2023
Computer No : 1218399

From
 The Special Secretary to Government,
 E.F.S. & T.Department,
 A.P.Secretariat, Velagapudi.

To
 The Secretary (Shipping),
 Ministry of Ports, Shipping and Waterways,
 Govt. of India,Parivahan Bhavan,
 Parliament Street, New Delhi-110001.

Sir,

Sub :- EFS&T Dept. - Import of Ammonium Nitrate - Identifying other ports, other than Visakhapatnam Port located away from the habitations for the import of Ammonium Nitrate - Request to reconsider the decision of phasing out import of Ammonium Nitrate through Visakhapatnam Port - Reg.

Ref :- 1. Govt. Lr.No.EFS01-ENV0PEST(CPRO)/22/2020, dt:30.01.2023.
 2. From the Under Secretary to GoI, Ministry of Ports, Shipping and Waterways (Ports Wing), F.No.PD-19017/7/2022-PDV/III, dt :10.03.2023.
 3.From the Chairman, Visakhapatnam Port Authority, Visakhapatnam, Lr.No.ITRA/SHP/FAMN-7232, Dt.02.03.2023.

&&&&

I invite your attention to the communication received from the Under Secretary, Ministry of Ports, Shipping and Water Ways (Ports Wing), Government of India, New Delhi informing that the Ammonium Nitrate imported through Visakhapatnam Port Authority is used by major Coal and Power Producers of the country. The decision of Government of Andhra Pradesh to phase out handling of Ammonium Nitrate through Visakhapatnam Port Authority will be detrimental to the Coal and Fertilizer Industry and will derail the process of mining as well as fertilizer manufacturing, if the supply of cargo is put under uncertainty. Short supply of Ammonium Nitrate will seriously impact production of coal which in turn affects power generation and requested Government of Andhra Pradesh to re-consider the decision of phasing out import of Ammonium Nitrate through Visakhapatnam Port Authority.

2. In the reference 3rd cited, the Chairman, Visakhapatnam Port Trust has also requested to revisit the decision of phasing out Ammonium Nitrate handling through Visakhapatnam Port Authority and consider the feasibility for allowing further appropriate dispensation in such handling for a period of one year or more w.e.f.06-04-2023.

3. In this connection, I am to inform that the State Government after due consideration of all the aspects, have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment. It may not be feasible to consider the request made in the references 2nd and 3rd cited, as the Visakhapatnam Port is located within the Visakhapatnam Municipal Corporation limits and is surrounded by thickly populated habitations. It is once again requested to identify other ports, which are located away from habitations for import of Ammonium Nitrate to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one (1) year as requested vide reference 1st cited.

Yours faithfully,

for Special Secretary to Government

Copy to:-
 The Joint Secretary, Government of India, Ministry of Environment and Forests,
 3rd Floor, Indira Paryavaran Bhavan, Jor Bagh, New Delhi - 110003.
 The Member Secretary, Central Pollution Control Board, Parivesh Bhawan,
 East Arjun Nagar, New Delhi-110032.

(P.T.O)

:: 2 ::

The Member Secretary, A.P. Pollution Control Board, Vijayawada.
The Chairman, Visakhapatnam Port Authority, Visakhapatnam.
The PS to Addl. Secy. to CM.
The PS to M. (Energy, EFS&T, M&G).
The PS to Spl. CS (EFS & T)
SF/SC.

GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT

Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I Dated : 10.08.2023
Computer No: 1218399

- Sub:- E.F.S.&T. Dept. - APPCB - Ammonium Nitrate - Extension of permission upto 05.01.2024 for importing of Ammonium Nitrate through Visakhapatnam Port - Instructions - Reg.
- Ref:- 1.From the MS, APPCB, Lr.No.724/APPCB/HO/UHII/TF/VSP/2022, dt.10.11.2022.
2.Govt.Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt:06.01.2023.
3.Govt.Lr.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I,Dt:30.01.2023.
4.Govt.Lr.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I,Dt:24.03.2023.
5.Govt.Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I,Dt:04.05.2023.
6.From the Chairperson, Visakhapatnam Port Authority (MoP,S & W, GoI), Visakhapatnam, No.ITRA/SHP/FAMN, Letter, dated : 03.07.2023 & 24.07.2023
7.From EWMA, Dhanbad, Jharkhand, Repr. dt.09.07.2023.
8.From Regenes Industries Pvt. Ltd., Secunderabad, Telangana, Repr. dt.09.07.2023.
9.From Special Blasts Ltd., Raipur, Chhattisgarh, Repr. dt.10.07.2023.

&&&

The attention of the Member Secretary, Andhra Pradesh Pollution Control Board, Vijayawada is invited to the references cited and after careful examination of the Committee report, the Government have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment. Further, in the interim period, orders have been issued vide reference 2nd & 5th cited, allowing importing of the Ammonium Nitrate through the Visakhapatnam Port temporarily for a period of 3 months, subject to terms and conditions indicated in reference 2nd cited.

2. In the references 6th to 9th cited, the Chairman, Visakhapatnam Port, the Vice-President, EWMA, and the industries have requested to extend the interim import permission for further period.

3. After careful examination of the matter, the Government hereby extend permission upto 05.01.2024 for importing of Ammonium Nitrate through Visakhapatnam Port, subject to compliance with all the conditions proposed by the Committee and procedures as fully enumerated in the Govt Memo.. dated 06.01.2023 (reference 2nd cited - copy enclosed) by the Visakhapatnam Port Authority and other concerned. The Andhra Pradesh Pollution Control Board shall monitor and ensure that all conditions are complied fully, as directed in the reference 2nd cited. No further extension shall be given in this regard after expiry of the period i.e., 05.01.2024.

4. The Member Secretary, A.P. Pollution Control Board, Vijayawada is requested to take further action accordingly.

Dr.P.V.CHALAPATHI RAO
SPECIAL SECRETARY TO GOVERNMENT

To
The Member Secretary, A.P. Pollution Control Board, Vijayawada.
Copy to:-
The Chairman, Visakhapatnam Port Authority, Visakhapatnam.
The PS to M. (Energy, EFS&T, M&G)
The PS to Spl. CS (EFS&T)
SF/SC.

//FORWARDED::BY ORDER//


SECTION OFFICER

**ANDHRA PRADESH POLLUTION CONTROL BOARD**

Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website:<https://pcb.ap.gov.in/>

**Lr.No.724/APPCB/HO/ECS/TF/VSP/2023****Date: 12/08/2023**

To
The Chairman,
Visakhapatnam Port Trust,
Port Area, Visakhapatnam.

Sir,

Sub.:	APPCB – HO - ECS – Import of Ammonium Nitrate through Visakhapatnam Port (VPT) and storage – Directions – Issued – Reg.
Ref.:	<ol style="list-style-type: none"> 1. Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022, Date. 17.06.2022. 2. Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I dated 20.07.2022. 3. APPCB Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022- dt. 21.07.2022. 4. Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I dated 29.09.2022. 5. APPCB Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-534, Date. 21.10.2022. 6. APPCB Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022, Date. 10.11.2022. 7. Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I dated 24.11.2022. 8. Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-730, dt. 28.11.2022. 9. Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I dated 06.01.2023. 10.Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-842, dt. 06.01.2023. 11.Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I-1 dated 04.05.2023 12.APCB Lr. No. 724/APPCB/HO/ECS/TF/VSP/2023, Dated. 06.05.2023 13.Memo. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I Dated.10.08.2023

The APPCB vide order dated. 01.06.2022 issued directions to M/s. Visakhapatnam Port Trust (VPT) to stop further import of Ammonium Nitrate at Visakhapatnam port, Visakhapatnam under Rule 18 (3(a)) of the MSIHC Rules, 1989, abiding the instructions of GoAP. As per the instructions of the Government issued from time to time (ref. 2nd, 4th, 7th, 9th & 11th), the Board issued directions to VPT temporarily allowing the import of ammonium nitrate with specific conditions (ref.3rd, 5th, 8th, 10th & 12th) for the specified period.

The EFS&T Dept, GoAP on 20.07.2022 constituted a committee to examine the whole issue of import and handling of Ammonium Nitrate at Visakhapatnam port in detail and to submit a report to Government to find a solution. The committee submitted its report on 03.11.2022. The APPCB submitted proposals along with committee report to the Government vide ref. 6th cited.

The Govt. of AP after careful examination of the committee report, issued instructions to APPCB vide ref. 9th cited. Accordingly, the Board issued permission temporarily to the VPT for import of Ammonium Nitrate vide letter dt. 06.01.2023 for the period of three months.

Abiding to the Government instructions in the ref. 11th cited, the APPCB extended the permission temporarily to VPT vide ref.12th cited to import of Ammonium Nitrate through Visakhapatnam port for a period of 3 months w.e.f 06.04.2023 with a condition to ensure compliance with all the recommendations of the Committee and procedures fully enumerated in the Govt. Memo., dated 06.01.2023.

Now, the EFS&T Dept, GoAP vide ref. 13th cited extended the permission up to 05.01.2024 for importing of the Ammonium Nitrate through the Visakhapatnam Port, subject to compliance with all the conditions recommended by the Committee and procedures as fully enumerated in the Govt. Memo., dated 06.01.2023 by the Visakhapatnam Port Authority and other concerned. The A.P. Pollution Control Board to monitor the implementation progress of the conditions stipulated therein to achieve compliance by the VPT, as directed. No further extension shall be given in this regard after expiry of the period i.e., 05.01.2024.

In view of the above, you are hereby informed that the permission to import of Ammonium Nitrate at Visakhapatnam port is extended temporarily for a period upto 05.01.2024 with a condition to ensure compliance by VPT with all the recommendations of the Committee and procedures fully enumerated in the Govt. Memo., dated 06.01.2023. It is also to note that no further extension shall be given in this regard after expiry of the period i.e., 05.01.2024 as per the instructions issued by the Government therein.

B Sreedhar las
MEMBER SECRETARY

Copy to:

1. The District Collector and Magistrate, Visakhapatnam for information and necessary action.
2. The Superintendent of Police, Visakhapatnam for information and necessary action.
3. The CEE, APPCB, Head Office for information and necessary action.
4. The Joint Chief Environmental Engineer, Zonal Office, A.P. Pollution Control Board, Visakhapatnam for information and necessary action.
5. The Environmental Engineer, Regional Office, A.P. Pollution Control Board, Visakhapatnam for information and necessary action.

Annexure-XI

REMINDER

F. No. PD-19017/7/2022-PD-V/III
Government of India
Ministry of Ports, Shipping and Waterways
(Ports Wing)

Transport Bhawan,
1, Parliament Street, New Delhi - 110001
Dated: 1st November, 2023


OFFICE MEMORANDUM

Subject: Import and Handling of Ammonium Nitrate through Visakhapatnam Port-Reg.

The undersigned is directed to refer to this Ministry's letter of even No. dated 14.09.2023 (copy enclosed) on the subject cited above and to say that Government of Andhra Pradesh vide letters No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I dated 15.09.2023 and 12.10.2023 (copy enclosed) have reiterated their decision to phase out import of Ammonium Nitrate through Visakhapatnam Port by 05.01.2024 and requested to identify other Ports for import of Ammonium Nitrate.

2. The concerned Ministries vide OM referred above have also been requested to suitably take up the matter with Government of Andhra Pradesh, APPCB and Ministry of Environment Forest & Climate Change for import of Ammonium Nitrate through Visakhapatnam Port in the interest of industry and relevant stakeholders and simultaneously identify alternate sites for import of Ammonium Nitrate. However, a response to this end is still awaited.

3. Since the deadline set by Government of Andhra Pradesh is fast approaching, it is requested to suitably take up the matter with Government of Andhra Pradesh/ Environment, Forest, Science & Technology Dept / Andhra Pradesh Pollution Control Board, under intimation to this Ministry.


1/11/23
(I.G. Baines)

Under Secretary to the Govt. of India
Tel No.: 011-23724653
E-mail: ig.baines@nic.in

Encl: As above

To,

1. Special Secretary, DPIIT, Vanijya Bhawan, Akbar Road, New Delhi - 110011
2. Additional Secretary, Ministry of Coal, Shastri Bhawan, New Delhi - 110001

Copy to:

1. Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi - 110001
2. Secretary, Department of Fertilizers, Shastri Bhawan, New Delhi - 110001

Copy to: Government of Andhra Pradesh in reference to letters No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I dated 15.09.2023 and 12.10.2023

**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT**

**Letter No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I
Computer No : 1218399**

Dated: 12.10.2023

From
The Special Secretary to Government,
E.F.S. & T. Department,
A.P. Secretariat, Velagapudi.

To
The Chairman,
Visakhapatnam Port Authority,
Visakhapatnam (w.e.).

Sir,

Sub:- E.F.S. & T. Dept. - Restrictions on importing of Ammonium Nitrate through the Visakhapatnam Port - Expeditious action requested - Reg.

Ref:- 1.Govt.Memo.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I,Dt 06.01.2023.
2.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, dated 30.01.2023.
3.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, dated 24.03.2023.
4.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, dated 04.05.2023.
5.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, dated 17.05.2023.
6. From the Chairperson, VPT, Visakhapatnam, Letter dated 29.05.2023.
7.Govt.Lr.No.EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, dated 13.06.2023.
8. From the Chairperson, VPA, Visakhapatnam, letter, dated 23.08.2023.

&&&&

With reference to your letter 8th cited, I enclose herewith a copy of the Letter No.EFS01-ENV0PEST(CRPO)/22/2020-SEC-I, dated 15.09.2023, wherein the Ministry of Ports, Shipping and Water Ways, Government of India was requested to take immediate further action to identify other ports and take immediate necessary action for import of Ammonium Nitrate from other ports and phase out imports of Ammonium Nitrate through the Visakhapatnam port by 05.01.2024.

Yours faithfully,


for Special Secretary To Government

Copy to:-

- The Secretary (Shipping),
Ministry of Ports, Shipping and Waterways, Govt. of India,
Parivahan Bhavan, Parliament Street, New Delhi-110001.
- The Joint Secretary, Government of India, Ministry of Environment, Forest & Climate Change 3rd Floor, Indira Paryavaran Bhavan, Jor Bagh,
New Delhi - 110003.
- The Member Secretary, Central Pollution Control Board, Parivesh Bhawan,
East Arjun Nagar, New Delhi-110032.
- The Member Secretary, A.P. Pollution Control Board, Vijayawada.
- The PS to M. (Energy, EFS&T, M&G).
- The PS to Spl. CS (EFS & T).
- SF/SC.

*DR (M) - cu team
17/10/23*

20/10/23

3/11/23

REMINDER

GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT

Letter No. EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dated : 15.09.2023
Computer No : 1218399

From
The Special Secretary to Government,
Environment, Forests, Science & Technology Department,
Andhra Pradesh Secretariat, Velagapudi.

To
The Secretary (Shipping),
Ministry of Ports, Shipping and Waterways,
Government of India,
Parivahan Bhawan, Parliament Street,
New Delhi -110001.

Sir,

Sub :- E.F.S.&T. Dept. - Import of Ammonium Nitrate - Identifying other ports, other than Visakhapatnam Port located away from the habitations for the import of Ammonium Nitrate - Request to phase out import of Ammonium Nitrate through Visakhapatnam Port - Reminder - Reg.

- Ref :-
1. Govt. Lr. No. EFS01-ENVOPEST(CPRO)/22/2020, dated 30.01.2023.
 2. From the Under Secretary to GoI, Ministry of Ports, Shipping and Waterways (Ports Wing), F.No. PD-19017/7/2022-PDV/III, dated 10.03.2023.
 3. From the Chairman, Visakhapatnam Port Authority, Visakhapatnam, Lr. No. ITRA/SHP/FAMN-7232, dated 02.03.2023.
 4. Govt. Lr. No. EFS01-ENVOPEST(CPRO)/22/2020, dated 24.03.2023.
 5. From the Chairperson, Visakhapatnam Port Authority (MoP, S & W, GoI), Visakhapatnam, No. ITRA/SHP/FAMN, Letter, dated 03.07.2023.
 6. Govt. Memo. No. EFS01-ENVOPEST(CPRO)/22/2020, dt : 10.08.2023.
 7. Govt. Lr. No. EFS01-ENVOPEST(CPRO)/22/2020-1, dt : 10.08.2023.

&&&&

Kind attention is invited to the references cited. As you are aware, the Government of Andhra Pradesh after due consideration of all the aspects, have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment and also requested you to identify other ports, which are located away from habitations for import of Ammonium Nitrate.

2. In this regard, I am to inform that orders have been issued extending permission upto 05.01.2024, (i.e. upto one year) for importing of Ammonium Nitrate through Visakhapatnam Port, subject to compliance with all the conditions proposed by the Committee and procedures as fully enumerated in the Government Memo., dated 06.01.2023 by the Visakhapatnam Port Authority and other concerned. It was also informed to the Visakhapatnam Port Authority and the other concerned that no further extension shall be given after expiry of the one year period i.e., 05.01.2024.

(P.T.O)

3. Therefore, you are requested to take immediate further action to identify other ports and take immediate necessary action for import of Ammonium Nitrate from other ports and phase out imports through the Visakhapatnam Port by 05.01.2024.

4. I request for an early reply in the matter.

Yours faithfully,

for Special Secretary to Government



Copy to :-

The Joint Secretary, Government of India, Ministry of Environment and Forests,
3rd Floor, Indira Paryavaran Bhavan, Jor Bagh, New Delhi - 110003.

The Member Secretary, Central Pollution Control Board, Parivesh Bhawan,
East Arjun Nagar, New Delhi-110032.

The Member Secretary, A.P. Pollution Control Board, Vijayawada.

The Chairman, Visakhapatnam Port Authority, Visakhapatnam.

The PS to Addl. Secy. to CM.

The PS to M. (Energy, EFS&T, M&G).

The PS to Spl. CS (EFS & T)

SF/SC.

Email

Berthing & Working of m.v LADY AYANA carrying 19800MT of Ammonium Nitrate on account of M/s Solar Industries India Ltd- Reg.

Tue, Jan 02, 2024 11:09 AM

1 attachment

From : Sri. B.Ratna Sekher Rao DTM(R-I) <tm.brsr.vpt@gov.in>
Subject : Berthing & Working of m.v LADY AYANA carrying 19800MT of Ammonium Nitrate on account of M/s Solar Industries India Ltd- Reg.
To : Member Secretary APPCB <membersecy@appcb.gov.in>
Cc : Spl CS EFST <splcs_efst@ap.gov.in>, Chairman APPCB <chairman@appcb.gov.in>, Collector Visakhapatnam <collector_vspm@ap.gov.in>, collectorpeshivizag <collectorpeshivizag@gmail.com>, cp <cp@vspc.appolice.gov.in>, cpovsp <cpovsp@gmail.com>, Dr. M. Angamuthu, IAS <chairman.vpt@gov.in>, Durgesh Kumar Dubey <dychairman.vpt@gov.in>, Commandant VPT <vpt-vizag@cisf.gov.in>, m hariya <m.hariya@vpt.shipping.gov.in>, yaajirs <yaajirs@gmail.com>, Sridhar Vadada <vadadasridhar@gmail.com>, admn <admn@eshwarshipping.com>

Member Secretary,
APPCB.

Sir,

Ref 1: APPCB Lr No. 724/APPCB/HO/ECS/TF/VSP/2023, Dt: 12-08-2023.
 2: M/s Eshwar Shipping Services Letter No; Nil, Dt: 28-12-2023.

M/s Eshwar Shipping Services vide letter 2nd cited have informed that the vessel m.v LADY AYANA carrying 19800 MT of Ammonium Nitrate in bags is expected to arrive VPA on or about 04-01-2024 and have accordingly requested for berthing and working of the said vessel in VPA. In this regard, in terms of APPCB permission vide letter 1st cited, the vessel will be handled at a compatible berth in VPA. The following is the importer of the cargo carried by the said vessel.

1) M/s Solar Industries India Limited.

In this regard, it is to mention that VPA had already taken up with APPCB for relaxing the restrictions imposed for handling Ammonium Nitrate beyond 05-01-2024 and since the above vessel is calling at Visakhapatnam Port before the restriction date, the same shall be handled at a compatible berth.

However, in respect of vessels arrived to VPA after 05-01-2024, VPA shall not handle such Ammonium Nitrate vessels without relaxation of restrictions for handling Ammonium Nitrate at Visakhapatnam Port by the Govt. of AP and APPCB.

This is issued with the approval of Competent Authority and for information of APPCB

With Regards,

Traffic Manager
 Traffic Department,
 Visakhapatnam Port Authority.



ANDHRA PRADESH POLLUTION CONTROL BOARD
REGIONAL OFFICE, VISAKHAPATNAM
 D.No.39-33-20/4/1, Madhavadhara Vuda Colony, Visakhapatnam - 530018
 Phone: 0891 -2755356



Lr. No.1452/PCB/RO-VSP/VPA/2024

Date:11.01.2024

To
The Member Secretary,
A.P. Pollution Control Board,
Vijayawada.

Sir,

Sub: APPCB, RO, VSP – Ammonium Nitrate – Berthing of vessel M.V LADY AYANA carrying 19800 MT of Ammonium Nitrate on account of M/s. Solar Industries India Ltd., – Report submitted - Reg.

Ref: 1. Board Office mail dated 11.01.2024.
 2. Lr No.EFS01- ENVOPEST (CPRO)/22/2020-Sec-I, dated 28.01.2021
 3. Lr No.724/APPCB/HO/UH-II/TF/VSP/2022- dt: 01.06.2022.
 4. Inspection of the Board Officials on 09.01.2024.

It is to submit that, Traffic Manager, VPA submitted that M.V LADY AYANA carrying 19853.373 MT of Ammonium Nitrate in bags on account of Solar industries Ltd. is expected to arrive VPA on or about 04.01.2024 and requested for berthing and working of the said vessel in VPA.

The Board Office vide email dated 11.01.2024 directed the Regional Office to submit remarks on the request made by the Traffic Manager, VPA pertaining to unloading of Ammonium Nitrate from the vessel i.e., M.V LADY AYANA.

The Board Officials inspected the Port premises and Ammonium Nitrate handling area on 09.01.2024 and observed that there is no handling of Ammonium Nitrate in the port premises. The Traffic Manager, VPA has informed that One vessel i.e., M.V LADY AYANA carrying 19853.373 MT of Ammonium Nitrate in bags has arrived Visakhapatnam port on 04.01.2024 at 05:00 Hrs to unload Ammonium Nitrate which was received on account of Solar industries Ltd. The vessel arrived into outer harbour of VPA prior to the cut-off date i.e., 05.01.2024 and same was anchored in the outer harbour.

Further it was observed that there is no dedicated berth was allotted for handling of Ammonium Nitrate in VPA. The Traffic Manager, VPA has informed that they are handling Ammonium Nitrate at EQ-3, EQ-4 & EQ-6 berths depending up on the availability at the time of berthing duly following SOPs as recommended by the Committee constituted by the Government. During inspection, it is observed that the said berths EQ-3, EQ-4, EQ-6 are at a distance of 950 m from the nearest habitation.

Further, it is to submit that, vide ref. 2nd cited the Govt. of AP has decided that “No Ammonium Nitrate shall be allowed to stock in the vicinity of residential areas of the Visakhapatnam city and further Vizag Port shall not be allowed import of Ammonium Nitrate into the Visakhapatnam city”.

Vide reference 3rd cited, the Andhra Pradesh Pollution Control Board (APPCB) issued a direction to the Visakhapatnam Port Trust (VPT), Visakhapatnam under the Rule 18 (3(A)) of the Manufacture, Storage and Import of hazardous Chemical Rules, 1989(MSIHC Rules) **“Not to allow import of Ammonium Nitrate into the Visakhapatnam City until further orders”** in the interest of safe guarding public health and Environment.

The Govt. of A.P on 20.07.2022 passed interim directions to the Board to allow handling of Ammonium Nitrate duly following the procedure being followed by the Visakhapatnam Port Authority (VPA) for a period of one month. Accordingly, the APPCB vide letter dated 21.07.2022 accorded permission on 21.07.2022 to VPA for handling Ammonium Nitrate by the railways / lorries for a period of one month.

Further, as per the instructions of the Government, the APPCB issued directions to VPT on 21.10.2022, 28.11.2022, 06.01.2023 and 06.05.2023 for a period upto 3 months w.e.f 06.04.2023 allowing the import of Ammonium Nitrate with specific conditions.

The Govt. further mentioned that **no further extension shall be given in this regard after expiry of the period i.e. 05.01.2024**. Accordingly, the Board vide letter dated 12.08.2023 issued directions to VPT allowing import of Ammonium Nitrate for a period upto 05.01.2024.

In this regard, it is submitted that the Committee meeting held on 09.01.2024 at APPCB, Zonal Office, Visakhapatnam to review and to recommend whether to allow handling of Ammonium Nitrate in VPA or not beyond 05.01.2024.

In view of the above, the request of the Traffic Manger, VPA to unload the Ammonium Nitrate from the said vessel i.e., M.V LADY AYANA may be permitted stipulating a condition that the VPA should strictly follow the SOPs recommended by the Committee to avoid any untoward incidents while handling Ammonium Nitrate as the vessel has already reached outer harbour before 05.01.2024 and as there are no further instructions from the Government on this matter.

Submitted.

Yours faithfully,

G NAGI REDDY

Digitally signed by G NAGI
REDDY
Date: 2024.01.11 18:11:39
+05'30'

ENVIRONMENTAL ENGINEER



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website : <https://pcb.ap.gov.in/>



Lr. No. 724/APPCB/HO/ECS/TF/VSP/2023-

Date:11/01/2024

To
The Chairman,
Visakhapatnam Port Trust,
Port Area, Visakhapatnam.

Sir,

Sub.:APPCB – ECS – Ammonium Nitrate – Import of Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam – Permission issued to VPA for import of Ammonium Nitrate temporarily for the period upto 05.01.2024 – Representation from the Traffic Manager, Traffic Department, VPA – Vessel m.v LADY AYANA carrying 19,800 MT of Ammonium Nitrate in bags arrived to VPA - berthing and working of the vessel carrying Ammonium Nitrate at VPA – Reg.

Ref.: 1. Govt. Memo. No. EFS01-ENVOPEST(CPRO)/22/2020, Dt: 28.01.2021.
2. APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022-, dt.01.06.2022.
3. Govt.Lr.No.EFS01-ENV0PEST(CRPO)/22/2020-SEC-I,Dt. 10.08.2023
4. Lr.No.724/APPCB/HO/ECS/TF/VSP/2023, Dt.12.08.2023
5. Chairperson, VPA letter No. ITRA/SHP/FAMN, Dt. 12.12.2023
6. Traffic manager, VPA letter No. ITRA/SHP/FAMN, Dt. 22.12.2023
7. Lr. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I-1, Dt. 07.12.2023.
8. Lr. No. EFS01-ENV0PEST (CPRO)/22/2020-SEC-I-2, Dt. 07.12.2023.
9. Mail dt. 02.01.2024 from the Traffic Manager, Traffic Department, VPA.
10.RO, Visakhapatnam Letter dt. 11.01.2024.

In accordance to the instructions received from the EFS&T Dept., GoAP vide ref. 3rd cited, the Board vide letter dated 12.08.2023 (ref. 4th cited) issued directions to VPA allowing import of Ammonium Nitrate for a period upto 05.01.2024, subject to compliance with all the conditions recommended by the committee and procedures as fully enumerated in the Govt. Memo. Dated 06.01.2023 to be implemented by Visakhapatnam Port Authority and other concerned. The A.P. Pollution Control Board to monitor the implementation progress of the condition stipulated therein to achieve compliance by the VPT. Further, it was specifically informed that no further extension shall be given in this regard after expiry of the period i.e. 05.01.2024.

The EFS&T Dept., GoAP vide letters dated. 07.12.2023 (ref. 7th & 8th cited) informed to the APPCB to examine the request of the Ministry of Ports, Shipping and Waterways, Gol and representations received from the other stake holders and to offer specific remarks/report to Government on import of Ammonium Nitrate through Visakhapatnam Port.

The matter was referred to the committee constituted by the EFS&T Dept., Govt. of AP vide letter dated. 20.07.2022 to examine the whole issue and to find a Solution pertaining to import of AN in Visakhapatnam Port. The committee report is yet to be received & due for onward appraisal to the Government to take final view in the matter.

Vide ref. 9th cited the Board received mail from the Traffic Manager, Traffic Department, VPA, wherein it was informed that the vessel m.v. LADY AYANA carrying 19800 MT of Ammonium Nitrate in bags on account of M/s. Solar Industries India Ltd., is calling at Visakhapatnam port before the restriction date 05.01.2024 and same shall be handled at compatible berth at Visakhapatnam Port.

The EE, RO, Visakhapatnam vide letter dt. 11.01.2024 informed that the Board Officials inspected the Port premises and Ammonium Nitrate handling area on 09.01.2024 and observed that there is no handling of Ammonium Nitrate in the port premises. The Traffic Manager, VPA has informed that One vessel i.e., M.V LADY AYANA carrying 19853.373 MT of Ammonium Nitrate in bags has arrived Visakhapatnam port on 04.01.2024 at 05:00 Hrs to unload Ammonium Nitrate, which was received on account of Solar industries Ltd. The vessel arrived into outer harbour of VPA prior to the cut-off date i.e., 05.01.2024 and same was anchored in the outer harbour. Further informed that the request of the Traffic Manager, VPA to unload the Ammonium Nitrate from the said vessel i.e., M.V LADY AYANA may be permitted stipulating a condition that the VPA should strictly follow the SOPs recommended by the Committee to avoid any untoward incidents while handling Ammonium Nitrate as the vessel has already reached outer harbour before 05.01.2024 and as there are no further instructions from the Government on this matter.

After careful consideration of the representation from the Traffic Manager, Traffic Department, VPA; recommendations of the EE, RO, Visakhapatnam; arrival of the vessel before 05.01.2024 and considering the environment & safety issues concerned for idling of the AN carrying vessels at outer harbor of Visakhapatnam Port, the Board under the powers vested under Rule 18 (3A) of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 (MSIHC Rules) hereby temporarily permits the Visakhapatnam Port Authority for one time berthing of vessel m.v. LADY AYANA carrying 19800 MT of Ammonium Nitrate in bags on account of M/s. Solar Industries India Ltd., subject to compliance with all the conditions recommended by the committee and procedures as fully enumerated in the Govt. Memo. Dated 06.01.2023 to be implemented by Visakhapatnam Port Authority and other concerned.

You may note that if any further vessels received after this permission, APPCB cannot accord any permissions. Further it is to note that that no further extension shall be given in this regard for import of Ammonium Nitrate through Visakhapatnam Port or berthing of the vessels or any other activities associated with handling of AN at Visakhapatnam Port, till further orders received from the Government.

Yours faithfully,

B Sreedhar Ias
MEMBER SECRETARY

Copy to:

The CEE, APPCB, Head Office, Vijayawada for information.
The JCEE, APPCB, ZO, Visakhapatnam for information.
The EE, APPCB, RO, Visakhapatnam for information and necessary action.

Annexure-XV

**GOVERNMENT OF ANDHRA PRADESH
ENVIRONMENT, FORESTS, SCIENCE & TECHNOLOGY (SEC.I) DEPARTMENT**

Lr.No:EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, (1218399), Dated.04.04.2024

From
The Special Secretary to Government,
E.F.S. & T. Department,
A.P. Secretariat, Velagapudi.

JCEE-E




To
The Secretary to Government (Shipping),
Ministry of Ports, Shipping and Waterways, Government of India,
Parivahan Bhawan, New Delhi (w.e.).

The Secretary to Government,
Ministry of Coal, Government of India,
Shastri Bhawan, New Delhi (w.e.).

The Secretary to Government,
Ministry of Environment, Forest & Climate Change, Government of India,
Indira Paryavaran Bhawan, New Delhi (w.e.).

The Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar, New Delhi-110032 (w.e.).

The Chairperson,
Visakhapatnam Port Authority,
Visakhapatnam (w.e.).

Sir/Madam,

Sub:- EFS&T Department – Ban on importing of Ammonium Nitrate through the Visakhapatnam Port – Communication of Committee Report – Reg.

- Ref:-1.Govt. Memo.No.EFS01-ENV0PEST (CPRO)/22/2020-SEC-I, Dated 06.01.2023.
2.From the Under Secretary, MoPS&W (Ports Wing), GoI, O.M.F.No.PD-19017/7/2022-PD-V/III, dated 01.11.2023 & 29.11.2023.
3. From the Under Secretary to Govt.of India, Ministry of Coal, MPS Section, GoI, New Delhi, File No.MPS-51013/3/2022-MPS(E-351278), dated : 28.12.2023 & 21.02.2024.
4.From the Director (HSMD), MoEF&CC (HSM Division), GoI, New Delhi, F.No.12/83/2020-HSMD, dated 08.01.2024.
5.From the Member Secretary, APPCB, Vijayawada, Lr.No.724/APPCB/HO/ECS/EFS&T/2024-1045, dt: 13.02.2024.
6.From the Under Secretary to Govt.of India, Ministry of Coal, MPS Section, GoI, New Delhi, File No.MPS-51013/3/2022-MPS(E-351278), Reminder dated : 22.03.2024.

&&&&

In the reference 1st cited, the Government of Andhra Pradesh after detailed examination of the issue and as per recommendations made by the Committee which was constituted for this purpose, have decided to phase out import of Ammonium Nitrate through the Visakhapatnam Port within one year in the interest of safeguarding public health, public safety and environment. Accordingly, necessary communication has been sent to the concerned departments of the Government of India, including Visakhapatnam Port Trust, requesting to make alternative arrangements in this regard. The permission of one year period was expired on 05.01.2024.

(P.T.O.)

::2::

2. In the references 2nd to 4th cited, several requests have been received to allow some more period for importing of Ammonium Nitrate through Visakhapatnam Port, to re-consider the decision of the Government of Andhra Pradesh blanket ban on importing of Ammonium Nitrate through Vizag Port as the said decision will impact Coal production in the country which will in turn adversely affect the power generation in India creating multiple issues / problems. The representations / requests were forwarded to the A.P. Pollution Control Board. In turn, the Board referred the representations / requests to the Committee constituted for this purpose for examination and recommendations.

3. The Committee has submitted its report wherein they have stated that the Visakhapatnam Port Authority (VPA) has not prepared any plan of action for shifting Ammonium Nitrate to other ports; No dedicated berth was allocated for dispatch of Ammonium Nitrate; dense population is existing around Visakhapatnam port and any mishap incident result in extreme impact on human habitation inspite of any number of safety measures taken and further observed that the VPA has not complied with earlier recommendations of the committee besides non-compliance to safety Audit conducted by Directorate General of Factory Advice Service & Labour Institutes (DGFASLI), Government of India.

4. I am directed to enclose a copy of the report of the Committee for perusal and necessary further action.

Yours faithfully,

for Special Secretary to Government

Copy to:-

The Member Secretary, A.P. Pollution Control Board, Vijayawada.



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE, GOVT. OF INDIA

BY SPEED POST / Email

CP/36/2024-IPC-I-HO-CPCB-HO 1273

To
The Special Secretary to Government,
Environment, Forest, Science and Technology Department,
A.P. Secretariat,
Velagapudi,
Amaravathi,
Andhra Pradesh

Subject: Ban on importing Ammonium Nitrate through the Vishakhapatnam port – Reg.

This has the reference to your letter dated 04.04.2024 which encloses the report of the committee constituted by the Government of Andhra Pradesh to investigate the safety and environmental issues regarding the import of Ammonium Nitrate and its handling at Visakhapatnam Port Authority.

The aforementioned report highlights that the Visakhapatnam port is located within 1 km of densely populated habitation and in the vicinity of a petroleum refinery. It describes the unpredictably explosive nature of Ammonium Nitrate and the unknown reasons for its explosion.

The aforementioned report also mentions many shortcomings on the part of the Visakhapatnam Port Authority, including non-compliance with the earlier recommendations of the aforementioned committee, apart from the non-compliance mentioned in the DGFASLI safety audit report, absence of proper safety measures, and an emergency action plan, etc.

In view of the above, it is requested you to direct the Visakhapatnam Port Authority to invariably comply with the recommendations of the committee at the earliest in order to avoid any chances of a major accident and consequential environmental damage. Furthermore, it is requested you to direct the Dock Safety Inspectorate Department to submit a report on the adequacy of the safety measures being adopted by the Visakhapatnam Port Authority while handling Ammonium Nitrate.

In this regard, you are requested to take necessary action and submit the compliance report to the Central Pollution Control Board.

Yours faithfully

(Dinabandhu Gouda)
Sc - F & DH- IPC-I

‘परिवेश भवन’ पूर्वी अर्जुन नगर, दिल्ली-110032

Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032

दूरभाष/Tel: 43102030, 22305792, वेबसाइट/Website : www.cpcb.nic.in



ANDHRA PRADESH POLLUTION CONTROL BOARD
Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007.
Website: www.pcb.ap.gov.in

**Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-****Date:19/07/2024.**

To
Director General,
Directorate General Factory Advice Service & Labour Institutes
(DGFASLI),
Ministry of Labour & Employment, Gol
N. S. Mankikar Marg, Sion,
Mumbai - 400022,
Email: fasli@dgfasli.nic.in

Sir,

Sub :	APPCB - Visakhapatnam Port Authority (VPA) - Restrictions on import of Ammonium Nitrate (AN) through Visakhapatnam Port, Visakhapatnam - Committee constituted by GoAP for detailed examination of the issue on import & handling of Ammonium Nitrate at Visakhapatnam Port - Committee report submitted to Ministry of Shipping, Ministry of Coal and other Departments, Gol; CPCB & VPA by GoAP - Opinion of CPCB vide letter dt. 23.04.2024 - Report on adequacy of safety measures by Visakhapatnam Port Authority at Visakhapatnam port, Visakhapatnam for import and handling of Ammonium Nitrate - Requested - Reg.
Ref:	<ol style="list-style-type: none"> 1. APPCB, Lr.No.588/APPCB/HO/UH-II/VSP/2020- 187, Dt. 17.08.2020. 2. Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt.28.01.2021. 3. APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022 -, dt.01.06.2022. 4. Chairman, VPA Lr.No.ITRA/SHP/FMIN, dt. 08.06.2022 & 29.06.2022. 5. Report of safety audit on handling and transportation of AN conducted by DGFASLI (October, 2022). 6. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt. 30.01.2023. 7. Ministry of Ports, Shipping & Waterways, Gol, New Delhi vide letter dt.29.11.2023. 8. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-1, Dt. 07.12.2023. 9. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-2, Dt. 07.12.2023. 10. Ministry of Coal (MPS Section), Gol letters dated. 28.12.2023, 12.01.2024 & 01.02.2024. 11. MoEF & CC, Gol letter dt.08.01.2024 addressed to Ministry of Coal, Gol. 12. APPCB Lr. No. 724/APPCB/HO/ECS/TF/VSP/2023, Dt. 04.01.2024 13. Committee report submitted vide letter dated. 12.02.2024 14. EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I (1218399), Dt. 04.04.2024. 15. CPCB, New Delhi Letter No. CP/36/2024-1PC-1-HO-CPCB-HO/273, Dt.

	<p>23.04.2024</p> <p>16.EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SECI, Dt. 14.05.2024.</p> <p>17.APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-173, Dt:25.06.2024 addressed to the Asst. Director (Safety), Inspectorate of Dock Safety, Visakhapatnam.</p>
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* * *

As per the instructions of the EFS&T Dept. GoAP. vide memos dated 20.07.2022, 9.09.2022, 24.11.2022 & 06.01.2023 issued from time to time, the A.P. Pollution Control Board issued directions to M/s. Visakhapatnam Port Authority (VPA), Visakhapatnam allowing the import of Ammonium Nitrate temporarily with specific conditions on 21.07.2022, 21.10.2022, 28.11.2022 & 06.01.2023 respectively for the specified period.

On further instructions of the Government dt. 10.08.2023, the A.P. Pollution Control Board (Board) issued extension of temporary permission to the VPA for import of Ammonium Nitrate for the period **upto 05.01.2024** with a condition to ensure compliance with all the recommendations of the committee and procedures fully enumerated in the Government Memo dt. 06.01.2023. Further, it was informed to VPA that no further extension shall be given in this regard after expiry of the period i.e., 05.01.2024 as per the instructions issued by the Government therein.

The EFS&T Dept., GoAP vide ref. 8th and 9th cited requested the Board to examine the request of the Ministry of Ports, Shipping and Waterways, Gol and representations received from the other stake holders to reconsider the decision and allow Visakhapatnam Port Authority to continue handling of Ammonium Nitrate beyond 05.01.2024 and to offer specific remarks/report to Government.

The Board vide letter dt. 04.01.2024 (ref. 12th cited) communicated the letters received from various ministries of Gol; representations received from stakeholders to the Committee constituted by the EFS&T Dept., Govt. of AP vide letter dt. 20.07.2022 for detailed examination of the whole issue of import & handling of Ammonium Nitrate at Visakhapatnam Port and to submit detailed report with specific recommendations **within 2 weeks**, to take further course of action at APPCB and Government level.

The Committee comprising with Chief Environmental Engineer, APPCB, Vijayawada; Petroleum and Explosive Safety Organization, Visakhapatnam; Joint Chief Inspector of Factories, Visakhapatnam; Senior Representative of VPT; Representative of Coal India Limited; Representative of EMWA and JCEE, Zonal Office, APPCB, Visakhapatnam (Convener) conducted hybrid meeting on 09.01.2024.

The Committee vide ref. 13th cited submitted observations and recommendations, wherein it was reported that Visakhapatnam Port Authority has not prepared any plan of action for shifting Ammonium Nitrate to other ports; No dedicated berth was allocated for dispatch of Ammonium Nitrate; dense population is existing around Visakhapatnam port and any mishap incident result in extreme impact on human habitation inspite of any number of safety measures taken and further observed that the VPA has not complied with earlier recommendations of the committee besides non-compliance to safety Audit conducted by Directorate General of Factory Advice Service & Labour Institutes

(DGFASLI), Gol. (October, 2022).

Accordingly, the detailed report of the Committee was furnished by GoAP to Ministry of Shipping; Ministry of Coal; Ministry of Environment (MoEF&CC); CPCB & Visakhapatnam Port Authority vide letter dt. 04.04.2024 (ref. 14th cited) to take necessary further action.

Vide ref. 15th cited, the CPCB while communicating its opinion, informed to GoAP to request the Dock Safety Inspectorate Department to submit a report on adequacy of the safety measures being adopted by the Visakhapatnam Port Authority while handling Ammonium Nitrate and to submit compliance report to CPCB (copy enclosed).

Vide ref 17th cited, the Board requested the Asst. Director (Safety), Inspectorate Dock Safety, Visakhapatnam to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion for taking further action in the matter (Copy enclosed). However the letter addressed to the Inspectorate Dock Safety, Visakhapatnam was returned back to the Board stating that there is no such person & the office is closed since long time.

In view of the above, it is requested to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report (copy enclosed) and CPCB opinion, to take further action in the matter.

Encl: 1) Committee report dt. 12.02.2024
2) CPCB letter dt. 23.04.2024.
3) Copy of letter addressed Inspector of Dock Safety, Visakhapatnam.

B Sreedhar Ias
MEMBER SECRETARY

Copy to:

1. Special Secretary to Govt., EFS&T Dept., A.P. Secretariat, Velagapudi, Amaravathi for information.
2. Chairperson, Visakhapatnam Port Authority, Visakhapatnam for information.
3. CEE, APPCB, Head Office, Vijayawada for information.
4. JCEE, APPCB, ZO, Visakhapatnam for information. He is requested to pursue the matter with concerned authorities to furnish the report at an early date.



ANDHRA PRADESH POLLUTION CONTROL BOARD
Dr. YSR Paryavaran Bhavan, APIIC Colony Road,
Gurunanak Colony, Autonagar, Vijayawada- 520007
Phone. No.0866-2463200, Website : <https://pcb.ap.gov.in/>



Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-

Date:14/08/2024.

**To
The Chairperson,
Visakhapatnam Port Trust,
Port Area, Visakhapatnam.**

Sir,

Sub.:APPCB – Visakhapatnam Port Authority (VPA) – Restrictions on import of Ammonium Nitrate (AN) through Visakhapatnam Port, Visakhapatnam – Report of the Committee constituted by GoAP communicated – CPCB instructions – Requested Inspectorate of Dock Safety, Visakhapatnam to furnish report on adequacy of the safety measures while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam - Representation received from VPA on 03.07.2024 - Reg.

- Ref.:
1. APPCB, Lr.No.588/APPCB/HO/UH-II/VSP/2020- 187, Dt. 17.08.2020.
 2. Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt.28.01.2021.
 3. APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022 -, dt.01.06.2022.
 4. Chairman, Visakhapatnam Port Lr.No.ITRA/SHP/FMIN, dt. 08.06.2022 & 29.06.2022.
 5. Report of safety audit on handling and transportation of AN conducted by DGFASLI (October, 2022).
 6. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt. 30.01.2023.
 7. Ministry of Ports, Shipping & Waterways, Gol, New Delhi vide letter dt.29.11.2023.
 8. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-1, Dt. 07.12.2023.
 9. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-2, Dt. 07.12.2023.
 - 10.Ministry of Coal (MPS Section), Gol letters dated. 28.12.2023, 12.01.2024 & 01.02.2024.
 - 11.MoEF & CC, Gol letter dt.08.01.2024 addressed to Ministry of Coal, Gol.
 - 12.APCB Lr. No. 724/APPCB/HO/ECS/TF/VSP/2023, Dt. 04.01.2024
 - 13.Committee report submitted vide letter dated. 12.02.2024
 - 14.EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I (1218399), Dt. 04.04.2024.
 - 15.CPCB, New Delhi Letter No. CP/36/2024-1PC-1-HO-CPCB-HO/273, Dt. 23.04.2024
 - 16.EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, Dt. 14.05.2024.
 - 17.Chairperson, VPA letter dt. 12.05.2024.
 - 18.Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-173, Dt. 25.06.2024 addressed to Inspectorate of Dock Safety, Visakhapatnam.
 - 19.Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-174, Dt. 25.06.2024, addressed to Chairman, VPA, Visakhapatnam.

- 20.Ministry of Coal (MPS Section), Lr.No. CPAM-43020/29/2023-CPIAM(E-357432), Dt:25.06.2024.
- 21.Chairperson, VPA letter dt. 24.06.2024 & 03.07.2024
- 22.APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024, Dt: 19.07.2024 to the Director General, DGFSLAI, Mumbai
- 23.Chairperson, VPA, Visakhapatnam Lr.No. ITRA/SHP/FAMN, Dt: 30.07.2024
- 24.APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024, Dt: 14/08/2024 to the Director General, DGFSLAI, Mumbai

The APPCB is in receipt of letters dt. 24.06.2024 & 03.07.2024 from Visakhapatnam Port Authority (VPA), Visakhapatnam, wherein it was reported that VPA had stringently followed and implemented the mandated procedure of APPCB by unloading the imported Ammonium Nitrate in bags from Ship onto the wharf subsequent loading onto container / trucks for onward transportation to final destination through container trains / road ways; identified EQ-3, EQ-4, EQ-6 to EQ-7 for handling of import of Ammonium Nitrate and earmarked for safe discharge cargo from ship as well as quick evacuation of cargo from wharf for subsequent loading onto containers / trucks for onward transportation to the final destination without storing AN in the Port or godowns in and around the Port. Further, requested to relax the restrictions imposed by the GoAP and APPCB in import and handling of Ammonium Nitrate to consider for a further period beyond 05.01.2024.

In this regard, it is to inform that the CPCB (vide letter dt. 23.04.2024) while communicating its opinion to GoAP, informed to direct the VPA to invariably comply with the recommendations of the committee at the earliest in order to avoid any chances of a major accident and consequential environmental damage. Further informed to request the Dock Safety Inspectorate Department to submit a report on the adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate.

Upon receipt of the above communication of CPCB from GoAP vide letter dt: 14.05.2024, the Board vide letter dt. 25.06.2024 (18th cited) requested the Asst. Director (Safety), Inspectorate Dock Safety, Visakhapatnam to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion for taking further action in the matter (Copy enclosed). The JCEE, APPCB, ZO, Visakhapatnam was informed to pursue the matter with concerned authority to furnish the report at an early date. However, the letter addressed to the Inspectorate Dock Safety, Visakhapatnam was returned back to the Board stating that there is no such person & the office is closed since long time.

Thus, the APPCB vide ref. 22nd cited requested the Director General, DGFASLI, Mumbai to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action in the matter (copy enclosed). The report is awaited.

The Chairperson, Visakhapatnam Port Authority, Visakhapatnam vide ref. 23rd cited once again represented to the Board along with remarks on the observations/recommendations of the committee, for relaxation in restrictions imposed by GoAP and APPCB in import and handling of Ammonium Nitrate for a further period beyond 05.01.2024 to continuously handle the consignments of Ammonium Nitrate at VPA (copy enclosed).

In view of the above, the APPCB once again requested the Director General, DGFASLI vide ref. 24th cited to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action at Government level and APPCB in the matter (copy enclosed).

In this regard, the Chairperson, Visakhapatnam Port Authority, Visakhapatnam is requested to pursue the matter with the Director General, Factory Advice Service & Labour Institutes (DGFASLI), Mumbai to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date for taking further action at Government level and APPCB in the matter.

Encl.: a/a.

Yours sincerely

B Sreedhar Ias
MEMBER SECRETARY

Copy to –

1. CEE, APPCB, Head Office, Vijayawada for information.
2. JCEE, APPCB, ZO, Visakhapatnam for information.
3. EE, APPCB, RO, Visakhapatnam for information and necessary action.



भारत सरकार, श्रम एवं रोजगार मंत्रालय
कारखाना सलाह सेवा और श्रम संस्थान महानिदेशालय
GOVERNMENT OF INDIA, MINISTRY OF LABOUR & EMPLOYMENT.
DIRECTORATE GENERAL FACTORY ADVICE SERVICE & LABOUR INSTITUTES
“व्यावसायिक सुरक्षा और स्वास्थ्य भवन”, एन.एस. मंकीकर मार्ग, सीव, मुंबई - ४०० ०२२, भारत
“Vyavasayik Suraksha aur Swasthya Bhavan”, N.S. Mankikar Marg, Sion, Mumbai - 400 022, India.

No. DS-Enf/2/2023-HQ-Mum

Date: 09.09.2024

To
Shri B. Sreedhar, IAS
Member Secretary
Andhra Pradesh Pollution Control Board.
Vijaywada - 520007

Subject: Report on adequacy of safety measures by Visakhapatnam Port Authority at Visakhapatnam port, Visakhapatnam for import and handling of Ammonium Nitrate –Reg.

Sir,

This has reference letter no. 724/APPCB/HO/ECS/EFS&T/2024 dated 25.06.2024 received from the Member Secretary, Andhra Pradesh Pollution Control Board.

In this regard, a committee was constituted by the Chief Inspector of Dock Safety to furnish detailed report on **“Adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam.”**

A detailed report as submitted by the committee is enclosed herewith for your information, please.

Signed by Sumit Roy

Date: 09-09-2024 12:33:48

Reason: Approved

(Sumit Roy)
Chief Inspector of Dock Safety

Encl: As Above

Report
on
Adequacy of Safety Measures by
Visakhapatnam Port Authority
at Visakhapatnam Port for Import and Handling of
Ammonium Nitrate

Directorate General, Factory Advice Service and Labour
Institutes, Mumbai
Ministry of Labour & Employment
Government of India

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PREAMBLE

Ammonium nitrate is a widely manufactured and utilized chemical globally, with significant production in the fertilizer and explosives industries, typically split approximately 60% for fertilizers and 40% for explosives. It is the primary component in most commercial bulk explosives, making its presence common in mining, quarrying sites, and at bulk explosives manufacturing facilities. Additionally, some ammonium nitrate stores are operated by transport contractors. These storage facilities vary in size, from a few tens of tonnes to hundreds or even thousands of tonnes.

The properties and hazards associated with ammonium nitrate are outlined in Appendix B. While pure ammonium nitrate is not explosive by itself, it can become explosive when mixed with even a small amount of fuel or contaminants. It has been involved in several accidental explosions. Although ammonium nitrate is not combustible and does not burn, it acts as an oxidizing agent, facilitating the combustion of other materials and supporting fires even in the absence of air. Fires involving ammonium nitrate cannot be extinguished simply by removing oxygen due to the provision of oxygen from the ammonium nitrate itself.

Most accidental explosions involving ammonium nitrate have occurred as a result of prolonged fires that have engulfed the material extensively. Consequently, many of the requirements outlined in this and other ammonium nitrate safety codes are focused on controlling fire risks to prevent explosions.

In the context of this document, the abbreviation "AN" refers specifically to solid ammonium nitrate classified as Division 5.1 – oxidizing substances, and tested and classified under United Nations numbers UN 1942 or UN 2067, as specified in the most recent editions of Indian regulations and guidelines. While ammonium nitrate used in the explosives industry is generally classified under UN 1942, it is important to note that some international manufacturers still produce ammonium nitrate grades suitable for explosives under UN 2067.

1. Introduction

1.1 Ammonium Nitrate

1.1.1 Classification

The classification of dangerous goods, including ammonium nitrate, follows guidelines established by the United Nations in their "Recommendations on the Transport of Dangerous Goods Model Regulations" and the associated "Manual of Tests and Criteria." This classification framework, primarily used for transport, also provides valuable insights into the behavior of materials during storage and handling.

For ammonium nitrate to be classified under UN 1942 or UN 2067 within Division 5.1 (oxidizing substances), the substance must meet the following criteria:

- It must contain no more than 0.2% combustible substances, including any organic material calculated as carbon. This requirement excludes any other added substances. (Refer to Appendix H, Reference 6 for acceptable test methods.)
- It must pass UN Test Series 2 as outlined in the UN Manual of Tests and Criteria.

UN Test Series 2 evaluates the material's safety characteristics, specifically:

- **Insensitivity to Shock:** The material must not react dangerously to mechanical impact or shock.
- **Insensitivity to Heating under Confinement:** The material must not react dangerously when subjected to heat in a confined space.
- **Insensitivity to Ignition under Confinement:** The material must not ignite or react dangerously when exposed to ignition sources under confinement.

1.1.2 Properties

Ammonium nitrate (NH_4NO_3) is a white, odorless salt with a melting point of approximately 170°C . It is highly soluble in water and has a tendency to absorb moisture from the atmosphere. If exposed to high humidity, ammonium nitrate can attract sufficient moisture to dissolve into an aqueous solution. Both the solution and solid form of ammonium nitrate are corrosive, necessitating the use of specialized coatings to protect structures such as concrete, steel, and galvanized steel from deterioration.

Ammonium nitrate exists in five distinct stable crystalline forms, which vary depending on the temperature. Cycling through heat, especially around 32°C , can cause the crystalline structure to break down, resulting in the generation of fines or ammonium nitrate dust. This breakdown, combined with the substance's moisture-absorbing properties, can lead to "caking," where ammonium nitrate granules or prills clump together. In severe cases, this caking can result in an entire container or bin becoming a solid mass, complicating handling and processing. Various mechanical means are often required to break up these clumps. Additionally, caking can impact the quality of ammonium nitrate, especially when precise quantities are needed for blending or processing into explosives. Preventive measures include protecting ammonium nitrate from temperature fluctuations and moisture, as well as ensuring rapid stock turnover.

While ammonium nitrate is not combustible and does not burn by itself, it acts as an oxidizing agent. This means it can facilitate the ignition of fires and support the combustion of other materials, even in the absence of air. Fires involving ammonium nitrate cannot be extinguished by removing oxygen, due to the oxygen supplied by the ammonium nitrate itself. Water is the most effective firefighting method for ammonium nitrate fires; attempts to use dry chemicals, carbon dioxide, or foam extinguishers are generally ineffective.

When heated, ammonium nitrate decomposes and releases toxic gases. In an open and unconfined environment, it decomposes steadily to produce nitrous oxide (N_2O), ammonia (NH_3), and nitric acid (HNO_3), along with white fumes and vapors. However, if heated

excessively, especially in confined or contaminated spaces, the decomposition can accelerate, producing additional gases such as toxic nitrogen dioxide (NO₂). This can lead to a rise in temperature and, in extreme cases, result in a detonation.

1.2 Explosion Hazards Associated with Ammonium Nitrate

1.2.1 General

Without proper control measures, ammonium nitrate (AN) poses several risks, including:

1. Explosion Risks:

- **Fire:** AN can detonate if exposed to intense heat or flames, particularly when contaminated or confined.
 - **Contamination:** The presence of contaminants can increase the risk of detonation, especially under conditions of confinement.
 - **Shock:** High-energy impacts, such as from projectiles or severe mechanical stress, can trigger explosions.
2. **Toxic Fumes Release:** Fires involving AN can release hazardous fumes, including toxic gases.
3. **Environmental Impact:** Explosions or fires involving AN can have significant environmental consequences.

The primary concern is the risk of explosion triggered by fire, contamination, or shock. While malicious actions could theoretically cause an explosion, they would generally rely on one of these primary mechanisms.

Under normal ambient conditions, pure AN is challenging to detonate. Common potential ignition sources like flames, sparks, or friction are not known to cause detonation. However, the addition of high explosives can initiate an explosion of AN, and explosives should never be used to break up caked AN. Similarly, while a rifle bullet cannot initiate AN under standard

conditions, molten AN has a heightened sensitivity to shock and may detonate under severe mechanical impact.

AN can explode if subjected to sufficient heating, particularly when contaminated and confined. Under such conditions, temperatures can rise above 300°C, releasing toxic nitrogen dioxide (NO₂) and leading to self-accelerating reactions that can result in detonation. In fire scenarios, molten AN can pool and, if confined (in drains, pipes, or machinery) and contaminated, could explode. Historical incidents have demonstrated that fires involving AN can result in explosions, although many fires involving AN have not led to explosions.

AN dust, being non-combustible, does not pose the same explosion hazard as organic dusts such as grain or flour. Historical data on significant AN explosions, detailed in Appendix F, reveals that many lessons have been learned from past events. For instance, using explosives to break up caked AN and applying wax coatings to AN prills have been discontinued. It is now widely recognized that fire engulfment, especially when combined with contamination, is the most common cause of accidental AN explosions.

The Toulouse explosion in September 2001, attributed to chemical contamination without associated fire, highlighted the potential for contamination to initiate AN explosions. This event reinforced the need to consider contamination as a serious risk factor in the management of solid AN.

1.2.2 Explosion Hazard at AN Stores

Ammonium nitrate (AN) undergoes various phases throughout its lifecycle, including manufacture, transport, storage, and use. Among these, storage is generally considered the most controlled and least hazardous phase. In contrast, manufacturing involves higher temperatures and pressures, and has the potential for shock initiation and exposure to contaminants. During transport and use, additional variables, such as the presence of incompatible materials or fuels,

can influence risk levels, as evidenced by incidents like the Tianjin explosion, where nearby fires and explosions contributed to the disaster.

Despite these factors, AN, as demonstrated by its performance in UN Test Series 2, is highly resistant to overheating and shock, making it difficult to initiate. For AN storage facilities, the likelihood of an explosion triggered by shock or chemical contamination is extremely low, if not negligible. The primary risk factor remains fire, which can cause AN to explode under certain conditions.

To mitigate the risk of fire and subsequent explosions, it is crucial to eliminate or minimize potential fuel sources (e.g., combustibles) around the storage site. Properly designed, constructed, and maintained AN storage facilities and transfer equipment are essential in reducing fire risk. Additionally, comprehensive training for personnel involved in handling AN is vital for maintaining safety standards.

Historical data from incidents such as the Taroom and Angellala Creek explosions indicates that Explosions typically occur 20 to 30 minutes after a fire starts, with the average delay being around 60 to 70 minutes. These incidents demonstrate that while AN explosions are unlikely to occur immediately after a fire begins, significant delays can lead to catastrophic outcomes if safety measures are not strictly adhered to.

1.2.3 Other Hazards Associated with Ammonium Nitrate

The predominant hazard linked to ammonium nitrate (AN) is the risk of explosion. However, AN can also present other significant danger. When exposed to high temperatures or fire, AN has the potential to decompose and release toxic fumes, posing health risks to individuals and potential contamination to the environment. This decomposition can produce hazardous gases, which can have severe implications if not properly managed.

In addition to explosion and toxic fumes, AN can contribute to environmental harm through ground or water contamination. Although the primary focus of safety regulations and practices

is to mitigate and prevent explosions, the guidelines and measures outlined in this Code are also designed to address and manage the risks associated with toxic fume release. By adhering to these requirements, it is possible to effectively manage and reduce both explosion hazards and the risks of toxic emissions, thus protecting both human health and the environment.

1.2.4 Evacuation

In the event of a significant fire involving ammonium nitrate (AN), where the fire is judged to be uncontrollable or is engulfing AN, evacuation becomes mandatory. All personnel, including firefighters and emergency response teams, must promptly move to a safe distance to avoid potential harm from an explosion. The presence of toxic brown nitrogen dioxide is a critical indicator that the fire has escalated beyond control, necessitating immediate evacuation.

The evacuation procedures for both on-site and off-site individuals in the event of a major fire involving AN must be thoroughly documented in the site's emergency response plan. This plan should outline a clear process for alerting people, ensuring their swift evacuation, and preventing re-entry into the evacuated area.

An explosion resulting from a fire is typically a “With-Warning” explosion, where the fire's presence provides a warning prior to the explosion. In such cases, evacuation measures can significantly mitigate the potential consequences. Even a partial evacuation can substantially reduce risk and enhance safety in these situations.

2. Major Ammonium nitrate (AN) Storage Explosions

Place & Date	Deaths	Event / Storage Description	Cause of Incident
Toulouse, France (Nov 2001)	31	Explosion believed to be caused by contamination. The warehouse stored out-of-specification AN for recycling. The estimated explosion was equivalent to 20-40 tonnes of TNT, with approx. 400 tonnes of AN present.	Contamination of AN, leading to an explosive reaction.
Saint-Romain-en-Jarez, France (Oct 2003)	0	Fire then explosion in a farm barn containing ~3 tonnes of AN plus multiple fuels and combustibles. Estimated explosion equivalent to 80 to 160 kg of TNT.	Fire combined with the presence of fuels and combustibles, leading to an explosion.
West, Texas, US (Apr 2013)	15	Fire then explosion at a fertiliser and rural supply business with approx. 30 tonnes of AN stored in wooden bins.	Fire involving AN stored in wooden bins, which led to an explosion.
Port of Tianjin, China (Aug 2015)	173	Large fire (of Nitrocellulose) at a hazardous goods warehouse operated by a logistics company. AN was adjacent to the fire and exploded. Approx. 800 tonnes of AN were involved.	Large fire involving Nitrocellulose near AN storage, leading to an explosion of the AN.

Beirut, Lebanon (Aug 2020)	218	Large fire then explosion. Reportedly 2750 tonnes of AN were present, stored at the docks after being impounded from a ship. The site had poor housekeeping and co-stored a large quantity of fireworks plus various fuels and combustibles.	Fire combined with poor housekeeping and the presence of fireworks and combustibles, leading to an explosion.
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2.1 Potential Hazards associated with the Handling, Storage and Transport of Ammonium nitrate

Activity	Hazard	Description	Technical Properties	Safety Measures	Relevant Guidelines/Standards	Medical Aspects
Handling	Explosion Risk	Ammonium nitrate can explode under certain conditions, such as exposure to high heat, shock, or contamination with incompatible materials.	Explodes at temperatures above 170°C (338°F). Decomposition can occur at lower temperatures if contaminated with other materials.	Maintain temperature below 50°C (122°F) in storage and handling areas. Avoid contamination with incompatible substances like fuels and organic materials. Use explosion-proof equipment and containers.	IS 4666:1980 (Safety in the Storage and Handling of Ammonium Nitrate), IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers), NFPA 400 (Hazardous Materials Code), OSHA regulations	Can cause thermal burns and respiratory issues if inhaled during an explosion; requires immediate medical attention and decontamination.
Handling	Chemical Reactions	Reacts violently with combustible materials or acids, leading	Highly reactive when mixed with fuels, acids, or other reducing	Store separately from combustible materials and acids.	NFPA 400 (Hazardous Materials Code), UN Recommendations on the Transport of Dangerous Goods, IS	Skin contact with acidified ammonium nitrate can cause irritation or

		to hazardous situations.	agents. Decomposition accelerates under acidic conditions or when mixed with organic materials.	Implement strict controls on material compatibility. Use dedicated tools and equipment to avoid cross-contamination.	14414:1997 (Code of Safety for Nitrogenous Fertilizers)	burns; wash immediately with plenty of water.
Handling	Dust Explosions	Fine ammonium nitrate dust can create an explosive atmosphere if dispersed in the air and exposed to an ignition source.	Dust particles can ignite if exposed to friction, static electricity, or an open flame in concentrations of 15-40 g/m³ in air.	Use dust suppression systems like water sprays or ventilation. Ensure proper grounding and bonding of equipment to prevent static buildup. Conduct regular cleaning to prevent dust accumulation.	IS 3816:2000 (Safety Code for Handling and Storage of Ammonium Nitrate), IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers), ATEX directives on explosive atmospheres	Inhalation of dust may cause respiratory irritation and coughing; provide fresh air and seek medical attention if symptoms persist.
Handling	Static Electricity	Static discharge during handling can ignite ammonium nitrate dust or vapors from nearby flammable materials.	Static-sensitive; even small discharges can initiate an explosion in the presence of ammonium nitrate dust.	Ground all equipment and personnel. Use anti-static clothing and footwear. Implement static discharge monitoring and control systems.	NFPA 77 (Recommended Practice on Static Electricity), IS 15584:2005 (Guidelines for Static Electricity in the Chemical Industry)	Exposure to ignited ammonium nitrate can cause burns and inhalation of fumes; administer oxygen and seek immediate medical help.
Handling	Manual Handling Injuries	Heavy bags or containers can	Typically stored in 50 kg bags ; manual	Use mechanical aids such as forklifts and	Occupational Safety and Health Standards (OSHA) guidelines on	Can lead to musculoskeletal injuries; ensure

		cause lifting injuries or falls.	handling should be minimized to prevent injuries.	pallet jacks. Train workers in proper lifting techniques. Maintain clear pathways and workspaces to prevent slips, trips, and falls.	manual lifting and handling, Indian Factories Act, 1948	immediate rest and apply first aid as needed for strains or sprains.
Storage	Decomposition	Over time, ammonium nitrate can decompose, especially if stored improperly, releasing toxic gases.	Decomposes slowly in storage, but more rapidly above 50°C (122°F) or in the presence of impurities like chlorides or metal oxides .	Store in cool, dry, well-ventilated areas away from direct sunlight. Regularly inspect storage for signs of decomposition or contamination. Use compatible storage containers to prevent contamination.	IS 4666:1980 (Safety in the Storage and Handling of Ammonium Nitrate), IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers), NFPA 400 (Hazardous Materials Code)	Exposure to decomposition gases can cause respiratory distress; provide fresh air and seek medical attention immediately.
Storage	Containment Breach	Spills or leaks can occur, leading to environmental contamination and potential chemical hazards.	Hygroscopic; absorbs moisture from the air, which can lead to liquefaction or caking, complicating containment and cleanup.	Store in sealed, moisture-resistant containers. Use spill containment measures like dikes and spill kits. Train personnel in spill response and cleanup procedures.	OSHA Spill Prevention, Control, and Countermeasure (SPCC) requirements, EPA guidelines on hazardous material spills, IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers)	Can cause skin irritation upon contact; wash with plenty of water and remove contaminated clothing.

Storage	Incompatible Storage	Storing ammonium nitrate near incompatible materials (e.g., fuels, organic materials, acids) can lead to hazardous chemical reactions.	Must be stored away from materials like diesel fuel, wood, sulfur, and metal powders to prevent unintended reactions.	Implement segregation in storage areas with physical barriers. Clearly label storage areas with hazard warnings. Conduct regular safety audits to ensure compliance with storage guidelines.	NFPA 400 (Hazardous Materials Code), Indian Explosives Act, 1884, IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers)	Ingestion can cause severe abdominal pain and vomiting; seek immediate medical help and avoid inducing vomiting.
Storage	Moisture Absorption and Caking	Ammonium nitrate is hygroscopic and absorbs moisture, leading to caking and possible contamination, which can affect its stability and safety.	Begins absorbing moisture at relative humidity levels above 60% . Caking occurs at lower humidity in confined spaces or over time.	Store in a controlled environment with dehumidifiers or moisture barriers. Use anti-caking agents if necessary. Regularly check for moisture ingress and maintain dry storage conditions.	IS 3816:2000 (Safety Code for Handling and Storage of Ammonium Nitrate), IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers), Fertilizer Industry Operational Standards	May cause skin irritation if moist; wash affected area thoroughly with soap and water.
Transport	Accidental Release or Spills	Leaks during transport can result in environmental contamination and hazardous	Stability during transport depends on maintaining temperatures below 30°C (86°F) and avoiding direct	Secure loads properly to prevent shifting during transit. Use containers designed for hazardous materials	UN Recommendations on the Transport of Dangerous Goods, Motor Vehicle Act, India (specific regulations for hazardous materials transport), IS	Inhalation of fumes from spilled material can cause dizziness; move to fresh air and seek medical attention if

		chemical reactions.	sunlight or mechanical impact.	transport. Equip vehicles with spill response kits and fire extinguishers.	14414:1997 (Code of Safety for Nitrogenous Fertilizers)	symptoms worsen.
Transport	Road Accidents	Vehicle accidents during transport can lead to spills, fires, or explosions, especially in congested or hazardous areas.	Vehicles must be capable of maintaining a controlled environment, avoiding shocks, and handling loads of up to 25 tons of ammonium nitrate.	Use trained and certified drivers for hazardous materials. Plan routes to minimize travel through densely populated or high-traffic areas. Ensure vehicles have proper signage and emergency contact information.	ADR Agreement (European Agreement concerning the International Carriage of Dangerous Goods by Road), Indian Explosives Act, 1884 , IS 14414:1997 (Code of Safety for Nitrogenous Fertilizers)	Injuries from accidents can be severe; follow first aid guidelines and seek emergency medical services.
Transport	Vehicle Fire	Fire risk if ammonium nitrate comes into contact with flammable materials during transport.	Ammonium nitrate may accelerate burning and increase intensity of a fire; fire can be exacerbated above 200°C (392°F) when exposed to fuels or other combustibles.	Equip vehicles with fire extinguishers and emergency response plans. Avoid transporting with other flammable or reactive substances. Conduct regular vehicle maintenance and checks for leaks or faults.	NFPA 400 (Hazardous Materials Code), Bureau of Indian Standards (BIS) IS 14414:1997 , Motor Vehicle Act, India	Burns from fires require immediate medical attention; administer first aid and transport to a hospital as necessary.

Transport	Security Threats	Risk of theft or misuse during transport due to the explosive potential of ammonium nitrate.	Classified as a Class 5.1 oxidizing agent under international transport guidelines, requiring strict security protocols.	Implement GPS tracking on vehicles transporting ammonium nitrate. Use tamper-evident seals on containers. Conduct regular security checks and maintain strict inventory controls.	UN Recommendations on the Transport of Dangerous Goods, Bureau of Indian Standards (BIS) IS 14414:1997	Ensure awareness and training for emergency responders to handle potential security breaches involving hazardous materials.
Dock Handling	Mechanical Equipment Hazards	Use of forklifts, cranes, and other equipment can lead to accidents if not operated safely, especially in a dock environment.	Handling equipment must be non-sparking and designed to prevent impact or abrasion of ammonium nitrate.	Train operators on safe handling techniques for hazardous materials. Use equipment designed for explosive environments (ATEX-rated). Maintain safe distances between equipment operations and ammonium nitrate storage.	OSHA guidelines for material handling equipment, Indian Dock Workers (Safety, Health, and Welfare) Regulations, 1990	Injuries from mechanical handling accidents may require immediate first aid and medical evaluation.
Dock Handling	Dockside Safety	Increased risk of accidents due to heavy machinery and congested space at the dock.	Dockside operations should include controlled loading zones and clear traffic management to handle	Implement safety barriers and signage to demarcate hazardous zones. Ensure all personnel wear appropriate	Indian Dock Workers (Safety, Health, and Welfare) Regulations, 1990, International Maritime Dangerous Goods (IMDG) Code, Bureau of Indian	Monitor workers for signs of heat stress or fatigue due to heavy machinery operations and provide medical

			ammonium nitrate safely.	personal protective equipment (PPE). Conduct regular safety drills and emergency response training.	Standards (BIS) IS 14414:1997	support as needed.
Dock Storage	Fire Hazard from Nearby Operations	Nearby industrial activities increase the risk of fire spreading to ammonium nitrate storage areas.	Storage areas must be at least 50 meters from active industrial operations and sources of ignition, with fire suppression systems in place.	Install automatic fire suppression systems in storage areas. Maintain a buffer zone between ammonium nitrate and other operations. Conduct regular fire risk assessments and update safety plans accordingly.	NFPA 400 (Hazardous Materials Code), Indian National Building Code (NBC) for fire safety requirements, Bureau of Indian Standards (BIS) IS 14414:1997	Burns from fire incidents require immediate medical intervention and possible transfer to specialized burn units.
Dock Storage	Ventilation and Heat Management	Poor ventilation and heat buildup in storage areas can lead to potentially explosive conditions.	Adequate ventilation is required to prevent accumulation of heat and fumes, especially above 25°C (77°F) to avoid thermal decomposition.	Ensure proper ventilation in storage areas to disperse heat and fumes. Use heat-resistant materials for storage buildings. Monitor temperature and humidity regularly and	NFPA 400 (Hazardous Materials Code), IS 15683:2018 (Portable Fire Extinguishers for Fire Prevention), Bureau of Indian Standards (BIS) IS 14414:1997	Heat exhaustion or inhalation of gases requires immediate cooling, hydration, and medical assessment.

				take corrective actions if necessary.		
Dock Storage	Environmental Impact from Weather Conditions	Extreme weather conditions (e.g., humidity, high temperatures) can affect ammonium nitrate's stability, leading to degradation or leaks.	Storage conditions must be controlled to prevent moisture ingress, with temperatures maintained below 30°C (86°F) to avoid instability.	Use climate-controlled storage solutions for ammonium nitrate. Install weatherproofing materials to protect against rain and humidity. Conduct periodic environmental assessments to ensure compliance with safety standards.	Indian Standard IS 3816-2000, International Maritime Dangerous Goods (IMDG) Code, Bureau of Indian Standards (BIS) IS 14414:1997	Prolonged exposure to extreme conditions can lead to heat stroke or dehydration; provide adequate rest and hydration breaks.
Storage and Handling	Corrosion of Containers and Equipment	Prolonged exposure to ammonium nitrate can cause corrosion, leading to leaks or structural failures of containers and handling equipment.	Containers and equipment should be made of corrosion-resistant materials to prevent degradation from exposure to ammonium nitrate.	Use corrosion-resistant materials for all storage and handling equipment. Conduct regular inspections for signs of corrosion and wear. Apply protective coatings to metal surfaces as needed.	BIS IS 101 (Methods of Sampling and Test for Paints, Varnishes, and Related Products), Bureau of Indian Standards (BIS) IS 14414:1997	Corrosive injuries require thorough rinsing and medical evaluation for chemical burns.

Handling and Storage	Psychological Stress and Fatigue Among Workers	High-risk environment and the need for constant vigilance can cause stress and fatigue among workers.	High-risk operations necessitate a focus on continuous monitoring and staff rotation to manage stress and maintain safety vigilance.	Implement regular training and safety drills to build confidence and preparedness. Provide access to mental health resources and support. Rotate shifts to prevent fatigue and maintain high alertness among workers.	OSHA guidelines on workplace stress management, Indian Factories Act, 1948 on worker health and safety, Bureau of Indian Standards (BIS) IS 14414:1997	Chronic stress can lead to fatigue, anxiety, or other psychological conditions; provide support through employee assistance programs.
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3. Committee findings

In reference to the Office Memorandum No. DS-Enf/2/2023-HQ-Mum dated 21.08.2024, the Committee on Safety Issues at Visakhapatnam Port Authority (VPA) thoroughly reviewed the current protocols surrounding the import, storage, and handling of ammonium nitrate, a substance with significant potential hazards. The findings revealed that while some safety measures are in place, they are not fully adequate. Storage facilities for ammonium nitrate were found to lack proper segregation, ventilation, and updated fire suppression systems, which are critical in preventing catastrophic incidents. Additionally, the handling processes during unloading and storage were identified as being conducted without sufficient training for workers, increasing the risk of accidental exposure or explosions. Proximity to incompatible materials further intensified these risks. The details of committee findings are listed below;

3.1. Lack of Dedicated Transportation and Route Management

Issue Details:

- No dedicated vehicles for ammonium nitrate dispatch: The use of non-specialized vehicles for transporting ammonium nitrate increases the risk of contamination and mishandling. This oversight can lead to accidents or unintended chemical reactions.
- No dedicated route or signage for ammonium nitrate transportation: The absence of a dedicated route exposes other road users and areas to unnecessary risk. Lack of signage means that those transporting the material may not be aware of the safest paths or protocols.
- No barriers or separation measures: Without physical barriers to separate ammonium nitrate from other goods or traffic, there's a risk of collision or exposure to incompatible substances.

Implications:

- Risk of Contamination and Accidents: Using generic vehicles not designed for hazardous materials increases the risk of contamination and accidental spillage. This can lead to severe chemical reactions, fires, or explosions, especially if ammonium nitrate comes into contact with incompatible substances.
- Exposure to Unintended Recipients: Without dedicated routes, ammonium nitrate might be transported through populated or high-traffic areas, increasing the risk of exposure to the general public.
- Inadequate Traffic Management: The lack of barriers and clear separation increases the chances of vehicular accidents involving ammonium nitrate, which could have catastrophic consequences.

Justification:

- Regulatory Requirements: Regulations typically mandate that hazardous materials like ammonium nitrate must be transported using specialized vehicles that meet specific

safety criteria, including isolation and containment features. Additionally, international best practices recommend using designated routes to minimize risk.

- **Precedents and Case Studies:** Past incidents, such as the West Fertilizer Company explosion in Texas (2013), underscore the importance of dedicated transportation and route management to prevent large-scale accidents and community exposure.

Recommended Actions:

- **Implement Dedicated Vehicles:** Acquire or designate specific vehicles for transporting ammonium nitrate that meet international safety standards.
- **Establish Designated Routes and Signage:** Develop and clearly mark routes dedicated to hazardous material transport, with appropriate signage to guide drivers and inform the public.
- **Install Barriers and Safety Measures:** Physical barriers should be installed on routes used for transporting ammonium nitrate to prevent accidental collisions and ensure safer transportation corridors.

3.2. Inadequate Safety and Emergency Measures

Issue Details:

- **No fire separation systems:** Fire separation systems are absent in areas where ammonium nitrate is stored or handled. This poses a significant risk of fire spreading to these areas, leading to potential explosions.
- **Lack of emergency plans specific to ammonium nitrate:** Emergency plans do not address the unique hazards associated with ammonium nitrate, which require specialized knowledge and protocols.

- Poor display of Material Safety Data Sheets (MSDS): MSDS are either not displayed or not easily accessible in critical areas where ammonium nitrate is handled, stored, or transported.

Implications:

- High Risk of Fire and Explosions: Without fire separation systems, there is an increased risk of fire spreading rapidly to ammonium nitrate storage areas, which could lead to devastating explosions.
- Unpreparedness in Emergencies: In the absence of specific emergency plans for ammonium nitrate, response teams might not be adequately prepared to handle situations involving its unique properties, such as its ability to act as an oxidizer and accelerate fires.
- Inadequate Information for Safe Handling: The lack of accessible MSDS means that workers might not have immediate access to crucial information needed for safe handling, storage, and emergency response, increasing the risk of accidents.

Justification:

- Regulatory Compliance: Many international safety regulations require the implementation of fire separation systems in areas where hazardous materials are stored. The failure to comply with these regulations can lead to severe penalties and increased liability in the event of an incident.
- Precedents: The Beirut Port explosion in 2020, caused by improperly stored ammonium nitrate, highlights the importance of having robust safety and emergency measures in place.
- Best Practices: International standards such as the NFPA (National Fire Protection Association) guidelines provide detailed requirements for fire safety, emergency planning, and the display of safety information like MSDS.

Recommended Actions:

- **Install Fire Separation Systems:** Implement appropriate fire separation systems in all areas where ammonium nitrate is stored or handled to prevent the spread of fire.
- **Develop Specific Emergency Plans:** Create and regularly update emergency response plans tailored to the risks associated with ammonium nitrate, including training for all staff.
- **Ensure Visibility and Accessibility of MSDS:** Make MSDS readily available and visible in all areas where ammonium nitrate is present to ensure that workers can quickly access safety and emergency information.

3.3. Insufficient Training and Competency Assessment

Issue Details:

- **No regular training updates or specialized programs for chemical handling:** Workers handling ammonium nitrate lack updated training or specialized programs that focus on the unique properties and risks of ammonium nitrate.
- **No mechanism for competency assessment:** There is no formal process to evaluate the competency of workers handling ammonium nitrate, leading to a potential mismatch between the required skills and actual capabilities.
- **Absence of programs for hazardous material handling certification:** Workers are not certified in hazardous material handling, meaning they may not be fully aware of the best practices or regulatory requirements for safely managing ammonium nitrate.

Implications:

- **Increased Risk of Improper Handling:** Without regular and specialized training, workers may not fully understand the dangers associated with ammonium nitrate, increasing the likelihood of accidents due to improper handling or storage.

- **Lack of Preparedness for Emergencies:** Untrained personnel may not respond correctly during an emergency, potentially exacerbating the situation and increasing the risk of injury or death.
- **Non-Compliance with Regulatory Standards:** The absence of certification programs and competency assessments can lead to non-compliance with regulatory standards, exposing the port authority to legal and financial repercussions.

Justification:

- **Regulatory Expectations:** OSHA (Occupational Safety and Health Administration) and similar bodies require that workers handling hazardous materials receive specific training and demonstrate competency in their tasks.
- **Precedents and Case Studies:** Incidents like the Tianjin explosions in 2015 demonstrate the catastrophic outcomes when personnel are not adequately trained in handling hazardous materials.
- **Best Practices:** Regular training and competency assessments ensure that all personnel are aware of current best practices and can handle materials like ammonium nitrate safely and efficiently.

Recommended Actions:

- **Implement Regular Training Programs:** Develop and mandate participation in regular training sessions focused on the handling, storage, and emergency response for ammonium nitrate.
- **Establish Competency Assessment Mechanisms:** Create formal competency assessment programs to evaluate the skills and knowledge of all personnel involved in the handling of ammonium nitrate.

- Introduce Certification Programs: Launch certification programs for hazardous material handling, ensuring that all relevant personnel are properly trained and certified according to international safety standards.

3.4. Poor Maintenance and Inspection Protocols

Issue Details:

- No maintenance and replacement protocols for equipment: There are no established procedures for the regular maintenance and replacement of equipment used in handling ammonium nitrate.
- Inadequate inspection systems: The inspection systems in place are either insufficient or infrequent, leading to potential undetected wear and tear or malfunctioning equipment.
- Lack of regular safety audits: There are no scheduled safety audits to review and assess the effectiveness of current safety measures and identify areas for improvement.

Implications:

- Equipment Failures and Accidents: Without proper maintenance and inspection protocols, equipment failures can occur, leading to spills, leaks, or accidents involving ammonium nitrate.
- Undetected Safety Hazards: Infrequent inspections may fail to detect safety hazards in a timely manner, allowing minor issues to escalate into significant problems.
- Non-compliance with International Standards: The lack of regular safety audits means that the port authority may not be adhering to international safety standards and regulations, potentially leading to legal consequences.

Justification:

- **Regulatory Requirements:** International regulations and guidelines require regular maintenance, inspection, and safety audits to ensure that equipment is functioning correctly and that safety measures are adequate.
- **Case Studies and Best Practices:** Historical incidents, such as the Enschede fireworks disaster (2000), show the consequences of failing to maintain equipment and conduct regular safety audits.
- **Risk Management:** Regular inspections and audits are critical for identifying potential risks and implementing corrective measures before incidents occur.

Recommended Actions:

- **Develop Maintenance Protocols:** Establish detailed maintenance and replacement protocols for all equipment used in handling ammonium nitrate, ensuring regular checks and timely replacements.
- **Implement Frequent Inspection Systems:** Conduct frequent inspections of all facilities and equipment to ensure compliance with safety standards and identify potential risks.
- **Schedule Regular Safety Audits:** Perform regular safety audits to evaluate the effectiveness of safety measures, compliance with regulations, and areas needing improvement.

3.5. Non-compliance with Safety Regulations and Documentation**Issue Details:**

- **Missing onsite and disaster management plans:** The onsite and disaster management plans are incomplete or missing critical details specific to ammonium nitrate handling and emergencies.

- Insufficient record-keeping: There is a lack of proper documentation and record-keeping regarding safety procedures, incidents, and compliance efforts.
- Non-compliance with safety evaluations and regulations: The port authority has not conducted required safety evaluations or adhered to regulations for hazardous material handling.

Implications:

- Unpreparedness for Emergencies: Without comprehensive disaster management plans, there is no clear guidance for emergency response, leading to potential chaos and increased risk during an incident.
- Lack of Accountability and Continuous Improvement: Insufficient record-keeping makes it difficult to track compliance, learn from past incidents, and implement improvements.
- Legal and Financial Consequences: Non-compliance with regulations can lead to significant fines, legal actions, and reputational damage, affecting the port's operations and credibility.

Justification:

- Regulatory Compliance: Compliance with safety regulations, including thorough documentation and disaster planning, is mandatory to ensure safe handling of hazardous materials and mitigate risks.
- Best Practices: International best practices emphasize the importance of comprehensive emergency planning and meticulous record-keeping to ensure accountability and continuous improvement in safety management.

- **Precedents:** The Seveso disaster (1976) in Italy led to the establishment of the Seveso Directive, which highlights the importance of detailed safety documentation and compliance to prevent accidents.

Recommended Actions:

- **Develop Comprehensive Disaster Management Plans:** Create detailed disaster management plans that address the specific risks associated with ammonium nitrate and outline clear procedures for emergencies.
- **Improve Record-Keeping Practices:** Implement robust record-keeping systems to document all safety procedures, incidents, and compliance efforts, ensuring transparency and accountability.
- **Ensure Compliance with Safety Regulations:** Conduct regular safety evaluations and ensure adherence to all regulations and standards for hazardous material handling.

3.6. Lack of Emergency Response and Medical Preparedness

Issue Details:

- **No Incident Response Mechanism for Ammonium Nitrate:** There is no specific incident response mechanism in place for emergencies involving ammonium nitrate, such as spills, leaks, or explosions.
- **Insufficient Medical Facilities and Training:** The medical facilities near the port are inadequate for responding to hazardous chemical emergencies, and there is a lack of trained medical personnel who are familiar with the hazards of ammonium nitrate.
- **No Rapid Deployment Procedures or Command Center:** There is no established command center or procedures for rapid deployment in the event of an ammonium nitrate-related incident, which would be critical for coordinating emergency responses.

Implications:

- **Delayed Emergency Response:** The absence of a dedicated response mechanism and rapid deployment procedures can lead to delays in emergency response, which can exacerbate the severity of an incident involving ammonium nitrate.
- **Inadequate Medical Response:** Without properly trained medical personnel and adequate facilities, the port is ill-equipped to handle injuries or health complications resulting from ammonium nitrate exposure, putting workers and nearby residents at risk.
- **Uncoordinated Efforts During Crises:** The lack of a command center and clear communication channels can result in uncoordinated efforts during a crisis, leading to confusion, increased damage, and potentially loss of life.

Justification:

- **Regulatory Standards and Best Practices:** Regulatory bodies such as OSHA and the International Maritime Organization (IMO) mandate specific emergency response protocols for hazardous materials like ammonium nitrate. Best practices include having a dedicated incident command center and trained response teams to ensure a swift and effective response.
- **Case Studies and Incidents:** The Tianjin explosions in 2015, which involved hazardous chemicals, demonstrated the need for a rapid, well-coordinated emergency response. The lack of preparedness and training contributed to the high number of casualties and extensive damage.
- **Risk Mitigation:** A robust emergency response mechanism, including a trained medical team and established command center, is critical to minimizing the impact of any incident and ensuring the safety of both workers and the community.

Recommended Actions:

- **Establish an Incident Response Mechanism:** Develop and implement a specific incident response plan tailored to the unique risks associated with ammonium nitrate, including clear protocols for spills, leaks, and explosions.
- **Enhance Medical Training and Facilities:** Train medical personnel in handling chemical exposure and establish adequately equipped medical facilities to handle emergencies involving ammonium nitrate.
- **Create a Command Center and Rapid Deployment Procedures:** Set up a dedicated command center to coordinate responses during emergencies and develop rapid deployment procedures to ensure a swift and effective response.

3.7. Inadequate Fire Safety Measures

Issue Details:

- **Absence of Fire Suppression Systems:** There is no installation of automatic fire suppression systems specifically designed for areas where ammonium nitrate is stored or handled.
- **No Regular Fire Drills or Emergency Evacuation Drills:** There are no regular fire drills or emergency evacuation drills conducted to prepare personnel for a potential fire involving ammonium nitrate.
- **Lack of Firefighting Equipment and Training:** Firefighting equipment is either not available or insufficient, and there is a lack of training for personnel in using the equipment effectively in ammonium nitrate-related fires.

Implications:

- **Increased Risk of Fire Spread:** Without proper fire suppression systems, a fire in the vicinity of ammonium nitrate can quickly spread, leading to possible explosions and extensive damage.
- **Unpreparedness in Case of Fire:** The absence of regular fire and evacuation drills means that personnel are unprepared to respond swiftly and appropriately in the event of a fire, increasing the risk of injury or fatalities.
- **Ineffective Firefighting Efforts:** Inadequate equipment and training for firefighting mean that even minor fires involving ammonium nitrate could escalate into major incidents due to ineffective initial response efforts.

Justification:

- **Safety Standards and Codes:** Fire safety standards such as those from NFPA (National Fire Protection Association) require specific suppression systems and regular drills to prepare for hazardous material incidents. Adherence to these standards is crucial for minimizing fire risks.
- **Historical Incidents:** Past incidents, such as the West Fertilizer Plant explosion, show the catastrophic results of inadequate fire safety measures when dealing with ammonium nitrate, highlighting the need for comprehensive fire safety protocols.
- **Risk Management:** Implementing fire safety measures, including suppression systems and training, is a fundamental risk management strategy to protect lives and property from the hazards posed by ammonium nitrate.

Recommended Actions:

- **Install Fire Suppression Systems:** Implement automatic fire suppression systems specifically designed for ammonium nitrate storage areas, such as water deluge systems that can prevent fire spread.
- **Conduct Regular Fire Drills and Training:** Schedule regular fire and evacuation drills and provide comprehensive training for personnel on fire response procedures involving ammonium nitrate.
- **Equip and Train Firefighting Teams:** Ensure that firefighting teams are properly equipped with appropriate gear and trained to handle fires involving ammonium nitrate safely and effectively.

3.8. Poor Chemical Compatibility and Storage Practices**Issue Details:**

- **No Assessment of Chemical Compatibility:** There is no assessment or monitoring of chemical compatibility in areas where ammonium nitrate is stored, increasing the risk of hazardous reactions.
- **Improper Storage Conditions:** Ammonium nitrate is not stored under conditions that minimize its risk, such as controlling temperature, humidity, and separation from incompatible substances.
- **Lack of Regular Inspections and Audits of Storage Areas:** There are no regular inspections or audits to ensure that storage conditions are maintained and that ammonium nitrate is stored safely according to regulatory standards.

Implications:

- Risk of Hazardous Reactions: Without assessing chemical compatibility, ammonium nitrate could be stored near incompatible materials, such as flammable substances or reducing agents, which could lead to dangerous chemical reactions, fires, or explosions.
- Degradation of Ammonium Nitrate: Improper storage conditions, such as high temperatures or humidity, can lead to the degradation of ammonium nitrate, making it more susceptible to detonation or other hazardous reactions.
- Undetected Safety Hazards: The absence of regular inspections and audits means that potential safety hazards in storage areas, such as leaks or contamination, could go unnoticed, increasing the risk of incidents.

Justification:

- Regulatory Guidelines and Safety Standards: Safety standards, such as those from OSHA and the NFPA, require specific storage conditions for hazardous materials like ammonium nitrate to prevent accidents and ensure safety.
- Case Studies and Lessons Learned: The Oppau explosion in Germany (1921) and other similar incidents have shown the dangers of improper storage and the critical need for compatibility assessments and stringent storage practices.
- Preventive Safety Measures: Assessing chemical compatibility and ensuring proper storage conditions are essential preventive safety measures to avoid dangerous chemical reactions and protect workers and facilities.

Recommended Actions:

- Conduct Chemical Compatibility Assessments: Regularly assess chemical compatibility in all areas where ammonium nitrate is stored to prevent hazardous reactions.

- **Improve Storage Conditions:** Store ammonium nitrate in a controlled environment, maintaining appropriate temperature, humidity, and separation from incompatible materials to minimize risks.
- **Implement Regular Inspections and Audits:** Conduct regular inspections and audits of storage areas to ensure compliance with safety standards and identify potential hazards before they result in incidents.

3.9. Inadequate Community Safety and Awareness Programs

Issue Details:

- **No Community Awareness Programs or Communication Systems:** There are no programs or systems in place to inform the local community about the risks associated with ammonium nitrate and the actions to take in case of an emergency.
- **Lack of Accessible Emergency Contact Information:** Emergency contact information is not readily accessible to the community, preventing effective communication and coordination during an incident.
- **No Coordination with Local Emergency Services:** There is insufficient coordination with local emergency services, such as fire departments and hospitals, to ensure a quick and effective response in the event of an ammonium nitrate incident.

Implications:

- **Community Vulnerability:** The lack of awareness and preparedness programs leaves the local community vulnerable to the risks associated with ammonium nitrate, potentially leading to panic, injuries, or fatalities in an emergency.
- **Delayed Emergency Response:** Without accessible emergency contact information and coordination with local services, the response to an incident may be delayed, worsening the impact and increasing the risk to lives and property.

- **Inadequate Communication During Emergencies:** The absence of communication systems and coordination mechanisms can lead to confusion and uncoordinated efforts during an emergency, potentially escalating the situation.

Justification:

- **Regulatory Requirements:** Safety regulations often require facilities handling hazardous materials to implement community safety and awareness programs to inform and protect the surrounding population.
- **Precedents and Case Studies:** The Bhopal gas tragedy (1984) highlighted the devastating impact of inadequate community awareness and preparedness in industrial areas, emphasizing the need for effective communication and emergency response planning.
- **Best Practices:** International best practices recommend robust community safety programs and coordination with local emergency services to ensure a well-prepared response to hazardous material incidents.

Recommended Actions:

- **Develop Community Awareness Programs:** Implement programs to educate the local community about the risks of ammonium nitrate and provide clear instructions on what to do in case of an emergency.
- **Ensure Accessibility of Emergency Contact Information:** Make emergency contact information readily accessible to the community and ensure it is regularly updated and communicated.
- **Enhance Coordination with Local Emergency Services:** Establish strong coordination mechanisms with local emergency services, including regular joint training exercises and communication drills to ensure a coordinated response in case of an incident.

3.10. Lack of Periodic Review and Update of Safety Policies

Issue Details:

- **No Regular Review of Safety Policies:** There are no regular reviews or updates of the safety policies related to ammonium nitrate handling, leading to outdated practices that may not align with current regulations or best practices.
- **Inconsistent Application of Safety Regulations:** The application of safety regulations is inconsistent, leading to potential gaps in safety measures and increased risk.
- **No Performance Tracking of Safety Systems:** There is no system in place to track the performance of safety measures and ensure continuous improvement in the handling of ammonium nitrate.

Implications:

- **Outdated Safety Measures:** Without regular reviews, safety policies and procedures may become outdated and ineffective, failing to address new risks or changes in regulatory requirements.
- **Increased Risk of Non-Compliance:** Inconsistent application of safety regulations increases the risk of non-compliance, which can result in legal penalties, fines, and reputational damage.
- **Lack of Continuous Improvement:** The absence of performance tracking prevents the identification of weaknesses in safety systems and the implementation of improvements, reducing the overall safety of operations.

Justification:

- **Regulatory Compliance and Standards:** Safety regulations require regular reviews and updates of safety policies to ensure alignment with the latest standards and best practices for hazardous material handling.
- **Case Studies and Industry Best Practices:** Incidents in the chemical industry have shown the importance of regularly reviewing and updating safety policies to prevent accidents and ensure compliance with evolving regulations.
- **Continuous Improvement:** Implementing a system for regular review and performance tracking is essential for continuous improvement in safety management, helping to prevent incidents and protect workers and the community.

Recommended Actions:

- **Establish a Regular Review Process for Safety Policies:** Implement a formal process for regularly reviewing and updating safety policies related to ammonium nitrate handling to ensure they remain effective and compliant with current regulations.
- **Ensure Consistent Application of Safety Regulations:** Develop clear procedures and guidelines to ensure the consistent application of safety regulations across all operations.
- **Implement Performance Tracking Systems:** Introduce systems to track the performance of safety measures, identify areas for improvement, and ensure continuous enhancement of safety practices.

3.11. Insufficient Personal Protective Equipment (PPE) for Handling Ammonium Nitrate

Issue Details:

- **Lack of Proper PPE:** There is a lack of appropriate personal protective equipment (PPE) for workers handling ammonium nitrate, increasing the risk of exposure to harmful chemicals.
- **No Regular Inspection and Maintenance of PPE:** PPE is not regularly inspected, maintained, or replaced, leading to the use of damaged or ineffective equipment.
- **Inadequate Training on PPE Usage:** Workers are not adequately trained on the correct usage, storage, and maintenance of PPE, compromising its effectiveness in protecting against exposure.

Implications:

- **Increased Risk of Chemical Exposure:** Without proper PPE, workers are at a heightened risk of exposure to ammonium nitrate, which can cause respiratory problems, skin irritation, and other health issues.
- **Reduced Protection Due to Damaged PPE:** Using damaged or worn-out PPE reduces its ability to protect workers, potentially leading to injuries or illnesses.
- **Improper Use of PPE:** Inadequate training on PPE usage can result in improper fitting, usage, or maintenance, further compromising worker safety and increasing the likelihood of accidents.

Justification:

- **Occupational Safety Standards:** Regulations such as those from OSHA mandate the use of proper PPE for handling hazardous chemicals to minimize exposure risks and ensure worker safety.

- **Historical Precedents:** Previous incidents in the chemical industry have demonstrated the critical role of PPE in protecting workers from exposure and preventing injuries.
- **Risk Mitigation:** Proper PPE, combined with regular maintenance and training, is essential to protect workers from the hazards associated with handling ammonium nitrate.

Recommended Actions:

- **Ensure Availability of Proper PPE:** Provide appropriate PPE for all workers handling ammonium nitrate, including gloves, masks, eye protection, and protective clothing.
- **Implement Regular PPE Inspection and Maintenance:** Establish a routine inspection and maintenance schedule for PPE to ensure it remains effective and safe to use.
- **Conduct Comprehensive Training on PPE Usage:** Offer regular training sessions on the correct usage, fitting, storage, and maintenance of PPE to all workers handling hazardous materials.

3.12. Inadequate Security Measures for Ammonium Nitrate Storage Areas

Issue Details:

- **Lack of Physical Security Barriers:** There are no physical security barriers around ammonium nitrate storage areas to prevent unauthorized access.
- **Insufficient Surveillance and Monitoring Systems:** The storage areas are not adequately monitored with surveillance cameras or other monitoring systems, leading to potential security breaches.
- **No Access Control Mechanisms:** There are no access control mechanisms, such as locks or security personnel, to restrict entry to authorized personnel only.

Implications:

- **Risk of Unauthorized Access:** Without physical security measures and access control, unauthorized personnel may gain access to ammonium nitrate storage areas, increasing the risk of theft, sabotage, or accidental exposure.
- **Potential for Security Breaches:** Insufficient surveillance and monitoring systems make it difficult to detect and respond to security breaches in a timely manner, potentially leading to significant safety and security incidents.
- **Vulnerability to Terrorism or Sabotage:** Ammonium nitrate is a dual-use material that can be used in the manufacture of explosives. Poor security measures increase the risk of the material being misused for malicious purposes.

Justification:

- **Security Regulations and Best Practices:** Security standards for hazardous materials storage, such as those from the Chemical Facility Anti-Terrorism Standards (CFATS), require robust security measures to prevent unauthorized access and protect against theft or sabotage.
- **Case Studies and Incidents:** Past incidents involving the theft or misuse of hazardous materials highlight the importance of strict security measures to prevent such occurrences.
- **Prevention of Malicious Acts:** Implementing strong security measures, including surveillance, access control, and physical barriers, is crucial to preventing theft, sabotage, or misuse of ammonium nitrate.

Recommended Actions:

- **Install Physical Security Barriers:** Erect fences, walls, or other physical barriers around ammonium nitrate storage areas to prevent unauthorized access.

- **Enhance Surveillance and Monitoring Systems:** Deploy surveillance cameras and other monitoring systems to continuously monitor storage areas and detect any security breaches.
- **Implement Access Control Mechanisms:** Establish access control systems, such as locks, key cards, and security personnel, to restrict entry to authorized personnel only.

3.13. Insufficient Training and Competency Assessment Programs

Issue Details:

- **Lack of Specialized Training Programs:** There are no specialized training programs focused on handling ammonium nitrate and understanding its specific hazards and safety measures.
- **No Competency Assessment Mechanisms:** There are no mechanisms in place to assess the competency of workers handling ammonium nitrate, leading to a lack of assurance that they are adequately prepared.
- **Absence of Refresher Courses and Continuous Training:** There is no provision for regular refresher courses or continuous training to keep workers updated on the latest safety practices and regulations.

Implications:

- **Inadequate Knowledge and Skills:** Without specialized training, workers may lack the necessary knowledge and skills to handle ammonium nitrate safely, increasing the likelihood of accidents or improper handling.
- **Higher Risk of Human Error:** The absence of competency assessments means there is no formal process to verify that employees have understood training content, which increases the risk of human error during operations.

- **Non-Compliance with Safety Standards:** Insufficient training programs and competency assessments can lead to non-compliance with national and international safety standards, exposing the organization to potential fines and sanctions.

Justification:

- **Training Regulations and Best Practices:** Occupational safety regulations require that employees handling hazardous materials receive specialized training and demonstrate competency to reduce the risk of accidents and exposure.
- **Importance of Ongoing Education:** Continuous training and competency assessments are critical to ensuring that workers stay up-to-date with the latest safety procedures and regulatory changes.
- **Risk Management and Mitigation:** Proper training and regular competency assessments are fundamental components of effective risk management strategies, helping to minimize the likelihood of accidents and enhance overall safety.

Recommended Actions:

- **Develop Specialized Training Programs:** Create and implement specialized training programs that cover all aspects of handling ammonium nitrate, including chemical properties, associated risks, and emergency procedures.
- **Introduce Competency Assessment Frameworks:** Establish competency assessment frameworks to evaluate workers' understanding of training materials and their ability to apply safety measures in practice.
- **Provide Regular Refresher Courses:** Offer regular refresher courses and continuous training sessions to keep workers informed of the latest safety practices and regulatory updates.

3.14. Lack of Emergency Medical Response and Preparedness

Issue Details:

- **No On-Site Medical Facilities for Emergency Situations:** There are no dedicated on-site medical facilities equipped to handle emergencies related to ammonium nitrate exposure.
- **Inadequate First Aid Training and Supplies:** First aid supplies are insufficient, and there is a lack of regular first aid training for personnel, particularly for handling chemical exposure scenarios.
- **No Coordination with Local Medical Services:** There is no formalized coordination plan with local hospitals and emergency medical services to respond effectively in the event of an incident involving ammonium nitrate.

Implications:

- **Delayed Medical Response:** In the event of an exposure or accident, the lack of on-site medical facilities and inadequate coordination with local services could result in delayed medical response, exacerbating injuries or health outcomes.
- **Insufficient Immediate Care:** Without adequate first aid supplies and training, immediate care for exposed or injured personnel may be ineffective, increasing the severity of injuries and health risks.
- **Higher Risk of Fatalities or Severe Injuries:** The absence of proper emergency medical response measures increases the likelihood of fatalities or severe injuries in the event of a major incident involving ammonium nitrate.

Justification:

- **Health and Safety Regulations:** Occupational health and safety regulations mandate the availability of adequate medical facilities and first aid provisions for handling hazardous materials to ensure prompt and effective treatment of injuries.
- **Preparedness for Emergency Situations:** Being prepared for medical emergencies is crucial for minimizing health risks associated with ammonium nitrate exposure, as rapid response can significantly reduce the severity of injuries.
- **Best Practices from Industry Standards:** Leading practices in hazardous material management emphasize the importance of robust medical response systems and regular first aid training to ensure worker safety.

Recommended Actions:

- **Establish On-Site Medical Facilities:** Develop dedicated on-site medical facilities equipped to handle emergencies specific to ammonium nitrate exposure, including decontamination stations and necessary medical supplies.
- **Enhance First Aid Training and Supplies:** Conduct regular first aid training sessions for all staff, focusing on chemical exposure scenarios, and ensure that first aid supplies are comprehensive and readily available.
- **Formalize Coordination with Local Medical Services:** Create formal agreements and response plans with local hospitals and emergency medical services to ensure coordinated and rapid response in the event of an incident.

3.15. Inadequate Community Safety and Communication Programs

Issue Details:

- **No Community Education Programs:** There are no programs in place to educate the local community about the risks associated with ammonium nitrate and the appropriate response actions in the event of an emergency.
- **Lack of Accessible Emergency Contact Information:** Emergency contact information is not readily accessible to the community, leading to confusion and delayed response in emergencies.
- **No Regular Communication with Community Stakeholders:** There is no regular communication with community stakeholders to inform them about safety measures, updates, or potential risks related to ammonium nitrate handling.

Implications:

- **Unpreparedness in the Community:** Without education and communication programs, the local community may be unprepared to respond effectively in the event of an emergency involving ammonium nitrate, increasing the potential for harm.
- **Delayed Emergency Response:** Lack of accessible emergency contact information can delay the community's ability to report incidents or seek assistance, potentially exacerbating the impact of an emergency.
- **Erosion of Trust and Public Confidence:** Inadequate communication and transparency can erode public trust and confidence in the organization's ability to manage risks, potentially leading to reputational damage and community opposition.

Justification:

- **Community Right-to-Know Laws:** Many regulations, such as the Emergency Planning and Community Right-to-Know Act (EPCRA), mandate the communication of

hazardous material risks to the community and the provision of emergency response information.

- **Role of Public Awareness in Emergency Preparedness:** Educating the public about risks and emergency procedures is crucial for enhancing community resilience and ensuring a coordinated response in the event of an incident.
- **Precedents from Other Incidents:** Past incidents have shown that effective community engagement and communication can significantly reduce the impact of chemical emergencies and improve overall safety outcomes.

Recommended Actions:

- **Develop Community Education Programs:** Launch educational programs to inform the local community about the risks associated with ammonium nitrate and provide guidance on emergency response actions.
- **Ensure Accessibility of Emergency Contact Information:** Make emergency contact information readily accessible to the community through various channels, such as public notices, websites, and community centers.
- **Establish Regular Communication with Stakeholders:** Create a framework for regular communication with community stakeholders to keep them informed about safety measures, updates, and potential risks.

3.16. Lack of Fire Protection Systems and Emergency Preparedness for handling ammonium nitrate incident

Issue Details:

- **No Dedicated Fire Suppression Systems:** There are no dedicated fire suppression systems, such as sprinkler systems or fire extinguishers, specifically designed to handle fires involving ammonium nitrate.

- **Inadequate Fire Drills and Emergency Exercises:** Fire drills and emergency exercises are not conducted regularly, leading to a lack of preparedness among personnel for fire-related emergencies.
- **Absence of Fire Safety Plans and Documentation:** There are no comprehensive fire safety plans or documentation detailing the procedures to be followed in the event of a fire involving ammonium nitrate.

Implications:

- **Increased Risk of Fire Spread:** Without dedicated fire suppression systems, fires involving ammonium nitrate can spread rapidly, leading to extensive damage, injuries, and potential fatalities.
- **Unprepared Workforce:** Inadequate fire drills and emergency exercises mean that personnel are not well-prepared to respond effectively to fires, increasing the likelihood of panic, confusion, and delayed response.
- **Non-Compliance with Fire Safety Regulations:** The lack of fire safety plans and documentation may result in non-compliance with fire safety regulations, leading to potential fines, legal action, and increased liability.

Justification:

- **Fire Safety Regulations and Codes:** Fire safety regulations, such as those from the National Fire Protection Association (NFPA), require the installation of fire suppression systems and regular fire drills to ensure preparedness for fire-related emergencies.
- **Lessons from Previous Fire Incidents:** Incidents involving fires in chemical storage areas have demonstrated the importance of having dedicated fire suppression systems and well-trained personnel to prevent escalation and protect lives.

- **Importance of Fire Safety Planning:** Comprehensive fire safety plans and regular drills are critical for ensuring a coordinated and effective response to fires, minimizing damage, and protecting personnel and assets.

Recommended Actions:

- **Install Dedicated Fire Suppression Systems:** Equip all areas where ammonium nitrate is stored or handled with appropriate fire suppression systems, such as sprinklers and fire extinguishers, specifically designed for chemical fires.
- **Conduct Regular Fire Drills and Emergency Exercises:** Implement a schedule for regular fire drills and emergency exercises to ensure all personnel are familiar with fire response procedures and can act swiftly and effectively in an emergency.
- **Develop Comprehensive Fire Safety Plans:** Create detailed fire safety plans that outline the procedures to be followed in the event of a fire involving ammonium nitrate and ensure that these plans are regularly reviewed and updated.

3.17. Absence of On-Site Emergency Plan and Inadequate Disaster Management for Handling Ammonium Nitrate

Issue Details:

- **Absence of On-Site Emergency Plan:** The required on-site emergency plan, as stipulated by the Manufacturing, Storage, and Import of Hazardous Chemicals (MSIHC) Rules, was not found. Despite this, officials claimed that both on-site and off-site plans were covered under the disaster management plan.
- **Inadequate Disaster Management Documentation:** The emphasis on disaster management plans without proper documentation of the on-site emergency plan for handling tonnes of ammonium nitrate indicates a significant oversight. The lack of an on-site plan suggests that hazard identification and risk assessment for this quantity of ammonium nitrate were not conducted.

- **Insufficient Hazard Assessment:** One Quality Risk Assessment (QRA) report was found, but it addressed hazards at a minimal level and failed to quantify the full spectrum of hazards associated with the substantial quantity of ammonium nitrate stored.

Implications:

- **Increased Risk of Unmanaged Emergencies:** The absence of a detailed on-site emergency plan increases the risk of unmanaged emergencies, potentially leading to severe consequences in the event of a fire or explosion involving ammonium nitrate.
- **Inadequate Hazard Identification:** The lack of a comprehensive hazard identification and risk assessment demonstrates a failure to address the specific risks associated with large quantities of ammonium nitrate, leaving the facility vulnerable to unanticipated hazards.
- **Potential Compliance Issues:** Failure to develop and implement an on-site emergency plan may result in non-compliance with MSIHC Rules, exposing the facility to legal repercussions and increased liability.

Justification:

- **MSIHC Rules Requirements:** According to MSIHC Rules, facilities handling hazardous chemicals must have a detailed on-site emergency plan to address specific risks and ensure preparedness for emergencies.
- **Importance of Comprehensive Risk Assessment:** Proper hazard identification and risk assessment are crucial for understanding and mitigating the risks associated with large quantities of hazardous chemicals like ammonium nitrate. Previous incidents have shown that inadequate planning can lead to catastrophic outcomes.

- **Critical Need for Effective Emergency Planning:** Effective emergency planning, including both on-site and off-site plans, is essential for managing the risks associated with hazardous chemicals and ensuring a coordinated response to emergencies.

Recommended Actions:

- **Develop and Implement an On-Site Emergency Plan:** Immediately develop and implement a comprehensive on-site emergency plan that meets MSIHC Rules requirements. This plan should include detailed procedures for responding to emergencies involving ammonium nitrate.
- **Conduct a Thorough Hazard Identification and Risk Assessment:** Perform a detailed hazard identification and risk assessment to address the specific risks associated with handling 30,000 kg of ammonium nitrate. Ensure that the assessment covers all potential hazards and provides measures to mitigate them.
- **Review and Update Disaster Management Documentation:** Ensure that disaster management documentation is accurate and up-to-date, clearly outlining both on-site and off-site emergency plans. Regularly review and update these plans to reflect current best practices and regulatory requirements.

3.18. Lack of Follow-Up on Directives by Earlier Committees

Issue Details: There is a notable absence of follow-up on directives issued by earlier committees concerning the handling and transportation of ammonium nitrate. Previous recommendations and safety measures have not been adequately tracked or enforced. This lack of follow-through has led to continued vulnerabilities and non-compliance with established safety protocols.

Implications: The failure to follow up on previous directives perpetuates existing risks and gaps in safety measures. This oversight prevents the implementation of necessary improvements, leaving the facility and surrounding areas exposed to potential accidents and hazards associated

with ammonium nitrate. Additionally, the lack of enforcement of past recommendations can undermine regulatory compliance and affect the facility's overall safety performance.

Justification: Effective safety management requires the diligent follow-up of directives and recommendations to ensure continuous improvement and compliance with safety standards. Previous incidents and audits have highlighted the need for systematic tracking and implementation of safety measures. Neglecting these directives can lead to repeated safety failures and increased risk, as seen in various historical incidents where non-compliance with safety recommendations contributed to catastrophic events.

Recommended Actions:

- **Establish a Follow-Up Mechanism:** Implement a systematic process for tracking and enforcing directives from previous committees. This should include regular reviews and updates on the status of safety recommendations.
- **Assign Responsibility:** Designate a team or individual responsible for ensuring that all directives are addressed and implemented effectively.
- **Conduct Regular Audits:** Perform periodic audits to assess compliance with previously issued directives and identify any outstanding issues that need to be resolved.

4. Conclusion

The findings of the committee reveal several critical issues related to the handling, storage, and transportation of ammonium nitrate. First, there is a significant lack of dedicated transportation and route management. The absence of specialized vehicles for ammonium nitrate dispatch increases the risk of contamination and mishandling, which could lead to severe chemical reactions or accidents. Additionally, without designated routes or signage, there is a heightened risk of exposure to other road users and inadequate traffic management, potentially resulting in catastrophic accidents. The lack of physical barriers further exacerbates these risks by failing to prevent collisions or exposure to incompatible substances.

In terms of safety and emergency measures, the committee found inadequate provisions for fire separation systems and emergency planning specific to ammonium nitrate. The absence of such systems increases the risk of fire spreading to ammonium nitrate storage areas, potentially leading to explosions. Emergency plans do not adequately address the unique hazards of ammonium nitrate, and Material Safety Data Sheets (MSDS) are poorly displayed or inaccessible, hindering effective response and safe handling.

The lack of regular training updates and specialized programs for chemical handling, alongside the absence of competency assessment mechanisms, is another major concern. Workers handling ammonium nitrate are not receiving the necessary training or certification, leading to improper handling and increased risks during emergencies. This also results in non-compliance with regulatory standards, potentially exposing the port authority to legal consequences.

Maintenance and inspection protocols are insufficient, with no established procedures for equipment upkeep or regular safety audits. This oversight risks equipment failures, undetected safety hazards, and non-compliance with international safety standards. Similarly, poor documentation and incomplete onsite and disaster management plans contribute to

unpreparedness for emergencies, making it difficult to manage incidents effectively and potentially leading to legal and financial repercussions.

Security measures for ammonium nitrate storage areas are also lacking. There are no physical security barriers, insufficient surveillance, and no access control mechanisms, increasing the risk of unauthorized access, theft, or sabotage. Additionally, there is a significant gap in community safety and awareness programs, with no efforts made to educate the local population or coordinate with emergency services, which could delay response and increase vulnerability during emergencies.

Inadequate fire safety measures are evident, including the absence of dedicated fire suppression systems and regular fire drills. This lack of preparedness could lead to rapid fire spread and ineffective firefighting efforts. Similarly, there is a notable absence of on-site emergency plans and adequate disaster management documentation, reflecting a failure to address the specific risks associated with large quantities of ammonium nitrate.

Overall, these findings highlight a systemic failure to implement effective safety, security, and emergency response measures for handling ammonium nitrate, posing significant risks to both personnel and the surrounding community.



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Lr. No. 724/APPCB/HO/ECS/VPT/2024-

Date:25/09/2024.

To
The Chairperson,
Visakhapatnam Port Trust,
Port Area, Visakhapatnam.

Sir,

Sub.:APPCB – Visakhapatnam Port Authority (VPA) – Restrictions on import of Ammonium Nitrate (AN) through Visakhapatnam Port, Visakhapatnam – Report of the Committee constituted by GoAP - Communicated – CPCB instructions — DGFASLI, Mumbai Safety report dt: 09.09.2024 on safety measures for handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam – Communicated - Reg.

- Ref.:
1. APPCB, Lr.No.588/APPCB/HO/UH-II/VSP/2020- 187, Dt. 17.08.2020.
 2. Govt. Memo.No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt.28.01.2021.
 3. APPCB, Lr.No.724/APPCB/HO/UH-II/TF/VSP/2022 -, dt.01.06.2022.
 4. Chairman, Visakhapatnam Port Lr.No.ITRA/SHP/FMIN, dt. 08.06.2022 & 29.06.2022.
 5. Report of safety audit on handling and transportation of AN conducted by DGFASLI (October, 2022).
 6. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I, Dt. 30.01.2023.
 7. Ministry of Ports, Shipping & Waterways, GoI, New Delhi vide letter dt.29.11.2023.
 8. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-1, Dt. 07.12.2023.
 9. EFST Dept., GoAP, letter No.EFS01-ENVOPEST(CPRO)/22/2020-SEC-I-2, Dt. 07.12.2023.
 - 10.Ministry of Coal (MPS Section), GoI letters dated. 28.12.2023, 12.01.2024 & 01.02.2024.
 - 11.MoEF & CC, GoI letter dt.08.01.2024 addressed to Ministry of Coal, GoI.
 - 12.APPCB Lr. No. 724/APPCB/HO/ECS/TF/VSP/2023, Dt. 04.01.2024
 - 13.Committee report submitted vide letter dated. 12.02.2024
 - 14.EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I (1218399), Dt. 04.04.2024.
 - 15.CPCB, New Delhi Letter No. CP/36/2024-1PC-1-HO-CPCB-HO/273, Dt. 23.04.2024
 - 16.EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, Dt. 14.05.2024.
 - 17.Chairperson, VPA letter dt. 12.05.2024.
 - 18.Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-173, Dt. 25.06.2024 addressed to Inspectorate of Dock Safety, Visakhapatnam.
 - 19.Lr. No. 724/APPCB/HO/ECS/EFS&T/2024-174, Dt. 25.06.2024, addressed to Chairman, VPA, Visakhapatnam.
 - 20.Ministry of Coal (MPS Section), Lr.No. CPAM-43020/29/2023-CPIAM(E-

- 357432), Dt:25.06.2024.
21. Chairperson, VPA letter dt. 24.06.2024 & 03.07.2024
 22. APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024, Dt: 19.07.2024 to the Director General, DGFASLI, Mumbai
 23. Chairperson, VPA, Visakhapatnam Lr.No. ITRA/SHP/FAMN, Dt: 30.07.2024
 24. APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024, Dt: 14.08.2024 to the Director General, DGFASLI, Mumbai
 25. APPCB Lr. No. 724/APPCB/HO/ECS/EFS&T/2024, Dt: 14.08.2024 to the Chairperson, VPA, Visakhapatnam.
 26. EFS&T Dept., GoAP Letter No. EFS01-ENV0PEST(CPRO)/22/2020-SEC-I, Dt. 06.09.2024
 27. Infrastructure & Investment (Port) Dept., GoAP U.O. No. INI01-PORT/77/2020, Dt: 08.09.2024.
 28. Chief Inspector of Dock Safety, DGFASLI, Mumbai, Lr No. DS-Enf/2/2023-HQMum, Dt: 09.09.2024

The APPCB is in receipt of letters dt. 24.06.2024 & 03.07.2024 from Visakhapatnam Port Authority (VPA), Visakhapatnam, wherein it was reported that VPA had stringently followed and implemented the mandated procedure of APPCB by unloading the imported Ammonium Nitrate in bags from Ship onto the wharf subsequent loading onto container / trucks for onward transportation to final destination through container trains / road ways; identified EQ-3, EQ-4, EQ-6 to EQ-7 for handling of import of Ammonium Nitrate and earmarked for safe discharge cargo from ship as well as quick evacuation of cargo from wharf for subsequent loading onto containers / trucks for onward transportation to the final destination without storing AN in the Port or godowns in and around the Port. Further, requested to relax the restrictions imposed by the GoAP and APPCB in import and handling of Ammonium Nitrate to consider for a further period beyond 05.01.2024.

In this regard, it is to inform that the CPCB (vide letter dt. 23.04.2024) while communicating its opinion to GoAP, informed to direct the VPA to invariably comply with the recommendations of the committee at the earliest in order to avoid any chances of a major accident and consequential environmental damage. Further informed to request the Dock Safety Inspectorate Department to submit a report on the adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate.

Upon receipt of the above communication of CPCB from GoAP vide letter dt: 14.05.2024, the Board vide letter dt. 25.06.2024 (18th cited) requested the Asst. Director (Safety), Inspectorate Dock Safety, Visakhapatnam to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion for taking further action in the matter. The JCEE, APPCB, ZO, Visakhapatnam was informed to pursue the matter with concerned authority to furnish the report at an early date. However, the letter addressed to the Inspectorate Dock Safety, Visakhapatnam was returned back to the Board stating that there is no such person & the office is closed since long time.

Thus, the APPCB vide ref. 22nd cited requested the Director General, DGFASLI, Mumbai to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action in the matter.

The Chairperson, Visakhapatnam Port Authority, Visakhapatnam vide ref. 23rd cited

once again represented to the Board along with remarks on the observations/recommendations of the committee, for relaxation in restrictions imposed by GoAP and APPCB in import and handling of Ammonium Nitrate for a further period beyond 05.01.2024 to continuously handle the consignments of Ammonium Nitrate at VPA.

In view of the above, the APPCB once again requested the Director General, DGFASLI vide ref. 24th cited to arrange to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date in the light of the committee report and CPCB opinion, for taking further action at Government level and APPCB in the matter.

The Board vide ref. 25th cited, requested the Chairperson, Visakhapatnam Port Authority, Visakhapatnam to pursue the matter with the Directorate General Factory Advice Service & Labour Institutes (DGFASLI), Mumbai to furnish detailed report on adequacy of the safety measures being adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam at an early date for taking further action at Government level and APPCB in the matter.

In this regard, it is to inform that the Chief Inspector of Dock Safety, Directorate General Factory Advice Service & Labour Institutes (DGFASLI), Mumbai vide ref. 28th cited forwarded detailed report on status of the safety measures adopted by Visakhapatnam Port Authority while handling Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam, wherein it was reported that "*Overall, these findings highlight a systemic failure to implement effective safety, security, and emergency response measures for handling Ammonium Nitrate, posing significant risks to both personnel and surrounding community*". A copy of the above report dt. 09.09.2024 received from the DGFASLI, Mumbai is herewith forwarded for information and necessary action.

In view of the above DGFASLI safety report dt: 09.09.2024, the Chairperson, VPA is requested to take all necessary measures as recommended in the report and get the VPA re-inspected by DGFASLI and get compliance certificate on adequacy of the safety measures adopted by Visakhapatnam Port Authority for handling of Ammonium Nitrate through Visakhapatnam Port, Visakhapatnam from DGFASLI and submit to GoAP and APPCB at an early date to take further action in the matter.

Encl.: a/a.

Yours sincerely

S Sri Saravanan
MEMBER SECRETARY

Copy submitted to -

1. The Under Secretary to GoI, Ministry of Coal, MPS Section, GoI, Shashri Bawan, New Delhi for information.
2. The Under Secretary to GoI, Ministry of Ports, Shipping and Waterways (Ports Wing), Transport Bhawan, New Delhi for information.
3. The Director, Central Pollution Control Board (CPCB), Parivesh Bhawan, New Delhi for information.
4. The Director, HSM Division, MoEF & CC, GoI, Indira Paryavaran Bhawan, New Delhi for information.
5. The Special Secretary, DPIIT, Vanijya Bhawan, New Delhi for information.

6. The Secretary to Government, Infrastructure & Investment (Port) Department, GoAP for information.
7. The Special Chief Secretary to Government, EFS & T Dept., GoAP, A.P. Secretariat, Amaravathi for information.
8. The Secretary to Government, Industries & Commerce Dept., GoAP, A.P. Secretariat, Amaravathi for information.
9. CEE, APPCB, Head Office, Vijayawada for information.
10. JCEE, APPCB, ZO, Visakhapatnam for information and necessary action.
11. EE, APPCB, RO, Visakhapatnam for information and necessary action.