JOURNEY RISK MANAGEMENT (JRM) STUDY

Gorakhpur LPG BP TO PRAMILA INDANE SERVI

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

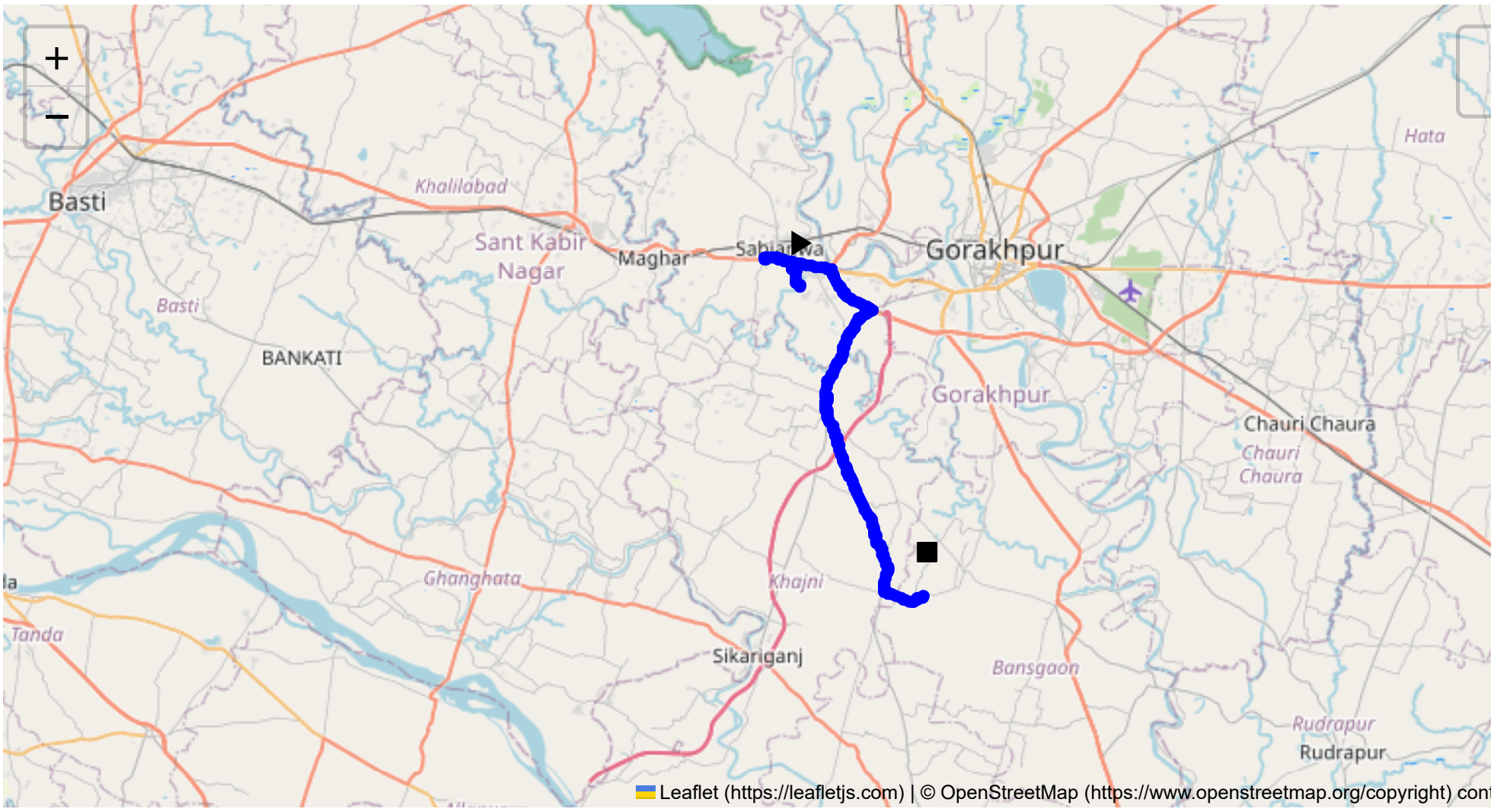
The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental 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: 38.08 km
Estimated Duration: 1.1 hours
Adjusted Duration (Heavy Vehicle): 1.4 hours
Start: (26.735959, 83.229398)
End: (26.54188, 83.31692)

Welcome to the Journey Risk Management Study

1. Overview of the Route Map

The route starts from GIDA Industrial Area Phase 1 in Sahjanwa, Uttar Pradesh, and continues through several small towns and villages including Kaalesar, Kurmaul, and Khajani, before reaching the endpoint in Dhobauli Gaharwar. The entire track is approximately 38.08 kilometers and weaves through both urban and rural areas, indicating a mix of road types and potential traffic conditions.

2. Typical Weather Conditions and Potential Weather-Related Hazards

Uttar Pradesh generally experiences a humid subtropical climate. Summers (March to June) can be extremely hot, while monsoons (June to October) bring heavy rainfall, potentially causing waterlogging and slippery roads. Winters (November to February) are mild but can result in fog, reducing visibility. Weather-related hazards on this route could include reduced visibility due to fog and waterlogged roads during the monsoon season.

3. Analysis of Traffic Patterns

The route passes through several towns, which may be prone to congestion, particularly:

- Morning (8 AM - 10 AM) and evening (5 PM - 7 PM) peak hours.
- Markets or school zones around towns that could experience localized congestion.
- Sahjanwa, being an industrial area, may also experience truck congestion during shift changes.

4. Assessment of Road Quality and Infrastructure

- Main roads are generally in good condition with adequate signage and markings.
- Smaller village roads may be narrower with variable surface quality, including potholes.
- Watch for lack of streetlights on less-traveled roads, which may pose a risk at night.

5. Suggestions for Alternative Routes for Emergencies

- If main routes are obstructed, drivers should consider local bypasses or less busy secondary roads connecting via nearby villages.
- Always ensure GPS devices are updated with current maps showing real-time traffic data.

6. Summary of Local Regulations Affecting Hazardous Material Transport

- Permits are required for transporting hazardous materials, with mandated safety measures.
- Restrictions may apply near schools, populated areas, or bridges; plan detours accordingly.

7. Overview of Historical Incidents

While specific historical incidents aren't documented in detail, roads in Uttar Pradesh have experienced accidents involving heavy vehicles due to overloading and mechanical failures. Carry additional safety gear as per standard protocols.

8. Environmental Considerations and Sensitive Areas

- The route doesn’t pass through any protected environmental zones, but proximity to agricultural lands suggests the need for caution to prevent spills.

- Prevent contamination of local waterways, especially during the monsoon season.

9. Analysis of Communication Coverage

Mobile coverage is generally reliable in urban areas but could be patchy in rural segments, especially on stretches of road away from the main towns. Use local service provider networks for better coverage.

10. Estimated Emergency Response Times

- Nearer to towns like Sahjanwa and Khajani, expect emergency services to reach within 20 to 30 minutes.
- In rural stretches, response times could extend to 45-60 minutes due to less immediate accessibility.

12. Overall Summary of Risk Assessment

The route poses moderate risks typical of semi-rural Indian roadways. Key concerns include weather impacts (fog/heavy rain), traffic congestion in urban areas, and variable road conditions in less-developed segments. Proper planning, adherence to load regulations, and vigilance in monitoring real-time conditions are crucial to ensure safe passage.

Risk Assessment - Turns

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
1	Turn	High	26.73690, 83.22947	15 KM/Hr	0.07 km
2	Turn	High	26.73697, 83.22939	15 KM/Hr	0.11 km
3	Turn	High	26.73746, 83.22938	15 KM/Hr	0.15 km
4	Blind Spot	Blind Spot	26.73791, 83.22625	10 KM/Hr	0.48 km
5	Turn	Medium	26.74524, 83.22746	30 KM/Hr	1.30 km
6	Turn	Medium	26.74532, 83.22740	30 KM/Hr	1.32 km
7	Turn	High	26.74654, 83.22390	15 KM/Hr	1.65 km
8	Turn	Medium	26.74661, 83.22388	30 KM/Hr	1.70 km
9	Blind Spot	Blind Spot	26.75126, 83.22476	10 KM/Hr	2.17 km
10	Blind Spot	Blind Spot	26.75353, 83.20457	10 KM/Hr	4.23 km
11	Turn	High	26.75381, 83.20466	15 KM/Hr	4.30 km
0	Roundabout	High	26.74681, 83.25111	15 KM/Hr	8.99 km
12	Turn	Medium	26.74644, 83.25150	30 KM/Hr	9.07 km
13	Turn	Medium	26.74310, 83.25343	30 KM/Hr	9.49 km
14	Turn	Medium	26.74298, 83.25343	30 KM/Hr	9.51 km

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
15	Turn	High	26.72312, 83.27632	15 KM/Hr	12.73 km
16	Turn	High	26.72324, 83.27640	15 KM/Hr	12.78 km
17	Blind Spot	Blind Spot	26.72125, 83.28059	10 KM/Hr	13.25 km
18	Turn	Medium	26.54495, 83.28839	30 KM/Hr	34.97 km
19	Turn	Medium	26.54485, 83.28844	30 KM/Hr	34.98 km
20	Turn	High	26.54147, 83.31661	15 KM/Hr	37.98 km

Emergency Locations

Found: 1 hospital(s)

	type	name	coordinates	speed_limit	risk_level	Distance from Start
0	hospital	Government. hospital khajni	26.6652993, 83.2497154	30 km/h	Medium	20.56 km

Crowded Spots

Route Photos of Risky Spots

Risk Type: Blind Spot

Risk Level: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 2.17 km

Coordinates: 26.75126, 83.22476

Risk Type: Blind Spot

Risk Level: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 4.23 km

Coordinates: 26.75353, 83.20457

Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 4.30 km

Coordinates: 26.75381, 83.20466

Risk Type: Roundabout

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 8.99 km

Coordinates: 26.74681, 83.25111

Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 9.07 km

Coordinates: 26.74644, 83.25150

Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 9.49 km

Coordinates: 26.74310, 83.25343

Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 9.51 km

Coordinates: 26.74298, 83.25343

Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 12.73 km

Coordinates: 26.72312, 83.27632

Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 12.78 km

Coordinates: 26.72324, 83.27640

Risk Type: Blind Spot

Risk Level: Blind Spot

Speed Limit: 10 KM/Hr

Distance from Start: 13.25 km

Coordinates: 26.72125, 83.28059

Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 34.97 km

Coordinates: 26.54495, 83.28839

Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 34.98 km

Coordinates: 26.54485, 83.28844

Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 37.98 km

Coordinates: 26.54147, 83.31661

Download Reports

📊 Download Excel Report

🗺️ Download Interactive Map