



IndianOil

JOURNEY RISK MANAGEMENT (JRM) STUDY

Salem Terminal TO PGS PETROL BUNK

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

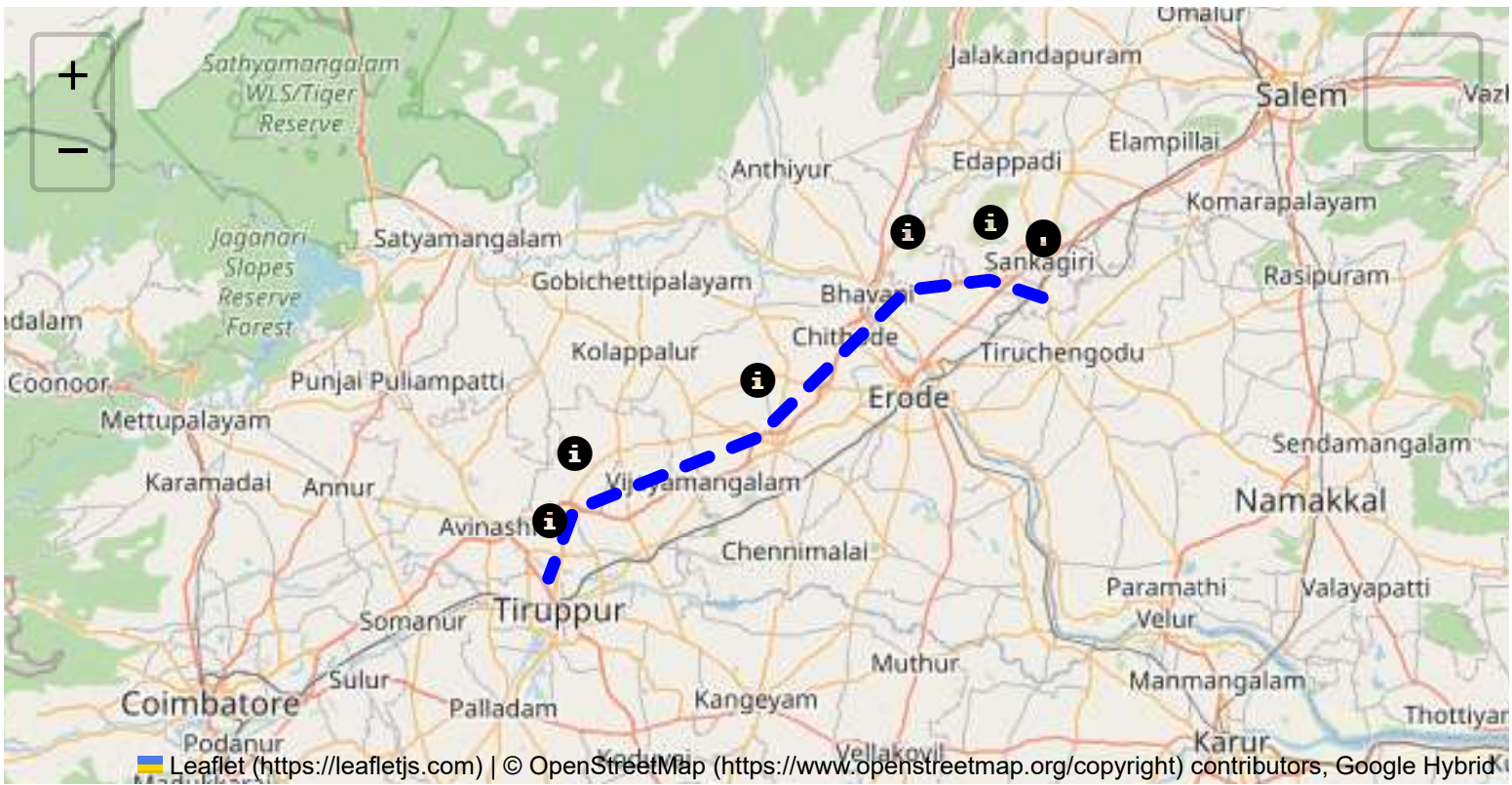
The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental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

Journey Risk Mitigation

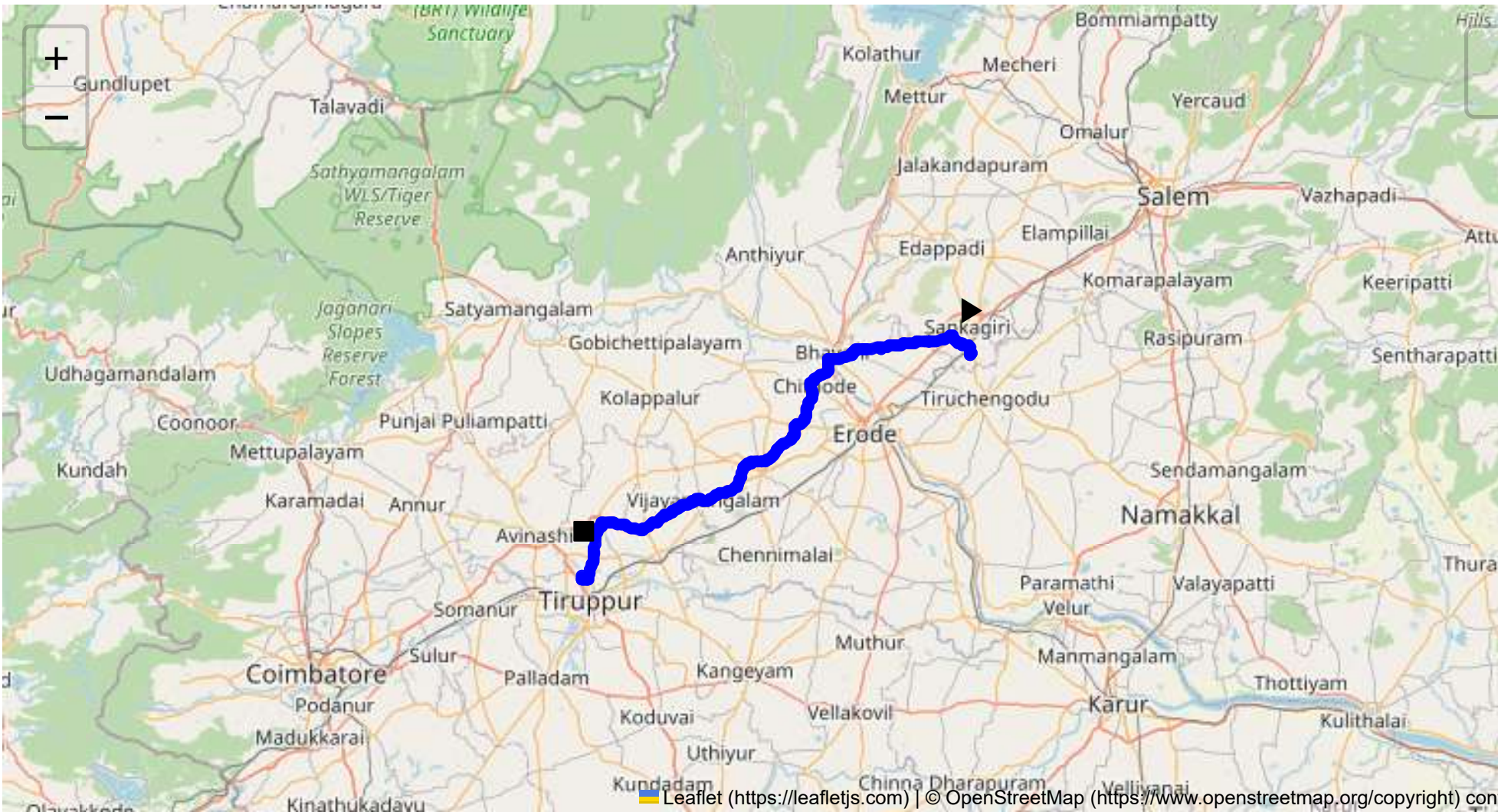
The report includes route-specific risk assessments, detailed journey charts, and defensive driving guidelines for each transport route. Integration with vehicle tracking systems guarantees real-time warnings on hazardous areas, speed limits, and mandatory stops, consistent with RTSP and CMVR safety 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: 85.02 km
Estimated Duration: 1.7 hours
Adjusted Duration (Heavy Vehicle): 2.2 hours
Start: (11.4381, 77.8734)
End: (11.134235, 77.332785)



Risk Spots

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
0	Turn	11.43822, 77.87348	15 KM/Hr	0.01 km
1	Turn	11.43961, 77.87341	15 KM/Hr	0.14 km
2	Turn	11.44029, 77.87544	15 KM/Hr	0.29 km

	RiskSpotType	Coordinates	Speed Limit	Distance from Start
3	Turn	11.44893, 77.87413	15 KM/Hr	1.30 km
4	Turn	11.45127, 77.86734	15 KM/Hr	2.15 km
5	Turn	11.45350, 77.85700	15 KM/Hr	3.29 km
6	Turn	11.45845, 77.85141	15 KM/Hr	4.11 km
7	Turn	11.46303, 77.84945	15 KM/Hr	4.65 km
8	Turn	11.45542, 77.81725	15 KM/Hr	8.37 km
9	Blind Spot	11.45634, 77.81673	10 KM/Hr	8.50 km
10	Blind Spot	11.44530, 77.72783	10 KM/Hr	18.65 km
11	Turn	11.20728, 77.35914	15 KM/Hr	74.23 km
12	Turn	11.20246, 77.35895	15 KM/Hr	74.85 km
13	Turn	11.13132, 77.34190	15 KM/Hr	83.09 km
14	Turn	11.13131, 77.34033	15 KM/Hr	83.24 km
15	Blind Spot	11.12933, 77.34007	10 KM/Hr	83.52 km
16	Blind Spot	11.12918, 77.33333	10 KM/Hr	84.21 km
17	Blind Spot	11.13433, 77.33289	10 KM/Hr	84.78 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
7	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
14	clinic	Erode Cancer Centre	11.3732, 77.649152	Opposite Side
28	hospital	Irt Hospital	11.2803603, 77.5644118	Driver's Side
32	hospital	Gen Siddha Hospital	11.2375033, 77.5059797	Opposite Side
33	hospital	Vijayamangalm Government Hospital	11.2382827, 77.501687	Opposite Side
34	hospital	Dr. N Viswanathan Hospital	11.2412783, 77.5005502	Opposite Side
36	clinic	P.M. Clinic	11.2281078, 77.4647296	Opposite Side

	type	name	coordinates	side_of_road
40	hospital	Sri Renu Hospital	11.1990225, 77.4219937	Driver's Side
42	hospital	Akshitha Hospital- Perumanallur	11.2050424, 77.3584876	Opposite Side
43	hospital	Malarpriya Medical Centre - Tiruppur	11.16584, 77.351437	Driver's Side
44	hospital	Jacob Hospital	11.1645096, 77.3496992	Driver's Side
45	clinic	Sri Dhanvanthri Clinic	11.160539, 77.349578	Driver's Side
46	hospital	Revathi Charity Trust Hospital	11.1588612, 77.34966	Driver's Side
47	hospital	Sree Saran Medical Centre	11.1488, 77.346725	Driver's Side
48	hospital	Sri Kumaran Hospital, Tiruppur	11.1307528, 77.3412468	Driver's Side
49	hospital	Saayi Prema, Tiruppur	11.1286682, 77.3404616	Driver's Side
50	hospital	Vasan Eye Care Hospital, Tirupur	11.127834, 77.3415747	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
6	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
15	hotel	Athithi cafe	11.3756993, 77.6516401	Driver's Side
16	restaurant	Athithi Cafe	11.3756705, 77.6516565	Driver's Side
17	restaurant	Canteen	11.3725755, 77.6466465	Opposite Side
18	restaurant	Kumki Restaurant	11.3523614, 77.644608	Driver's Side
19	parking	Kumki Restaurant	11.352414, 77.644492	Driver's Side
20	restaurant	Paradise Biriyani	11.3291744, 77.6297833	Driver's 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	parking	NHAI parking	11.3030168, 77.6009269	Opposite Side
25	restaurant	Arukkaniyammal Mess	11.2982771, 77.5967424	Opposite Side
26	fuel	HP	11.2909675, 77.5815262	Driver's Side
27	cafe	Backery and Cafe	11.2893987, 77.565338	Opposite Side

	type	name	coordinates	side_of_road
29	fuel	Reliance	11.2575595, 77.5511245	Driver's Side
30	fuel	Bharat Petroleum	11.255444, 77.5457729	Opposite Side
31	fuel	Auto LPG	11.2523222, 77.5400243	Opposite Side
35	fuel	HP Gas Station	11.239607, 77.4949754	Driver's Side
37	fuel	Indian Oil	11.2126458, 77.4417156	Opposite Side
38	restaurant	MDS restaurant	11.2058137, 77.4295619	Opposite Side
39	restaurant	Hotel Sree Anandha Bhavan	11.2058482, 77.4297017	Opposite Side
41	restaurant	Arya Bhavan	11.1991073, 77.4133915	Opposite Side

Welcome to the Journey Risk Management Study

Route Overview

The route from Sangagiri to Tiruppur via Puthur, Padaiveedu, Service Road in 638183, Perundurai Bypass, and State Highway 196, encompasses approximately 85.02 kilometers. The journey typically takes about 1.75 hours for heavy vehicles carrying hazardous materials.

Weather Conditions

- Typical Weather:** The region experiences a tropical climate with hot summers (March to June), a monsoon season (July to September), and mild winters (November to February).
- Weather Hazards:** Heavy rains during the monsoon season can lead to waterlogging and reduced visibility. Heat may contribute to road surface deterioration in summer months.

Traffic Patterns

- Peak Hours:** Generally, morning (8:00 AM - 10:00 AM) and evening (5:00 PM - 8:00 PM) see increased congestion, especially near major towns such as Perundurai and in Tiruppur.
- Congestion Points:** Expect delays particularly at Perundurai Bypass and intersections entering Tiruppur.

Road Quality and Infrastructure

- Road Conditions:** Generally good on highways, but some segments, especially in rural areas or service roads, may have potholes or require maintenance.
- Infrastructure:** The availability of rest stops and petrol stations is spread sporadically; however, key necessities are available near major towns.

Alternative Routes

- **For Emergencies:** Consider NH44 for north-south travel if severe congestion or roadblocks occur, though this may extend travel time.

Local Regulations for Hazardous Material Transport

- Adherence to local traffic regulations is mandatory, including speed limits and signage specifically for heavy and hazardous vehicles.
- Specific timing restrictions might apply for transporting hazardous materials, especially during peak periods in populated areas.

Historical Incidents

- **Accidents:** A review of local records would be necessary for precise data, but highways in Tamil Nadu see regular heavy vehicle incidents, often due to human error or mechanical failures.
- **Common Causes:** Over-speeding and poor visibility during heavy rainfall have been noted factors in historical incidents.

Environmental Considerations

- **Sensitive Areas:** Avoidance of proximity to water bodies during spills is crucial. Planning is needed near nature reserves, particularly during fuel transport.

Communication Coverage

- **Potential Dead Zones:** Coverage is generally good along this route, but occasional signal drops might occur between smaller communities. Essential to have offline maps and communication tools.

Emergency Response Times

- **Estimated Times:** Depending on proximity to major towns like Tiruppur or Perundurai, response times may vary from 15 minutes to an hour. Areas distant from towns might experience longer wait times.

Overall Summary of Risk Assessment

This route is moderately safe for the transport of hazardous materials when following regulatory guidelines and safety protocols. Proper planning around peak traffic times, weather conditions, and communications will mitigate many potential risks. Awareness of road conditions and maintenance is paramount, particularly post-monsoon. Emergency planning and practice of alternative route familiarity could significantly benefit incident management.

Route Photos of Risky Spots



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 0.29 km

Coordinates: 11.44029, 77.87544



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 1.30 km

Coordinates: 11.44893, 77.87413



Risk Type: Turn
Speed Limit: 15 KM/Hr
Distance from Start: 2.15 km
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Distance from Start: 3.29 km
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Risk Type: Turn
Speed Limit: 15 KM/Hr
Distance from Start: 4.11 km
Coordinates: 11.45845, 77.85141



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 4.65 km

Coordinates: 11.46303, 77.84945



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 8.37 km

Coordinates: 11.45542, 77.81725



Risk Type: Blind Spot
Speed Limit: 10 KM/Hr
Distance from Start: 8.50 km
Coordinates: 11.45634, 77.81673



Risk Type: Blind Spot
Speed Limit: 10 KM/Hr
Distance from Start: 18.65 km
Coordinates: 11.44530, 77.72783



Risk Type: Turn
Speed Limit: 15 KM/Hr
Distance from Start: 74.23 km
Coordinates: 11.20728, 77.35914



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 74.85 km

Coordinates: 11.20246, 77.35895



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 83.09 km

Coordinates: 11.13132, 77.34190



Risk Type: Turn

Speed Limit: 15 KM/Hr

Distance from Start: 83.24 km

Coordinates: 11.13131, 77.34033



Risk Type: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 83.52 km

Coordinates: 11.12933, 77.34007



Risk Type: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 84.21 km

Coordinates: 11.12918, 77.33333



Risk Type: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 84.78 km

Coordinates: 11.13433, 77.33289

[Download Interactive Map](#)