



# IndianOil

## JOURNEY RISK MANAGEMENT (JRM) STUDY

### Salem Terminal TO COCO GANAPATHIPALAYAM EDCCWS II

#### 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.

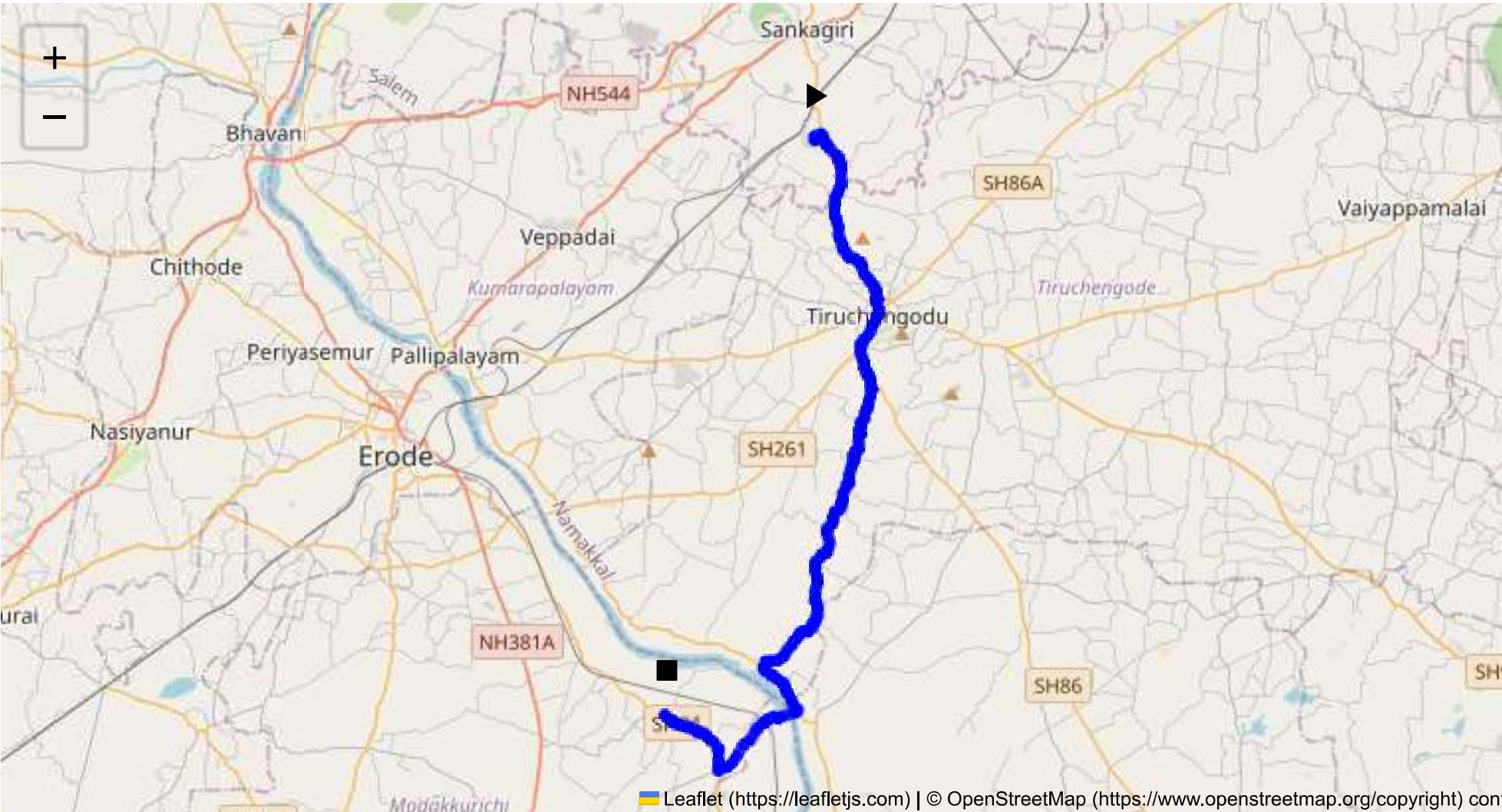
## Compliance with Government Directives

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: 32.91 km**  
**Estimated Duration: 0.9 hours**  
**Adjusted Duration (Heavy Vehicle): 1.1 hours**  
**Start: (11.4381, 77.8734)**  
**End: (11.242672, 77.82091)**



Risk Spots

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
1	Turn	11.43811, 77.87348	15 KM/Hr	0.00 km
2	Turn	11.43956, 77.87340	15 KM/Hr	0.14 km
3	Blind Spot	11.44029, 77.87544	10 KM/Hr	0.40 km

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
0	Roundabout	11.38395, 77.89480	15 KM/Hr	7.43 km
4	Turn	11.37868, 77.89498	15 KM/Hr	8.01 km
5	Turn	11.35759, 77.89191	15 KM/Hr	10.66 km
6	Turn	11.33071, 77.88660	15 KM/Hr	13.78 km
7	Turn	11.32130, 77.88484	15 KM/Hr	14.92 km
8	Turn	11.31205, 77.88131	15 KM/Hr	16.01 km
9	Turn	11.31151, 77.88008	15 KM/Hr	16.14 km
10	Turn	11.30805, 77.87934	15 KM/Hr	16.54 km
11	Turn	11.29763, 77.87710	15 KM/Hr	17.79 km
12	Turn	11.29668, 77.87515	15 KM/Hr	18.04 km
13	Turn	11.29585, 77.87457	15 KM/Hr	18.16 km
14	Turn	11.27590, 77.87354	15 KM/Hr	20.50 km
15	Turn	11.27057, 77.86827	15 KM/Hr	21.39 km
16	Turn	11.26017, 77.85606	15 KM/Hr	23.29 km
17	Turn	11.25802, 77.85511	15 KM/Hr	23.51 km
18	Turn	11.24384, 77.86689	15 KM/Hr	25.65 km
19	Turn	11.24100, 77.86030	15 KM/Hr	26.39 km
20	Blind Spot	11.22374, 77.83970	10 KM/Hr	29.62 km

Emergency Services

	type	name	coordinates	side_of_road
0	hospital	Tiruchengode, Goverment Hospital	11.3903328, 77.8920627	Driver's Side
1	hospital	SPM Medical Centre,Tiruchengode	11.3881331, 77.8931963	Opposite Side
3	hospital	T.C.A Hospital Tiruchengode	11.3791885, 77.8965774	Driver's Side
4	hospital	Soorya Multispecialty Hospital	11.3786429, 77.8931912	Opposite Side
5	clinic	Kongu Nursing Home	11.3783065, 77.8961134	Driver's Side
6	hospital	Tiruchengode Government Hospital	11.37645, 77.89426	Driver's Side
7	hospital	Tirukumaran Hospitals	11.3782118, 77.8914933	Opposite Side
8	hospital	Krishna Hospital, Namakkal	11.3754811, 77.8931817	Opposite Side
9	police	கரட்டுப்பாளையம் காவல் நிலையம்	11.357586, 77.8922539	Driver's Side
10	hospital	Chinnusamy Hospital	11.2414262, 77.8216267	Driver's Side



## Rest Stops

	type	name	coordinates	side_of_road
2	restaurant	Lijo	11.3805115, 77.8946385	Opposite Side

## Welcome to the Journey Risk Management Study

### Route Safety Analysis Report: Sangagiri to Ganapathipalayam, Tamil Nadu

1. Overview of the Route Map

- The route from Sangagiri to Ganapathipalayam stretches approximately 32.91 kilometers and primarily follows a combination of state highways and district roads. The journey typically winds through rural areas, small towns, and villages, offering several intersections and junctions.

2. Typical Weather Conditions and Potential Weather-Related Hazards

- Tamil Nadu experiences a tropical climate. During the monsoon season (June to September), heavy rains can cause waterlogging and reduced visibility. Moreover, the winters are mild, but fog can be an issue in early mornings. Weather-linked hazards include slippery roads during the rains and possible localized flooding.

3. Traffic Patterns

- **Peak Hours:** Traffic is typically higher in the morning (7 AM - 10 AM) and evening (5 PM - 8 PM) during work commutes.
- **Congestion-Prone Areas:** Expect congestion near towns and village markets, particularly around major junctions and in Sangagiri town. Checkpoints and tolls may also cause delays.

4. Assessment of Road Quality and Infrastructure

- The road quality varies but generally includes well-maintained highways and rural roads that can be narrow and less cared for. Potholes might appear after the monsoons, and shoulder lanes may not be reliably present.

5. Suggestions for Alternative Routes for Emergencies

- In case of emergencies, alternate roadways via the NH44 to divert north before reconnecting with local roads can be explored, though this may add significant distance. It’s crucial to review local maps for usable feeder roads.

6. Summary of Local Regulations Affecting Hazardous Material Transport

- Regulations in India require vehicles carrying hazardous materials to display appropriate placards and adhere to designated routes and timings. Night travel restrictions may apply, and local permits might be necessary.

7. Overview of Historical Incidents Involving Heavy Vehicles or Hazardous Materials

- While specific historical data is scarce for this precise route, regional incidents often involve vehicle overturns due to speeding and improperly secured loads, particularly on rural roads.

8. Environmental Considerations and Sensitive Areas

- The route passes through areas of agricultural activity, requiring careful management of accidental spills or leaks. There might be natural reserves or water bodies where extra caution is advised to avoid contamination.

9. Analysis of Communication Coverage

- While urban areas usually have robust cellular networks, rural segments might experience reduced signal strength leading to potential communication dead zones. It’s advisable to identify and note these along the route.

10. Estimated Emergency Response Times for Different Route Segments

- Response times are faster near towns and highways, ranging from 20 to 30 minutes. In rural stretches, particularly during adverse conditions, response times can extend up to an hour.

11. Overall Summary of Risk Assessment

- This route, while generally navigable and straightforward, contains typical risks associated with rural travel in India. These include weather-related impediments, potential for road degradation, and variable traffic conditions. Accurate navigation, adherence to regulatory requirements, and proactive safety measures are essential to manage the transportation of hazardous materials safely.

It is recommended that truck drivers are briefed thoroughly on the characteristics of this route, equipped with up-to-date navigational aids, and informed about the nearest service and emergency facilities along the journey.

Route Photos of Risky Spots



**Risk Type:** Blind Spot  
**Speed Limit:** 10 KM/Hr  
**Distance from Start:** 0.40 km  
**Coordinates:** 11.44029, 77.87544





**Risk Type: Roundabout**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 7.43 km**

**Coordinates: 11.38395, 77.89480**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 8.01 km**

**Coordinates: 11.37868, 77.89498**





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 10.66 km  
**Coordinates:** 11.35759, 77.89191



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 13.78 km  
**Coordinates:** 11.33071, 77.88660



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 14.92 km  
**Coordinates:** 11.32130, 77.88484





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 16.01 km  
**Coordinates:** 11.31205, 77.88131



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**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 16.14 km  
**Coordinates:** 11.31151, 77.88008





**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 16.54 km  
**Coordinates:** 11.30805, 77.87934



**Risk Type:** Turn  
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**Distance from Start:** 17.79 km  
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**Speed Limit:** 15 KM/Hr  
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**Coordinates:** 11.27590, 77.87354





**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 21.39 km**

**Coordinates: 11.27057, 77.86827**



**Risk Type: Turn**

**Speed Limit: 15 KM/Hr**

**Distance from Start: 23.29 km**

**Coordinates: 11.26017, 77.85606**





**Risk Type:** Turn  
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**Distance from Start:** 23.51 km  
**Coordinates:** 11.25802, 77.85511



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**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 25.65 km  
**Coordinates:** 11.24384, 77.86689



**Risk Type:** Turn  
**Speed Limit:** 15 KM/Hr  
**Distance from Start:** 26.39 km  
**Coordinates:** 11.24100, 77.86030





Risk Type: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 29.62 km

Coordinates: 11.22374, 77.83970

[Download Interactive Map](#)