



IndianOil

JOURNEY RISK MANAGEMENT (JRM) STUDY

Gorakhpur LPG BP TO YASHODARAJ INDANE GR

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

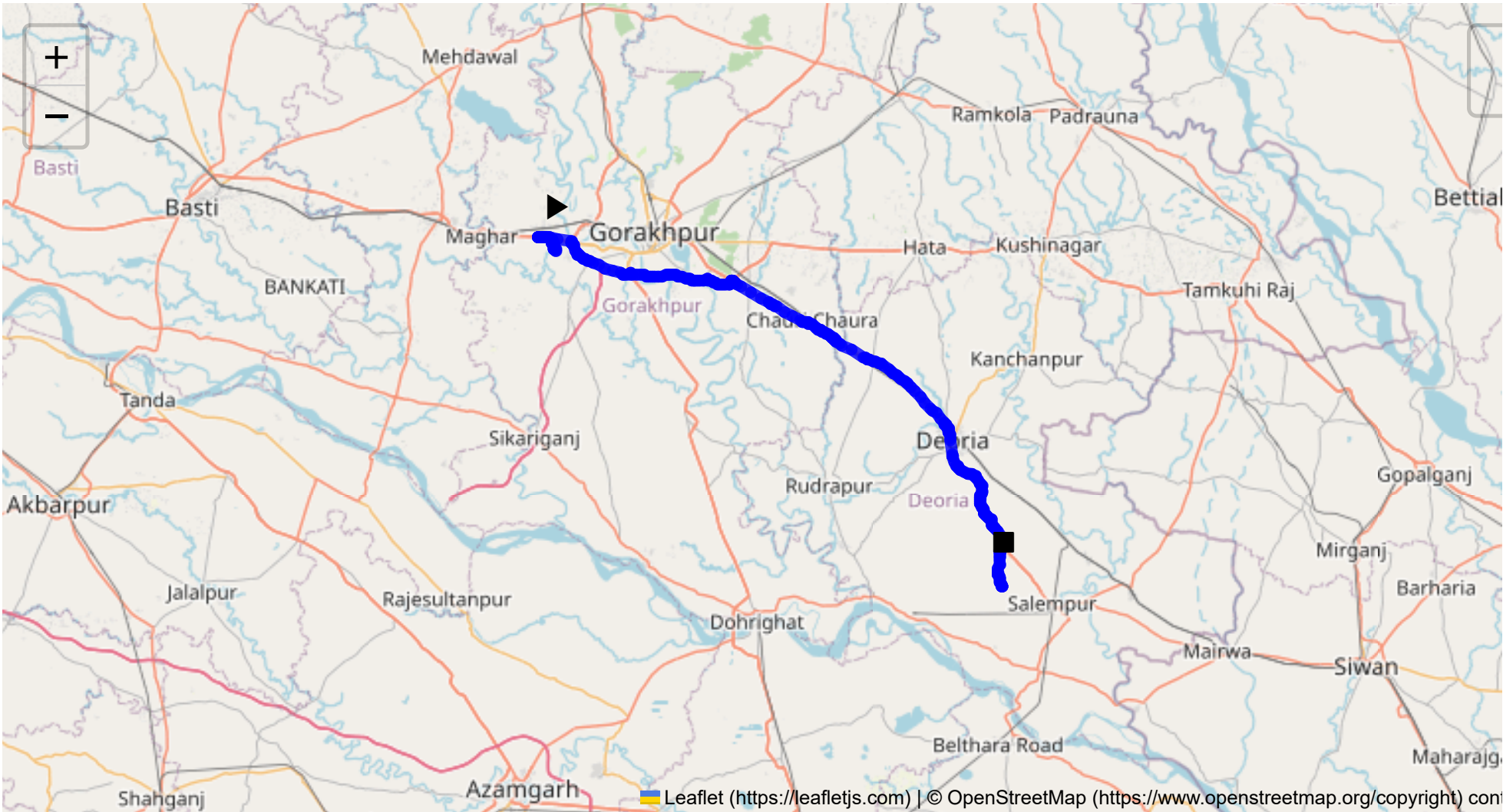
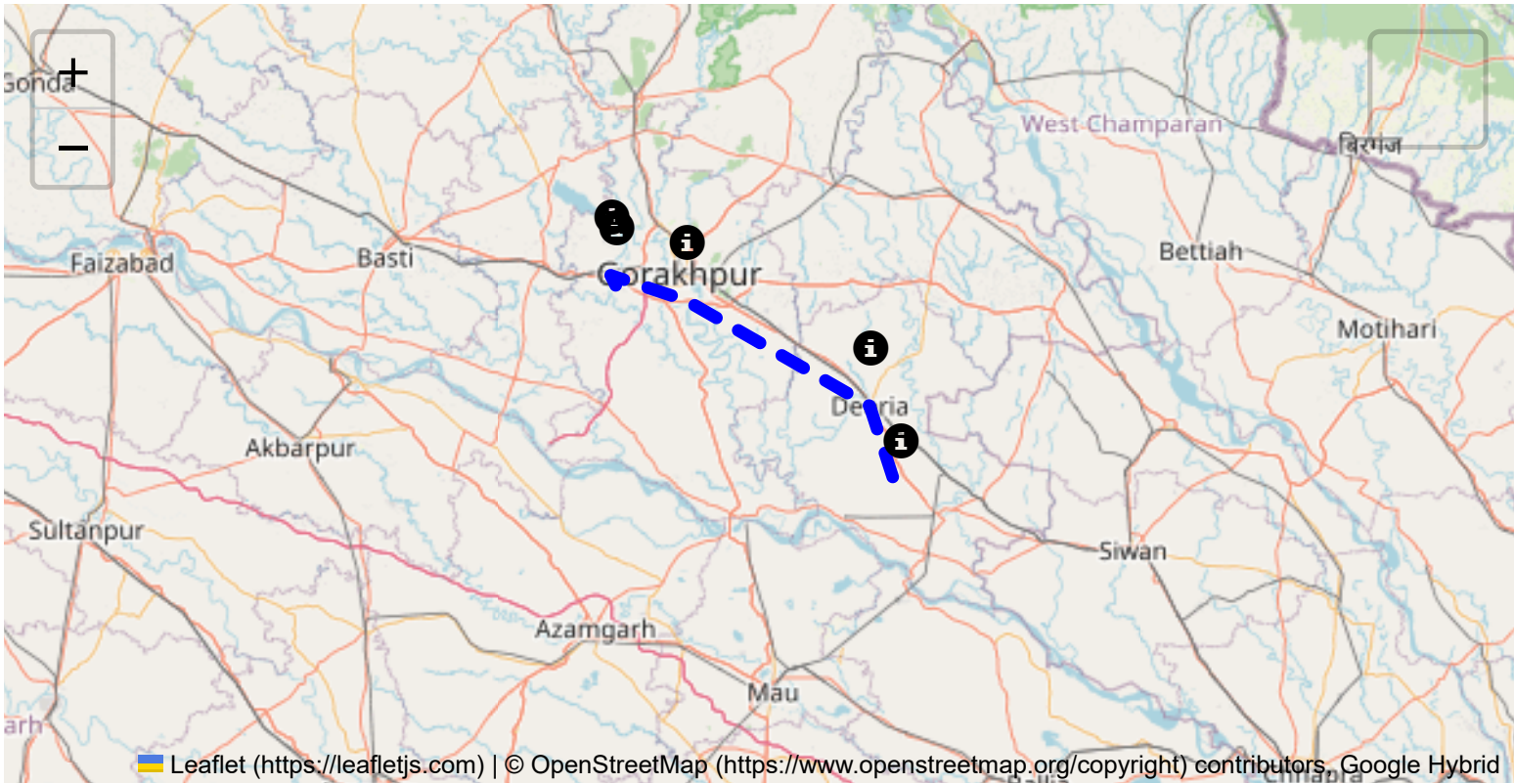
The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental 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: 95.66 km
Estimated Duration: 2.1 hours
Adjusted Duration (Heavy Vehicle): 2.6 hours
Start: (26.735959, 83.229398)
End: (26.31799, 83.84959)

Welcome to the Journey Risk Management Study

1. Overview of the Route Map

The route commences at GIDA Industrial Area Phase 1, Sahjanwa, Uttar Pradesh, travels through Sahjanwa, Gorakhpur, Bargo, and Bans Deoria, Raghav Nagar, and terminates at SH1, Narga, Uttar Pradesh. It covers approximately 95.66 kilometers, traversing through both urban and rural areas.

2. Typical Weather Conditions and Potential Weather-related Hazards

- **Weather Conditions:** The region experiences a subtropical climate, with hot and humid summers, a monsoon season (June to September), and mild winters.
- **Hazards:** Potential weather-related hazards include monsoon floods, which can cause roadblock and reduced visibility during heavy rains. Fog can also be a concern during the winter months, particularly in rural areas.

3. Traffic Patterns

- **Peak Hours:** The peak traffic hours are typically between 8 AM to 10 AM and 5 PM to 7 PM.
- **Congestion-Prone Areas:** Gorakhpur, being a major city on the route, is a notable congestion point, particularly during the peak hours. The roads near market areas in Deoria can also experience congestion.

4. Assessment of Road Quality and Infrastructure

- **Road Quality:** The roads in the industrial and urban sections like Gorakhpur are generally well-maintained. However, rural roads, especially around Bargo and Deoria, may have potholes and narrow single lanes, which can pose challenges for heavy vehicles.

5. Suggestions for Alternative Routes for Emergencies

- **Alternate Routes:** In case of roadblocks or emergencies, alternate routes involve taking NH27 from Sahjanwa to Gorakhpur and then following SH1 towards Deoria, bypassing dense urban centers where possible.

6. Summary of Local Regulations Affecting Hazardous Material Transport

- **Regulations:** Transport of hazardous materials is subject to restrictions during peak hours in urban areas. Necessary permits and documentation are required, and certain substances might need police escort.

7. Overview of Historical Incidents

- **Historical Incidents:** There have been occasional reports of heavy vehicle accidents, particularly during monsoon season due to slippery roads. No significant incidents with hazardous materials specifically documented, though caution is advised due to general road risks.

8. Environmental Considerations and Sensitive Areas

- **Sensitive Areas:** The route passes near agricultural lands, especially after Gorakhpur. These areas sensitive to chemical spills or leakage from trucks, necessitating strict adherence to safety protocols.

9. Analysis of Communication Coverage

- Coverage:** Major towns like Gorakhpur and Deoria generally have good mobile coverage. However, there may be sporadic dead zones in rural stretches, particularly in Bargo.

10. Estimated Emergency Response Times

- Response Times:** Emergency services are relatively quicker in urban areas such as Gorakhpur, potentially under 30 minutes. In more remote areas like Bargo, response times can exceed 45 minutes to an hour due to limited resources.

12. Overall Summary of Risk Assessment

- Risk Summary:** The primary risks along this route include weather-related disruptions, traffic congestion, and potential communication dead zones. Road conditions vary, and the presence of agricultural areas requires additional caution with hazardous materials. Adequate planning, alternative route knowledge, and adherence to local regulations are essential to mitigate these risks.

Risk Assessment - Turns

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
2	Turn	High	26.73746, 83.22938	15 KM/Hr	0.15 km
3	Blind Spot	Blind Spot	26.73791, 83.22625	10 KM/Hr	0.47 km
4	Turn	High	26.74524, 83.22746	15 KM/Hr	1.16 km
5	Turn	High	26.74654, 83.22390	15 KM/Hr	1.65 km
6	Blind Spot	Blind Spot	26.75126, 83.22476	10 KM/Hr	2.16 km
7	Blind Spot	Blind Spot	26.75353, 83.20457	10 KM/Hr	4.22 km
8	Turn	High	26.75377, 83.20465	15 KM/Hr	4.27 km
9	Blind Spot	Blind Spot	26.75377, 83.21355	10 KM/Hr	5.16 km
11	Turn	High	26.75386, 83.21352	15 KM/Hr	5.18 km
10	Blind Spot	Blind Spot	26.75407, 83.21347	10 KM/Hr	5.19 km
0	Roundabout	High	26.74681, 83.25111	15 KM/Hr	9.03 km
12	Turn	Medium	26.69713, 83.47549	30 KM/Hr	33.28 km
13	Turn	Medium	26.69755, 83.47549	30 KM/Hr	33.34 km
1	U-Turn	High	26.698439, 83.4747268	10 KM/Hr	33.46 km
14	Turn	High	26.69844, 83.47473	15 KM/Hr	33.46 km
15	Turn	High	26.69857, 83.47481	15 KM/Hr	33.49 km

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
16	Turn	Medium	26.63760, 83.59808	30 KM/Hr	47.55 km
17	Turn	High	26.37017, 83.85274	15 KM/Hr	89.29 km
18	Turn	Medium	26.33300, 83.84429	30 KM/Hr	93.64 km
19	Blind Spot	Blind Spot	26.31822, 83.85071	10 KM/Hr	95.42 km
20	Turn	High	26.31828, 83.84969	15 KM/Hr	95.53 km

Emergency Locations

Found: 3 hospital(s), 1 clinic(s)

	type	name	coordinates	speed_limit	risk_level	Distance from Start
0	hospital	Prakash Hospital	26.6957341, 83.4807387	30 km/h	Medium	33.89 km
3	hospital	K D Hospital, Deoria	26.4826171, 83.7821031	30 km/h	Medium	72.92 km
2	hospital	Sanjeevani Hospital, Deoria	26.4796329, 83.780432	30 km/h	Medium	74.09 km
4	clinic	Savitri Nursing Home, Deoria	26.4716292, 83.7854545	30 km/h	Medium	74.60 km

Crowded Spots

Found: 1 college(s)

	type	name	coordinates	speed_limit	risk_level	Distance from Start
1	college	BRD PG college	26.5161416, 83.7720277	30 km/h	Medium	69.77 km

Route Photos of Risky Spots



Risk Type: Blind Spot
Risk Level: Blind Spot
Speed Limit: 10 KM/Hr
Distance from Start: 2.16 km
Coordinates: 26.75126, 83.22476



Risk Type: Blind Spot
Risk Level: Blind Spot
Speed Limit: 10 KM/Hr
Distance from Start: 4.22 km
Coordinates: 26.75353, 83.20457



Risk Type: Turn
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 4.27 km
Coordinates: 26.75377, 83.20465



Risk Type: Blind Spot
Risk Level: Blind Spot
Speed Limit: 10 KM/Hr
Distance from Start: 5.16 km
Coordinates: 26.75377, 83.21355



Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 5.18 km

Coordinates: 26.75386, 83.21352



Risk Type: Blind Spot

Risk Level: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 5.19 km

Coordinates: 26.75407, 83.21347



Risk Type: Roundabout

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 9.03 km

Coordinates: 26.74681, 83.25111



Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 33.28 km

Coordinates: 26.69713, 83.47549



Risk Type: Turn
Risk Level: Medium
Speed Limit: 30 KM/Hr
Distance from Start: 33.34 km
Coordinates: 26.69755, 83.47549



Risk Type: U-Turn
Risk Level: High
Speed Limit: 10 KM/Hr
Distance from Start: 33.46 km
Coordinates: 26.698439, 83.4747268



Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 33.46 km

Coordinates: 26.69844, 83.47473



Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 33.49 km

Coordinates: 26.69857, 83.47481



Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 47.55 km

Coordinates: 26.63760, 83.59808



Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 93.64 km

Coordinates: 26.33300, 83.84429



Risk Type: Blind Spot

Risk Level: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 95.42 km

Coordinates: 26.31822, 83.85071

Download Reports

 Download Excel Report

 Download Interactive Map