



IndianOil

JOURNEY RISK MANAGEMENT (JRM) STUDY

Gorakhpur LPG BP TO JANTA INDANE GRAMIN

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

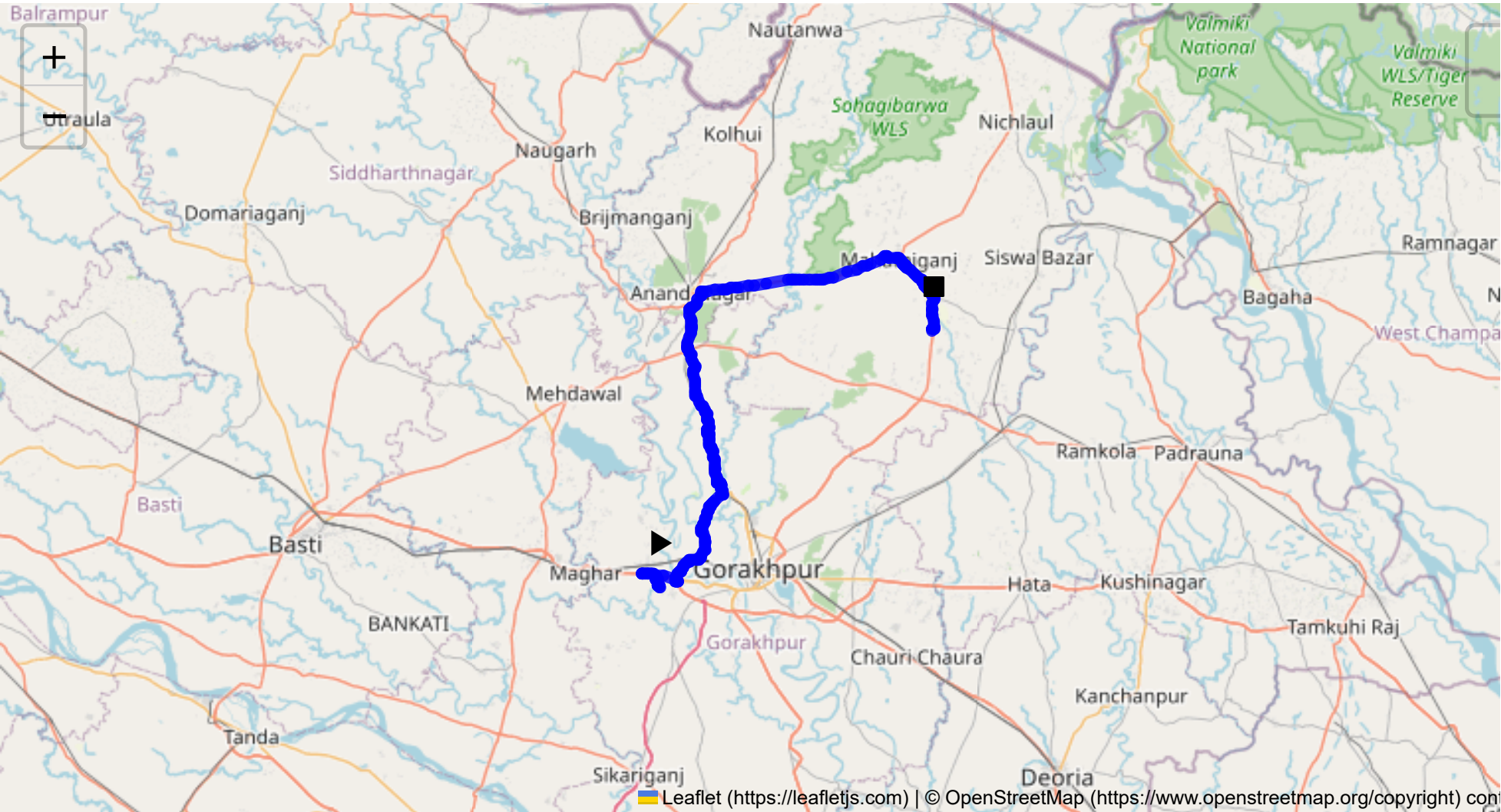
The JRM report addresses environmental risks along the route, ensuring compliance with environmental protection laws in ecologically sensitive zones. It suggests strategies such as identifying areas near water bodies, forests, or populated regions and implementing safety measures to minimize environmental 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: 94.79 km
Estimated Duration: 2.2 hours
Adjusted Duration (Heavy Vehicle): 2.8 hours
Start: (26.735959, 83.229398)
End: (27.05431, 83.60882)

Welcome to the Journey Risk Management Study

Certainly! Analyzing the route from GIDA Industrial Area Phase 1 in Sahjanwa to Bhithauli via specified points in Uttar Pradesh, we focus on preparing a comprehensive safety profile for a truck driver carrying hazardous materials. Here's a detailed breakdown.

1. Overview of the Route Map:

- The route spans approximately 94.79 kilometers, passing through industrial and rural areas, with a combination of two-lane highways and local roads. The main cities along the route are Kaalesar, Maharajganj, and Bismil Nagar.

2. Typical Weather Conditions and Potential Weather-Related Hazards:

- The region experiences extreme temperatures with hot summers and cold winters. The monsoon season (June to September) can cause heavy rainfall, leading to waterlogging and reduced visibility on roads. Dense fog is a common occurrence during winters (December to February), impacting driving conditions.

3. Traffic Patterns and Congestion-Prone Areas:

- Peak traffic hours are typically in the morning (8-10 AM) and evening (5-7 PM).
- Potential congestion points include urban areas such as Maharajganj and Bismil Nagar due to market areas and school zones. This can cause delays, particularly for heavy vehicles.

4. Assessment of Road Quality and Infrastructure:

- The road quality varies along the route, with some sections well-maintained (near urban centers) and others having poor conditions, such as potholes and uneven surfaces, especially in rural stretches.
- Infrastructure, including signage and lighting, may be inadequate in certain rural areas, increasing risks during night travel.

5. Suggestions for Alternative Routes for Emergencies:

- In case of roadblocks or hazards, alternate routes via NH27 or NH730 can be considered, though these may add significant distance.
- Local roads around Maharajganj can offer temporary detours but should be approached with caution due to variability in road conditions.

6. Summary of Local Regulations Affecting Hazardous Material Transport:

- Transport of hazardous materials requires specific permits in Uttar Pradesh. Adherence to designated routes and restrictions on transit times (no night travel) may be enforced.
- Regular vehicle and document checks are conducted by local traffic authorities to ensure compliance.

7. Overview of Historical Incidents:

- Historical data suggests occasional incidents, primarily minor accidents involving heavy vehicles in congested urban areas due to navigational challenges and erratic driving behavior.

8. Environmental Considerations and Sensitive Areas:

- The route goes through agricultural regions, demanding caution to avoid polluting lands or waterways.
- Awareness of protected areas or wildlife crossings, particularly around forested zones, may be necessary though not prominently marked.

9. Analysis of Communication Coverage:

- Generally, the route has adequate mobile network coverage, but specific rural stretches may occasionally experience service disruptions.

10. Estimated Emergency Response Times:

- In urban centers like Maharajganj, emergency services can typically respond within 30-45 minutes.
- In rural areas, response times may extend to an hour or more due to distance and road conditions.

11. Overall Summary of Risk Assessment:

- The route presents moderate risks, primarily from weather, road quality, and traffic congestion, particularly during peak hours.
- Safe navigation requires adherence to regulations, awareness of alternative routes, and precautions during adverse weather or in rural areas with limited infrastructure.
- Coordination with local authorities and real-time traffic monitoring is advised to minimize potential hazards.

Risk Assessment - Turns

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
2	Turn	High	26.73746, 83.22938	15 KM/Hr	0.14 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
0	Roundabout	High	26.74681, 83.25111	15 KM/Hr	8.13 km
9	Turn	High	26.74302, 83.25344	15 KM/Hr	9.48 km
10	Turn	High	26.74284, 83.25332	15 KM/Hr	9.50 km
11	Turn	High	26.74281, 83.25310	15 KM/Hr	9.52 km
12	Turn	High	26.74300, 83.25292	15 KM/Hr	9.55 km
13	Turn	Medium	26.74316, 83.25294	30 KM/Hr	9.57 km
1	Roundabout	High	26.86209, 83.31517	15 KM/Hr	25.82 km
14	Turn	Medium	26.92503, 83.29848	30 KM/Hr	33.29 km
15	Turn	Medium	26.93195, 83.29591	30 KM/Hr	34.16 km
16	Turn	Medium	27.01004, 83.27852	30 KM/Hr	43.32 km
17	Turn	Medium	27.08016, 83.27118	30 KM/Hr	51.21 km
18	Turn	High	27.10269, 83.28820	15 KM/Hr	54.60 km
19	Turn	High	27.05623, 83.61036	15 KM/Hr	94.32 km

	Risk Type	Risk Level	Coordinates	Speed Limit	Distance from Start
20	Turn	High	27.05641, 83.60910	15 KM/Hr	94.44 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: Roundabout
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 8.13 km
Coordinates: 26.74681, 83.25111



Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 9.48 km

Coordinates: 26.74302, 83.25344



Risk Type: Turn

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 9.50 km

Coordinates: 26.74284, 83.25332



Risk Type: Turn
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 9.52 km
Coordinates: 26.74281, 83.25310



Risk Type: Turn
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 9.55 km
Coordinates: 26.74300, 83.25292



Risk Type: Roundabout

Risk Level: High

Speed Limit: 15 KM/Hr

Distance from Start: 25.82 km

Coordinates: 26.86209, 83.31517



Risk Type: Turn

Risk Level: Medium

Speed Limit: 30 KM/Hr

Distance from Start: 33.29 km

Coordinates: 26.92503, 83.29848



Risk Type: Turn
Risk Level: Medium
Speed Limit: 30 KM/Hr
Distance from Start: 34.16 km
Coordinates: 26.93195, 83.29591



Risk Type: Turn
Risk Level: Medium
Speed Limit: 30 KM/Hr
Distance from Start: 51.21 km
Coordinates: 27.08016, 83.27118



Risk Type: Turn
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 54.60 km
Coordinates: 27.10269, 83.28820



Risk Type: Turn
Risk Level: High
Speed Limit: 15 KM/Hr
Distance from Start: 94.32 km
Coordinates: 27.05623, 83.61036

Download Reports



Download Excel Report



Download Interactive Map