

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI.

Original Application No.215 2024 (SZ)
[Earlier O.A. No. 644 of 2024(PB)]

News Item titled "Ammonia gas leak
triggers panic in Coimbatore"
appearing in the Deccan Herald
dated 30th April 2024.

Vs

1. The Member Secretary,
Tamil Nadu Pollution Control Board,
No.76, Mount Salai,
Guindy, Chennai – 600 032.

...Respondents

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Filed by
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI.

Original Application No.215 2024 (SZ)
[Earlier O.A. No. 644 of 2024(PB)]

News Item titled "Ammonia gas leak
triggers panic in Coimbatore"
appearing in the Deccan Herald
dated 30th April 2024.

Vs

1. The Member Secretary,
Tamil Nadu Pollution Control Board,
No.76, Mount Salai,
Guindy, Chennai – 600 032.
2. The Member Secretary,
Central Pollution Control Board,
Parivesh Bhawan, East Arjun Nagar,
Delhi –110 032.
3. District Magistrate, Coimbatore,
Collectorate Building,
Coimbatore -641 018.

... Respondents

**REPORT FILED ON BEHALF OF THE FIRST RESPONDENT -
TAMIL NADU POLLUTION CONTROL BOARD.**

I, R. Sarasavani, D/o. J. Raghavan, aged about 59 years, having my office at No.76, Mount Salai, Guindy, Chennai - 600 032, do hereby solemnly affirm and sincerely state as follows:-

1. I submit that I am working as the Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai and I am authorized to file this report on behalf of the first respondent - TNPCB and as such I am well acquainted with the facts of the case from the records available in our office.
2. It is respectfully submitted that the O.A. No. 644 of 2024, has been registered as a Suo Motu on 31.5.2024 by the Hon'ble NGT (PB) based on the news item published in 'The Deccan Herald' dated 30.04.2024 titled, "Ammonia gas

R. Sarasavani
05/05/24

JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
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leak triggers panic in Coimbatore". The Hon'ble Tribunal (PB) has impleaded the following as respondents:

- (1) Tamil Nadu State Pollution Control Board, through its Member Secretary, No. 76, Mount Salai, Guindy, Chennai-600032.
- (2) Central Pollution Control Board, through its Member Secretary, Parivesh Bhawan, East Arjun Nagar, Delhi-110032.
- (3) District Magistrate, Coimbatore, Collectorate Building, Coimbatore, Tamil Nadu- 641018.

and transferred the O.A. to the Hon'ble NGT(SZ) with a direction to the respondents to file their response.

3. It is respectfully submitted that the Hon'ble National Green Tribunal, Southern Zone, Chennai has taken the O.A and renumbered the O.A. as Original Application No.215 of 2024 (SZ). On 01.08.2024, the Hon'ble NGT(SZ), Chennai has taken the OA No.215 of 2024 and issued notice to the respondents and directed to file their reports.

4. It is respectfully submitted that as per the order passed by the Hon'ble NGT (SZ) dated 01.08.2024, the report is submitted by the first respondent herein as follows.

5. It is respectfully submitted that a News was received from the Revenue Authorities on 29.04.2024 at 07.45 pm, regarding occurrence of Ammonia Gas leakage accident in an industry located at Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District and an immediate inspection was carried out by the District Environmental Engineer, Tamil Nadu Pollution Control Board (TNPCB), Coimbatore North along with the Deputy Chief Scientific Officer, Advanced Environmental Laboratory, Coimbatore, TNPCB and Assistant Engineer, Coimbatore North, TNPCB. The Revenue Divisional Officer, Coimbatore North and Inspector of Police, Karamadai were also present during inspection.

6. It is respectfully submitted that the Ammonia Gas leakage accident occurred in the unit, M/s. AMS & Company located at S.F.No. 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District.

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7. It is respectfully submitted that the unit was purchased from M/s. Golden fries limited, S.F.No. 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District and the present management took control over the facility through Bank auction. M/s. AMS & Company has recently received the HT power supply during the month of April 2024 and has started the renovation work of the factory and machineries without obtaining the Consent to Establish / Consent to Operate (CTE/CTO) from the TNPC Board. The unit has not applied for the CTE/CTO till date. The unit has not started any production activities.

8. It is respectfully submitted that as a part of renovation work, M/s. AMS & Company was involved in reactivating the refrigeration system by filling about 300 kg of Ammonia Gas in its cooling circulation system. The cooling system is used to improve the self-life period of potato chips manufactured by passing the chips through a temperature zone of up to -30°C , so that the chips can be consumed for a period up to 18 months. The Manager of the unit has reported that they have filled Ammonia in the cooling system 15 days back and carried out testing of the refrigeration system on 29.04.2024. On 29.04.2024, around 7.30pm, the Ammonia gas started leaking due to breakage in the pipe line and started dispersing into the nearby habitation of Chenniveerampalayam, because of which the nearby public suffered eye irritation.

9. It is respectfully submitted that on hearing the news of Ammonia leakage from the unit, around 250 people in the nearby habitation of Chenniveerampalayam were evacuated to a Marriage Hall located in the nearby village by the District Administration in order to avoid major health risk to the public. The unit authorities reported that they have arrested the leakage in the pipeline and the issue settled over around 10.00 p.m and no Ammonia gas smell was observed afterwards.

10. It is respectfully submitted that Ambient Air Quality survey was conducted by the Advanced Environmental Laboratory, Coimbatore at two locations (One near the emission source and one at entrance of the unit) to

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measure the presence of Ammonia gas in ambient air. The Air sampling was carried out from 1.00 a.m. (30.04.2024) to 2.20 a.m. (30.04.2024).

11. It is respectfully submitted that the Advanced Environmental Laboratory, Coimbatore has analyzed the AAQ survey samples conducted during the night and furnished the results and the ROA (Attached as **Annexure - I**) reveals that the amount of ammonia gas present in the ambient air is 39.6 $\mu\text{g}/\text{m}^3$ and 30.4 $\mu\text{g}/\text{m}^3$ in the location near the source and entrance of the unit respectively and the concentration levels are within the limit. (As per air quality index – it is Good).

STANDARDS FOR AMMONIA IN AMBIENT AIR ($\mu\text{g}/\text{m}^3$)		
Concentration Range	AQI	Standard
0 -200	0-50	Good
201 – 400	51-100	Satisfactory
401 – 800	101-200	Moderate
801 - 1200	201-300	Poor
1201 – 1800	301-400	Very Poor
>1801	401-500	Severe

12. It is respectfully submitted that on the next day, i.e., 30.04.2024 at 10.00 a.m., the evacuated public have started agitation against the unit along with local Environmentalists and political parties in and around the factory premises.

13. It is respectfully submitted that the Additional Superintendent of Police, Coimbatore and the RDO, Coimbatore North have started negotiation with the public and the details of AAQ Survey conducted by the TNPCB was appraised to them. The affected people had made following demands:

- a. The public has demanded to close down the unit permanently which was operated without any license from the Authorities.
- b. Health Check up to be made to all the affected people.

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- c. Before closing down the unit, all the residual Ammonia gas present in the unit's refrigeration system should be removed safely so that they will not have any fear in future.

14. It is respectfully submitted that the Board has issued direction for closure and disconnection of power supply vide Proceedings dated 30.04.2024 to the unit under Section 33A of the Water (P&CP) Act, 1974, as amended and under Section 31A of the Air (P&CP) Act, 1981 as amended for carrying out establishment / renovation works without obtaining CTE/CTO from the TNPC Board and without adopting any precautionary measures for handling ammonia.

15. It is respectfully submitted that the District Collector, Coimbatore also instructed the District Environmental Engineer, Tamil Nadu Pollution Control Board, Coimbatore North and the Directorate of Industrial Safety and Health, Coimbatore to make joint inspection and to remove the residual ammonia present in the unit's refrigeration system safely before disconnecting the power supply to the unit.

16. It is respectfully submitted that it was reported by the unit's authority that about 300 kg of liquid ammonia was filled in the refrigeration system of the unit 15 days back for testing the system and it was estimated about fifty percent of the gas was leaked during the accident and balance of 125 to 150 kg was present in the system and it was planned to remove the gas safely.

17. It is respectfully submitted that the TNPCB engaged the services of M/s. Vijay Corporation, Navakkarai, Coimbatore, who have supplied Ammonia gas to the unit and the experts from M/s. Chemplast, Mettur for removal of residual Ammonia present in the system. The process of complete removal of Ammonia by transferring it to the cylinders from the receiver tank and from the system was completed around 10.30 pm on 30.04.2024.

18. It is respectfully submitted that, on completion of the removal of residual Ammonia from the system, the TANGEDCO disconnected the power supply pertaining to the unit and the Revenue officials sealed the unit at 11.00 pm on 30.04.2024. Then the public dispersed.

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19. It is respectfully submitted that the TNPC Board, in exercise of the powers conferred under section 31A of Air (P&CP) Act, 1981, has also directed the Director, Industrial Safety and Health to ensure the safety of the residual Ammonia in the cooling system of the unit, vide Proc. dated 16.05.2024.

In the above circumstances, it is humbly prayed that this Hon'ble National Green Tribunal (Southern Zone) may be pleased to pass such further or other orders as this Hon'ble Tribunal may deem fit and proper in the facts and circumstances of this case and thus render justice.

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05/9/24
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.

VERIFICATION

I, R. Sarasavani, D/o. J. Raghavan, working as Joint Chief Environmental Engineer, Tamil Nadu Pollution Control Board, Chennai, do hereby verify that the contents of above report are true to the best of my knowledge through records.

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05/9/24
JOINT CHIEF ENVIRONMENTAL ENGINEER
TAMIL NADU POLLUTION CONTROL BOARD
No.76, MOUNT SALAI, GUINDY,
CHENNAI-600 032.



Tamil Nadu Pollution Control Board
Inspection Report

1	a	Name of the Inspecting Officer	Dr.K.Rawichandran & Er.K.Kalaivendhan			
	b	Designation	DEE & AE			
	c	District office	Coimbatore North			
2		Date of Inspection	29.04.2024 & 30.04.2024			
3	a	Name of the Industry	M/s.AMS & Company			
	b	<u>Factory address:</u> S.F.No. 723, Chidkarampalayam village, Mettupalayam Taluk, Coimbatore District.				
4	a	Category	Classification	Orange	Large	
	b	Type of the industry	2007 - Food and food processing including fruits and vegetable processing			
5		Name of the Occupier of the unit present during inspection.	Thiru. Balakrishnan, Manager, Cell:9894845671			
6	Products manufactured:					
	a	Main Products manufactured:				
		<i>Main Product</i>	<i>Quantity</i>	<i>Unit</i>	<i>Actual production</i>	
		Frozen French fries	1500	T/M	-	
	b	By/Intermediate products manufactured:				
		<i>By / Intermediate Product</i>	<i>Quantity</i>	<i>Unit</i>	<i>Actual production</i>	
7	Quantity of effluent in KLD:					
	i)	Sewage			2 KLD	
	ii)	Trade effluent			72 KLD	
	b)	Sources of trade effluent: Potato washing, steam peeling, potato cutting.				
8	Performance of Sewage Treatment Plant:					
	<i>Nature of Effluent</i>	<i>Sl. No.</i>	<i>Components of STP</i>	<i>Nos.</i>	<i>Dimensions (in metres)</i>	<i>Status of functioning</i>
	(1)	(2)	(2)	(3)	(4)	(5)
	Sewage	1	Septic Tank	1		
		2	Dispersion trench			
	Trade Effluent - Type of ETP : Individual ETP					
9	Sources of Emission and Air Pollution Control Measures provided:					
	Point Source:					
	<i>Sl. No.</i>	<i>Source of Emission</i>	<i>APC measures provided</i>	<i>Stack top dimension (in metres)</i>	<i>Stack ht. above ground (in metres)</i>	<i>Status of functioning</i>
	1.	Drying Ovens - 2 Nos	Precipitators with stack			-
	2.	Frying Ovens - 2 Nos	Mist Eliminators with stack			-
	3.	Steam peeling	Stack			-
	4.	Prechiller - 2 Nos	Stack			-
	5.	Softener Degasser	Stack			-
	6.	DG Set 380 KVA - 3 Nos	Stack			-

10	Remarks on the maintenance of Log Books, Records and separate energy meter for Effluent Treatment Plant.	
11	Remarks on the Disposal of Solid Wastes / Hazardous Wastes :	
12	Remarks on Waste minimization, Inplant measures and House Keeping.	
13	Details of Complaints if any.	Please Refer item No.17
14	Violation of conditions stipulated in the Consent Orders / directions issued under Water/Air Act, if any.	Please Refer item No.17
15	Violation of conditions stipulated in the authorisation issued under the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008 if any:	Please Refer item No.17
16	Details of Samples collected, if any and Date/Time of collection and point of collection:	
17.	Any other special information if any (May include observations/suggestions made during inspection on the performance of ETP/APC Measures).	

Based on the news spreaded regarding occurance of Ammonia Gas leakage in an industry located at Chikkarampalayam Village, Mettupalayam Taluk, Coimbatore District, an immediate inspection was carried out by the District Environmental Engineer - Coimbatore North, the Deputy Chief Scientific Officer, Coimbatore North on 29.04.2024 & 30.04.2024 in the unit of M/s.AMS & Company located at S.F.No. 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District and the following were observed. The RDO, Coimbatore North and Inspector, Karamadal was also present during inspection.

1. The Ammonia Gas leakage accident occured in the unit of M/s.AMS & Company located at S.F.No. 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District.
2. During inspection, the Manager, In-charge for renovation works was present. The Proprietor of the unit was not available during inspection.
3. The unit was not under operation and not even started its production.
4. The said facility was previously operated by the unit of M/s. Golden fries limited, S F No 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District. The unit has obtained CTO vide Proc.No. DEE/TNPCB/CBE/F.4771/O/LW&A/2002 Dated 06.09.2002 and subsequently renewed up to 31.03.2008 for manufacturing of frozen French fries - 1500 T/M. As per the records, the unit has stopped its production during 2014-2015 and the same was mentioned in Inspection report dated 07.04.2015 and Minutes of the personal hearing conducted by the Joint Chief Environmental Engineer(M), TNPCB, Coimbatore with the unit's representatives on 12.07.2016.
5. Later on the unit of M/s.AMS & Company took over the facility by Bank auction. The unit has just got HT power supply during April 2024 and started renovation work of the

facility and machineries without getting CTE/CTO from the TNPC Board.

6. The unit is using cooling system to improve the shelf life period of chips by reducing the temperature upto -30°C so the chips can be used upto 18 months.
7. In a part of that renovation works, the new management has involved in reactivation of refrigeration system by filling about 300kg of Ammonia Gas in its cooling circulation system. The manager reported that they have filled ammonia in the cooling system 15 days back and carried out testing of the system. Leakage of Ammonia gas took place in a pipe line around 7:30PM (29/04/2024) and started dispersing into nearby habitation and some of the nearby public suffered with eye irritation.
8. On hearing the news of Ammonia leakage, around 250 people in the nearby habitation of Chenniveerampalayam was evacuated for safety to a Kalyana Mandapam located in nearby village and health risk to the nearby public was avoided.
9. The issue settled over around 10:00PM and no Ammonia gas smell was observed afterwards.
10. As requested by District administration Ambient Air Quality survey was conducted by Advanced Environmental Laboratory, Coimbatore at two locations (One nearer to emission source and one at entrance of the unit) to measure the presence of Ammonia gas in ambient air. The Air sampling was started around 1:00AM (30/04/2024) and completed around 2:20AM(30/04/2024).
11. AAQ survey was conducted during the night and from the RQA the amount of ammonia gas present in the ambient air is $39.6 \mu\text{g}/\text{m}^3$ and $30.4 \mu\text{g}/\text{m}^3$ in the location near the source and entrance of the unit and the concentration is within the limit. (as per air quality index - It is **Good**)

STANDARDS FOR AMMONIA IN THE AMBIENT AIR ($\mu\text{g}/\text{m}^3$)		
Range	AOI	Standard
0 - 200	0-50	Good
201 - 400	51-100	Satisfactory
401 - 800	101-200	Moderate
801 - 1200	201-300	Poor
1201 - 1600	301-400	Very Poor
>1601	401-500	Severe

In view of the above, it is recommended for issue of direction for closure and direction for disconnection of all power supply connections pertaining to the unit of M/s.AMS & Company located at S.F.No. 723, Chikkarempalayam village, Mettupalayam Taluk, Coimbatore District under Section 33A of the Water (P&CP) Act, 1974 as amended & under Section 31A of the Air (P&CP) Act, 1981 as amended thereon for carrying out establishment / renovation works without obtaining CTE/CTO from the TNPC Board and without adopting any precautionary measures for handling ammonia.

Further, the DISH (Directorate of Industrial Safety and Health) may also be directed to ensure the safety of the residual ammonia in the cooling system.

TANGEDCO SERVICE CONNECTION DETAILS:

Service Nos. HTSC-759

The Superintending Engineer

(Coimbatore-North),

Tamilnadu Generation and Distribution Limited (TNEB),

Tatabad, Coimbatore – 641 012.

(Email id: secben@tnebnat.org)

Executive Engineer / Mettupalayam TANGEDCO,

Sirmuga Road,

Power House

Mettupalayam-641301

eemtpolym@tnebnat.org

Assistant Executive Engineer / Karamadai TANGEDCO,

Kundha Colony

Railway Station Road

Karamadai- 641104

Assistant Engineer / West Karamadai TANGEDCO,

Kundha Colony

Railway Station Road

Karamadai- 641104

It is recommended for issue of direction for closure and direction for disconnection of all power supply connections pertaining to the unit of M/s.AMS & Company located at S.F.No. 723, Chikkarampalayam village, Mettupalayam Taluk, Coimbatore District under Section 33A of the Water (P&CP) Act, 1974 as amended & under Section 31A of the Air (P&CP) Act, 1981 as amended thereon for carrying out activities in the unit without obtaining CTE/CFO from the Board

Further, the DISH (Directorate of Industrial Safety and Health) may also be directed to ensure the safety of the residual ammonia in the cooling system.

S. S. Srinivasan
District Environmental Engineer
Tamilnadu Pollution Control Board
Coimbatore North



TAMILNADU POLLUTION CONTROL BOARD
Advanced Environmental Laboratory, Coimbatore - 641 030

TEST REPORT

ULR-TC1237124000004646

Report No.09/AEL - CBE/AAQS/2024 - 2025, Dated 30.04.2024.

1. Name of the Industry : M/s. AMS & Company.,
2. Address of the Industry : Senniveempalayam, Siskarampalayam (vill),
Karamadai - 641 104, Coimbatore District
3. Date of Survey : 30.04.2024.
4. Duration of Survey : 1 Hour
5. Test Started on : 30.04.2024
6. Test Completed on : 30.04.2024.
7. Matrix : Ambient Air Quality

Meteorological Conditions

Ambient Temperature ($^{\circ}$ C)	32.9	Relative Humidity (%)	53.0
Weather Condition	Clear Sky	Rain Fall (mm)	-
Predominant Wind Direction	South West \rightarrow North East	Mean Wind Speed (km/hr)	-

Ambient Air Quality Survey Results

Sl. No	Location	Direction	Distance (m) *	Height Form G.L.(m)	Pollutants Concentration (microgram / m ³)
					NH ₃
1	On top of scaffolding near Main gate of the unit adjacent to residential area.	North	105	2.0	30.4
2	On top of scaffolding near Admin office of the unit.	North East	70	2.0	39.6

Note:- * With respect to major emission sources.

The analytical results are restricted to the sampling period of 1 hour.

- End of Report -

30/04/24
J.E.S

30/04/24
[Dr. A. MANISEKAR]
Authorised Signatory
[Deputy Chief Scientific Officer]

3rd & 4th Floor, No.5, Ramasamy Nagar, Kavundampalayam, Coimbatore - 641 030.
Telephone: 0422 - 2440174, Email: aqcbe@mpcb.gov.in

BEFORE THE HON'BLE NATIONAL
GREEN TRIBUNAL,
SOUTHERN ZONE, CHENNAI.

Original Application No.215 2024 (SZ)
[Earlier O.A. No. 644 of 2024(PB)]

News Item titled "Ammonia gas leak
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Vs

1. The Member Secretary,
Tamil Nadu Pollution Control Board,
No.76, Mount Salai,
Guindy, Chennai – 600 032 & ors
...Respondents

**REPORT FILED ON BEHALF OF
THE FIRST RESPONDENT - TAMIL
NADU POLLUTION CONTROL
BOARD.**

Advocate for Respondent: TNPCB
Thiru.S. Sai Sathya Jith,
Advocate, Chennai.

Date:06.09.2024

Date of hearing on:14.10.2024.

