



# IndianOil

## JOURNEY RISK MANAGEMENT (JRM) STUDY

**Salem Terminal TO COCO CHENGAPALLI ADH SHRI  
JAANAKI PETRO FUEL**

### Objective of the JRM Report

This JRM report is designed to ensure compliance with the Central Motor Vehicle Rules, 1989 (CMVR), AIS 140 standards, and the Road Transport Safety Policy (RTSP). It provides a comprehensive risk assessment for the transportation of hazardous materials along specified routes. By integrating these legal frameworks, the report offers a broad strategy for identifying and mitigating route-specific risks.

### Regulatory Compliance

The report complies with the Central Motor Vehicles (Eleventh Amendment) Rules, 2022, mandating safe transportation practices for N2 and N3 category vehicles carrying hazardous materials. These rules require detailed route assessments, especially regarding road conditions, speed limits, and risk areas, to ensure safety compliance.

### Risk Management Strategy

This report categorizes transportation routes into high-risk and medium-risk areas, with a focus on factors such as sharp turns, accident-prone regions, and elevation changes. The goal is to provide actionable recommendations to minimize these risks, including speed regulations, driver warnings for hazardous zones, and the option of alternate routes.

## Compliance with the Road Transport Safety Policy (RTSP)

The report integrates RTSP provisions, including mandatory driving hours, rest periods, and nighttime driving restrictions. It ensures that drivers follow official guidelines, such as taking prescribed rest breaks and avoiding dangerous road conditions like poor visibility, heavy crowds, or high-traffic areas during peak hours.

## Emergency Preparedness and Response

The report highlights the significance of predetermined emergency stops for refueling, rest, and overnight stays. It includes protocols for safe responses to road hazards, alternative routes, and rerouting processes if roads are closed or severe weather arises. This aligns with the RTSP emphasis on driver safety and rapid emergency response.

## Environmental Considerations

The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental impacts during transport.

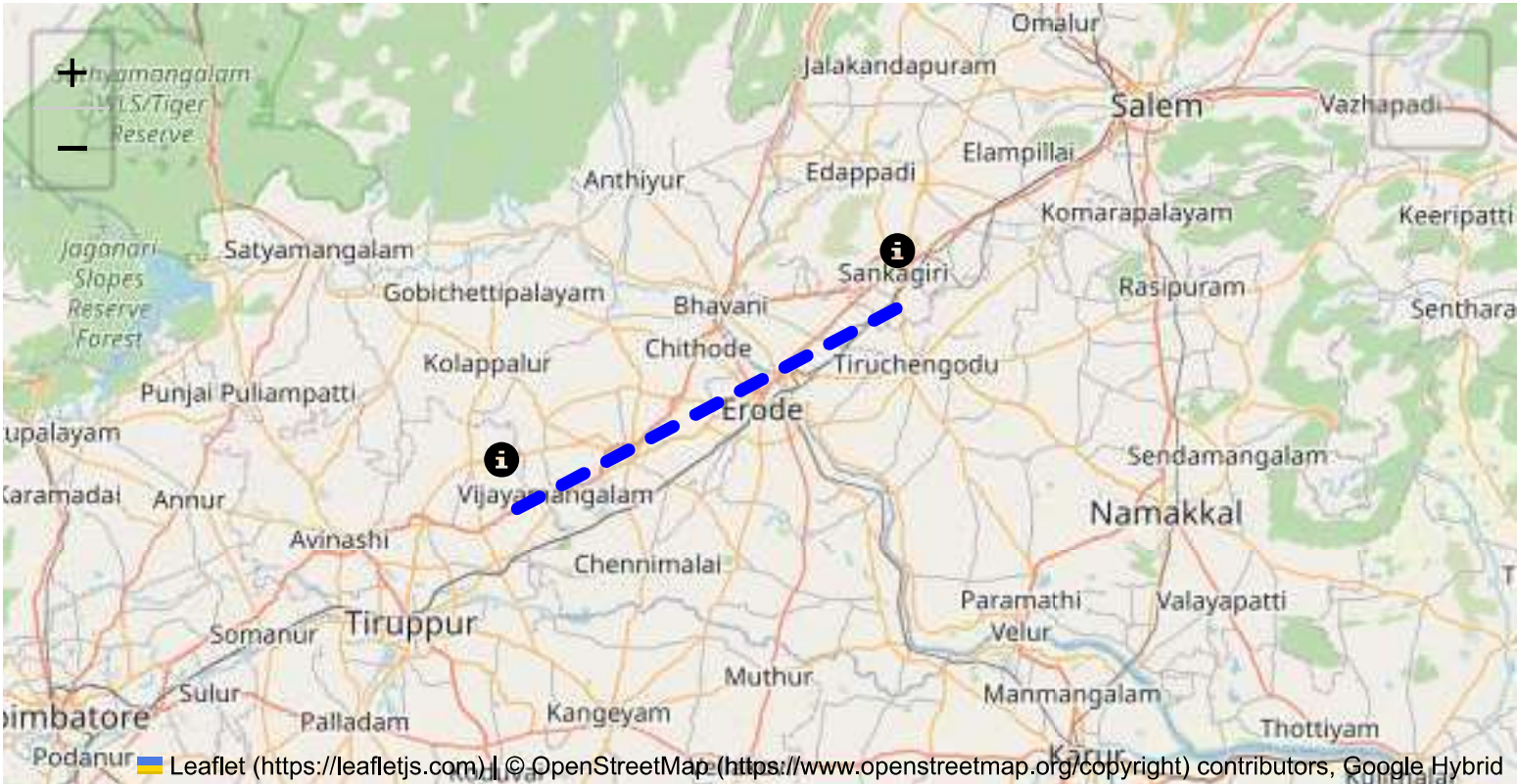
## Journey Risk Mitigation

The report includes route-specific risk assessments, detailed journey charts, and defensive driving guidelines for each transport route. Integration with vehicle tracking systems guarantees real-time warnings on hazardous areas, speed limits, and mandatory stops, consistent with RTSP and CMVR safety norms.

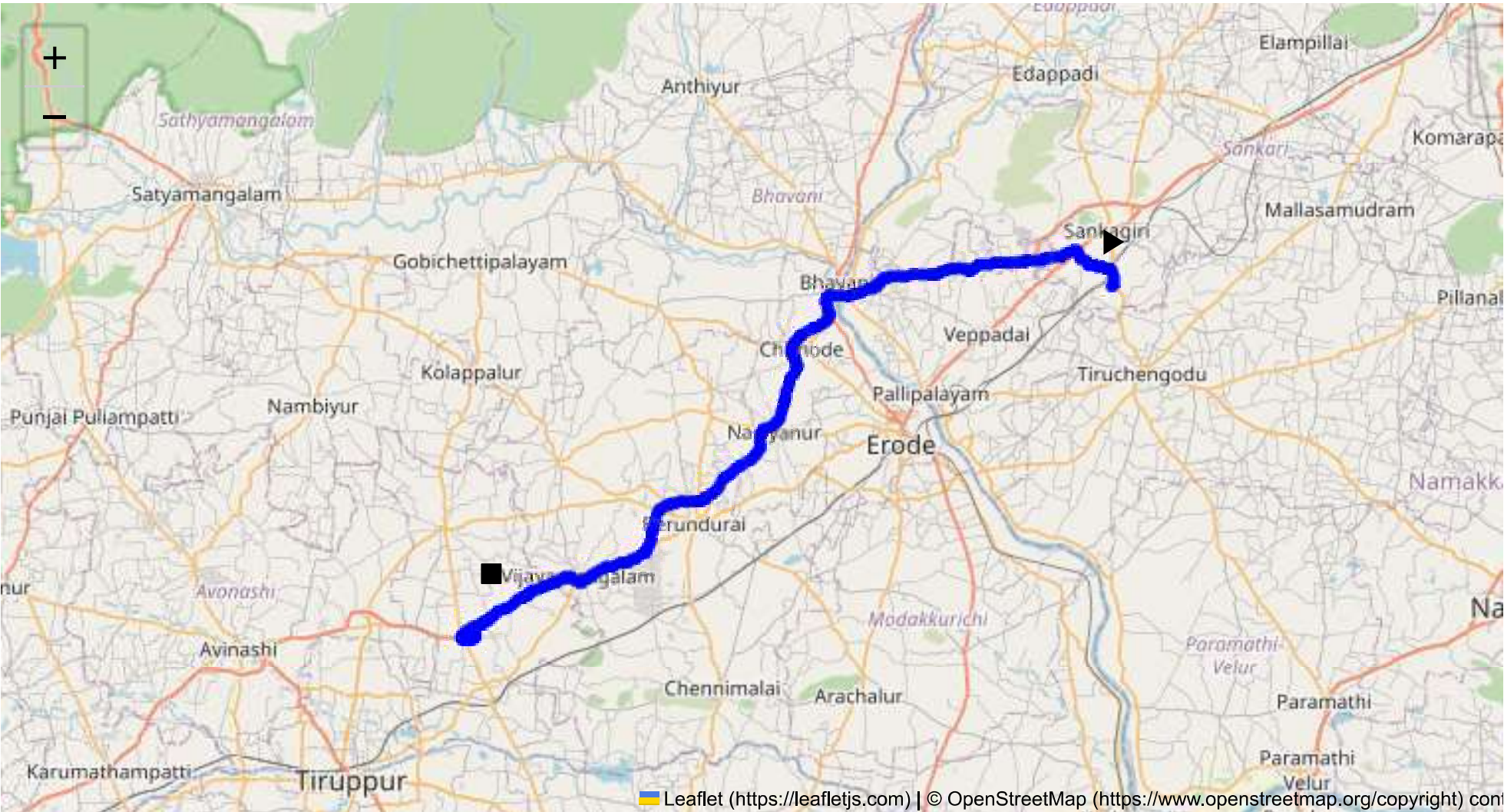
## Compliance with Government Directives

This report fully adheres to governmental directives regarding hazardous material transportation, implementing mandatory speed limits, nighttime driving restrictions, and comprehensive driver briefings and real-time alerts about route-related risks.





**Route Summary:**  
**Total Distance: 70.82 km**  
**Estimated Duration: 1.4 hours**  
**Adjusted Duration (Heavy Vehicle): 1.7 hours**  
**Start: (11.4381, 77.8734)**  
**End: (11.21273, 77.44152)**



**Risk Spots**

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
0	Turn	11.43822, 77.87348	15 KM/Hr	0.01 km
1	Turn	11.43968, 77.87345	15 KM/Hr	0.14 km
2	Turn	11.44029, 77.87544	15 KM/Hr	0.40 km



	RiskSpotType	Coordinates	Speed Limit	Distance from Start
3	Turn	11.44898, 77.87410	15 KM/Hr	1.31 km
4	Turn	11.45357, 77.85789	15 KM/Hr	3.19 km
5	Turn	11.45847, 77.85140	15 KM/Hr	4.12 km
6	Turn	11.46303, 77.84945	15 KM/Hr	4.66 km
7	Turn	11.45509, 77.81383	15 KM/Hr	8.69 km
8	Turn	11.29288, 77.59029	15 KM/Hr	44.28 km
9	Turn	11.29140, 77.58253	15 KM/Hr	45.10 km
10	Turn	11.20489, 77.42925	15 KM/Hr	66.07 km
11	Turn	11.20364, 77.43054	15 KM/Hr	66.24 km
12	Turn	11.20226, 77.43043	15 KM/Hr	66.40 km
13	Turn	11.19889, 77.43133	15 KM/Hr	66.70 km
14	Turn	11.19851, 77.42977	15 KM/Hr	66.94 km
15	Turn	11.19699, 77.42372	15 KM/Hr	67.70 km
16	Turn	11.19963, 77.42230	15 KM/Hr	68.03 km
17	Turn	11.20054, 77.42223	15 KM/Hr	68.15 km
18	Turn	11.21204, 77.44144	15 KM/Hr	70.44 km

## Emergency Services

	type	name	coordinates	side_of_road
1	hospital	Government Hospital	11.4525596, 77.7749426	Opposite Side
3	hospital	Dhanvantri Multi Speciality Hospital	11.451362, 77.766602	Opposite Side
4	hospital	Dhanvanthri Hospital	11.4496712, 77.7593772	Opposite Side
5	hospital	J.K.K. Trust Hospital	11.4445841, 77.7307962	Driver's Side
6	hospital	Shri Sathyanarayana Hospital	11.4291297, 77.6913408	Driver's Side
9	hospital	Thanish Siddha Hospital	11.430003, 77.674964	Opposite Side
10	clinic	Harshitha Clinic	11.4313207, 77.674718	Opposite Side
11	hospital	Sri Kaalangi Siddhar Mooligai Vaithiya Nilayam	11.432369, 77.674894	Opposite Side
12	clinic	G.K Clinic	11.4297244, 77.6749715	Opposite Side
16	clinic	Erode Cancer Centre	11.3732, 77.649152	Opposite Side
27	hospital	Irt Hospital	11.2803603, 77.5644118	Driver's Side
31	hospital	Gen Siddha Hospital	11.2375033, 77.5059797	Opposite Side
32	hospital	Vijayamangalm Government Hospital	11.2382827, 77.501687	Opposite Side
33	hospital	Dr. N Viswanathan Hospital	11.2412783, 77.5005502	Opposite Side

	type	name	coordinates	side_of_road
35	clinic	P.M. Clinic	11.2281078, 77.4647296	Opposite Side
39	hospital	Sri Renu Hospital	11.1990225, 77.4219937	Driver's Side

Rest Stops

	type	name	coordinates	side_of_road
0	fuel	SLOA Bunk - Unit II	11.4543854, 77.8052665	Driver's Side
2	restaurant	Canteen	11.4478386, 77.7705441	Driver's Side
7	fuel	Reliance	11.4325168, 77.6912865	Opposite Side
8	fuel	Indian Oil	11.4321177, 77.6765153	Opposite Side
13	fuel	KR Fuels - Auto LPG	11.4127737, 77.6747462	Driver's Side
14	hotel	Athithi cafe	11.3756993, 77.6516401	Driver's Side
15	restaurant	Athithi Cafe	11.3756705, 77.6516565	Driver's Side
17	restaurant	Kumki Restaurant	11.3523614, 77.644608	Driver's Side
18	parking	Kumki Restaurant	11.352414, 77.644492	Driver's Side
19	restaurant	Paradise Biriyani	11.3291744, 77.6297833	Driver's Side
20	parking	NHAI parking	11.3030168, 77.6009269	Opposite Side
21	hotel	Hotel Annachi	11.3020259, 77.600017	Opposite Side
22	hotel	Adayar Ananda Bhavan(a2b)	11.3018451, 77.599909	Opposite Side
23	restaurant	Ambur Star Biriyani	11.3017372, 77.5999546	Opposite Side
24	restaurant	Arukkaniyammal Mess	11.2982771, 77.5967424	Opposite Side
25	fuel	HP	11.2909675, 77.5815262	Driver's Side
26	cafe	Backery and Cafe	11.2893987, 77.565338	Opposite Side
28	fuel	Reliance	11.2575595, 77.5511245	Driver's Side
29	fuel	Bharat Petroleum	11.255444, 77.5457729	Opposite Side
30	fuel	Auto LPG	11.2523222, 77.5400243	Opposite Side
34	fuel	HP Gas Station	11.239607, 77.4949754	Driver's Side
36	fuel	Indian Oil	11.2126458, 77.4417156	Opposite Side
37	restaurant	MDS restaurant	11.2058137, 77.4295619	Driver's Side
38	restaurant	Hotel Sree Anandha Bhavan	11.2058482, 77.4297017	Driver's Side

Welcome to the Journey Risk Management Study

## Route Overview:

The route from Sangagiri to Vadamugam Kangayapalayam in Tamil Nadu covers approximately 70.82 kilometers. The primary path involves traveling via NH544, a well-trafficked national highway that provides a direct connection between these two points. This route is commonly used for cargo transportation due to its relatively straightforward and accessible layout.

## Weather Conditions:

Tamil Nadu generally experiences a tropical climate. The region can face heavy rainfall during monsoon seasons from June to September and again around October to December. This could lead to reduced visibility and slippery road surfaces. During summer months (March to May), high temperatures can affect vehicle performance and road conditions.

## Traffic Patterns:

- Peak Hours:** Typically, traffic increases during morning hours (7:30 AM - 9:30 AM) and evening hours (5:30 PM - 8:00 PM). This may lead to congestion, particularly near urban areas and intersections with other major roads.
- Congestion-Prone Areas:** Salem and Erode districts might experience traffic bottlenecks, especially near market areas and industrial zones.

## Road Quality and Infrastructure:

The NH544 is generally in good condition, designed to handle heavy traffic including trucks carrying hazardous materials. However, secondary roads, especially near smaller towns and villages, may have deteriorated sections and require caution. Frequent maintenance is carried out which could cause temporary disruptions.

## Alternative Routes:

In case of emergencies or major roadblocks, consider:

- Detour via SH20:** This state highway can act as an alternative, though it may increase travel time. It connects through smaller towns such as Tiruchengode.
- Local Roads:** Access localized roads only if familiar with smaller network lanes, or in case of absolute necessity, given their inconsistent quality.

## Local Regulations:

Transport of hazardous materials is subject to strict state and national regulations, including specific permissions and adherence to designated routes and timing. Restrictions are often enforced during peak traffic hours to minimize risks.

## Historical Incidents:

While there have been incidences of road accidents in the region, specific data on incidents involving heavy vehicles or hazardous materials within this section isn't extensively documented. However, awareness of sharp turns, high-speed incidents, and previous collision points is necessary.

## Environmental Considerations:

The route passes through both industrial and semi-rural areas with some stretches encompassing agricultural land. There are no significant wildlife conservation areas; however, care should be taken near water bodies to avoid chemical spillage.

## Communication Coverage:

Most of the route should have comprehensive mobile network coverage. Potential dead zones may exist in more rural stretches or within hilly terrain. Noteworthy patches include sections between Erode and small villages.

## Emergency Response Times:

- **Urban Areas (Salem, Erode):** Emergency services should reach within 15-30 minutes.
- **Rural Areas:** Response times could extend to 45 minutes or more due to distance from service centers.

## Overall Risk Assessment:

The route exhibits moderate risk typical of a major transport corridor with potential hazards primarily stemming from weather impacts, peak traffic congestion, and infrastructure conditions on subsidiary roads. Adherence to regulations and preparedness for inclement incidents will be crucial in maintaining safety. Regular communication with dispatch centers and local authorities is essential for real-time updates on road conditions and potential detours.

In summary, exercising appropriate caution, particularly during adverse weather conditions and peak traffic hours, along with compliance with legal and regulatory requirements, should mitigate most risks associated with this route for heavy vehicles transporting hazardous materials.

## Route Photos of Risky Spots





**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 0.40 km**

**Coordinates: 11.44029, 77.87544**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 1.31 km**

**Coordinates: 11.44898, 77.87410**





**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 3.19 km**

**Coordinates: 11.45357, 77.85789**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 4.12 km**

**Coordinates: 11.45847, 77.85140**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 4.66 km**

**Coordinates: 11.46303, 77.84945**





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 8.69 km  
**Coordinates:** 11.45509, 77.81383



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 44.28 km  
**Coordinates:** 11.29288, 77.59029





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 45.10 km  
**Coordinates:** 11.29140, 77.58253



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 66.07 km  
**Coordinates:** 11.20489, 77.42925



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 66.24 km  
**Coordinates:** 11.20364, 77.43054





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 66.40 km  
**Coordinates:** 11.20226, 77.43043



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 66.70 km  
**Coordinates:** 11.19889, 77.43133





**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 66.94 km**

**Coordinates: 11.19851, 77.42977**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 67.70 km**

**Coordinates: 11.19699, 77.42372**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 68.03 km**

**Coordinates: 11.19963, 77.42230**





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 68.15 km  
**Coordinates:** 11.20054, 77.42223



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 70.44 km  
**Coordinates:** 11.21204, 77.44144

[Download Interactive Map](#)



