

# **J M Baxi Group**

## **Standard Operating Procedures and Policies**

**Operations – Heavy Lift (HL) division**

## Introduction

A **standard operating policies and procedure (SOPP)** is a set of step-by-step activities compiled by an organization to help workers carry out **complex** as well as **standard routine operations**. SOPP help to achieve **efficiency, quality output and uniformity of performance** while contributing to efforts that lead to **process excellence**.

This SOP aims to achieve the following objectives:

1. Act as a **guide and reference document** to stakeholders at all level of the organization
2. Clearly **communicate** activities and help to achieve **consistency** in operational procedures
3. **Create accountability** by assigning responsibilities at each stage of the lifecycle
4. **Aid governance** by documenting **auditable processes** and detailing **control elements** at each stage of the lifecycle

### What is the Lifecycle and Process Tree?

Each SOP follows the process tree hierarchy and covers a specific entire mega process.

- A **mega process** represents the logical start and end of a process lifecycle. It is a grouping of processes across functions

- A **process** represents logical grouping of sub processes and provides detail at functional level

- A **sub process** represents grouping of similar activities

- An **activity lists** down specific tasks that have/are measurable, time bound, associated risks, mitigating controls and defined owners

The entire business lifecycle consists of several mega processes. An SOPP is tasked with the coverage of all processes, sub process and activities applicable to a particular mega process

### Who are the Stakeholders for this SOPP?

This stakeholders for this SOPP shall primarily be activity owners and business units.

1. Activity owners (operating units) – Activity owners shall use this SOPP as a reference document while performing their **activities daily**.

2. Business units – Business units shall use the SOPP as a repository of all activities across the lifecycle. This will aid in identifying **process improvement opportunities**.

### Who will use this SOPP?

This SOPP shall be used by stakeholders across the entire organization. Most notable shall be the following:

1. Risk and Governance units – Risk and Governance units shall reference the SOPP to **review existing controls** and test their

2. Auditors – Auditors shall use this SOPP to check **adherence to defined processes** and standards. The SOP shall help them identify any deviations to defined processes

### How do you read the SOPP?

To read this SOPP, it is essential to understand the **process lifecycle and its coverage**. This SOPP is documented in a **chronological order** in line with the sequence of activities performed by activity owners. Therefore, it should be read as such.

This SOPP also provides references to various **organization level policies, checklists, systems, reports** etc. These have been appropriately **referenced** at applicable activities and attached as

Annexures to this SOPP.

Each activity has a performer and an activity owner assigned to it. An activity also has the following references against it:

- System reference – This lists down the system used to perform the activity
- Product reference – This column lists down the products that the activity is applicable to
- Activity owner (with prefix) – Each activity has a prefix that describes the nature of the activity. 'Maker only' means that it is a standalone activity. 'Maker' refers to the maker leg of a maker checker activity. 'Checker' refers to the checker leg of a maker checker activity.

### Organization structure

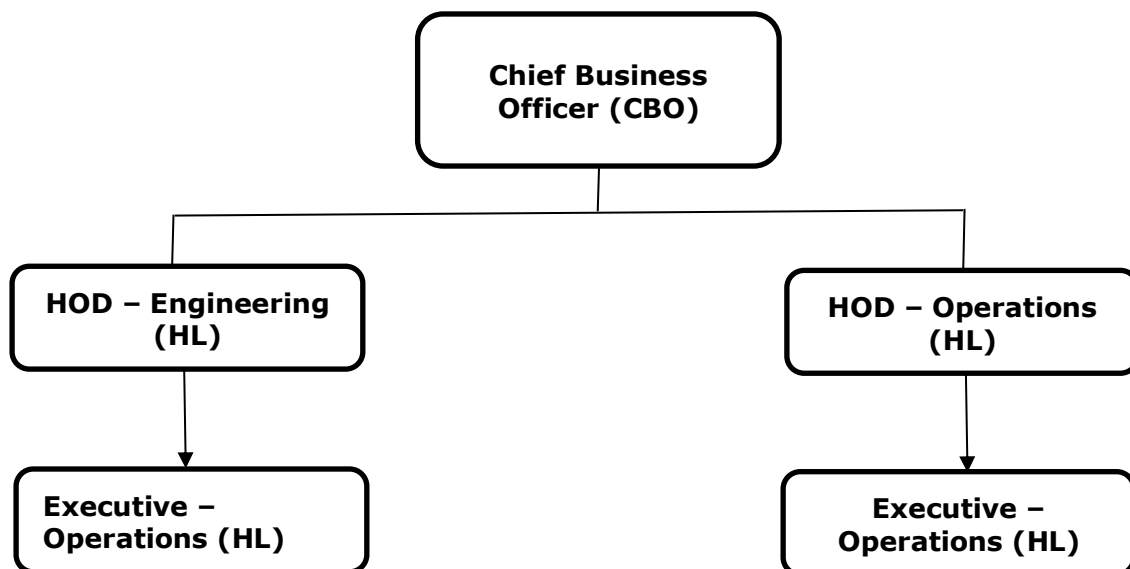
The organization structure defined in the SOPP is the structure defined at the functional level.

**'Activity owners'** are defined as those who are responsible for **performing the activity**.

**'Business Owners'** are defined as those who have **oversight and ultimate ownership** for the activities.

The **'roles and responsibilities'** table in the SOPP lists down the 'business owners' and provides details on **key activities** they are responsible for. The list of 'business owners' shall form the organization structure for the particular SOPP and mega process.

### Organization Structure



## Document review and approval

### Revision history

Version	Created By	Document Approved By	Date Approved	Revision
		Mr Sameer Parikh		

Applicable Entities	Entity Type		Entity Name	
	Heavy Logistics		J M Baxi Heavy Private Limited	
Process Owner				
IT Applications	Entity Name		System	
	JM Baxi Heavy Private Limited		INFOR	
Guidelines / Policy reference				
SOPP Cross References				

## Contents

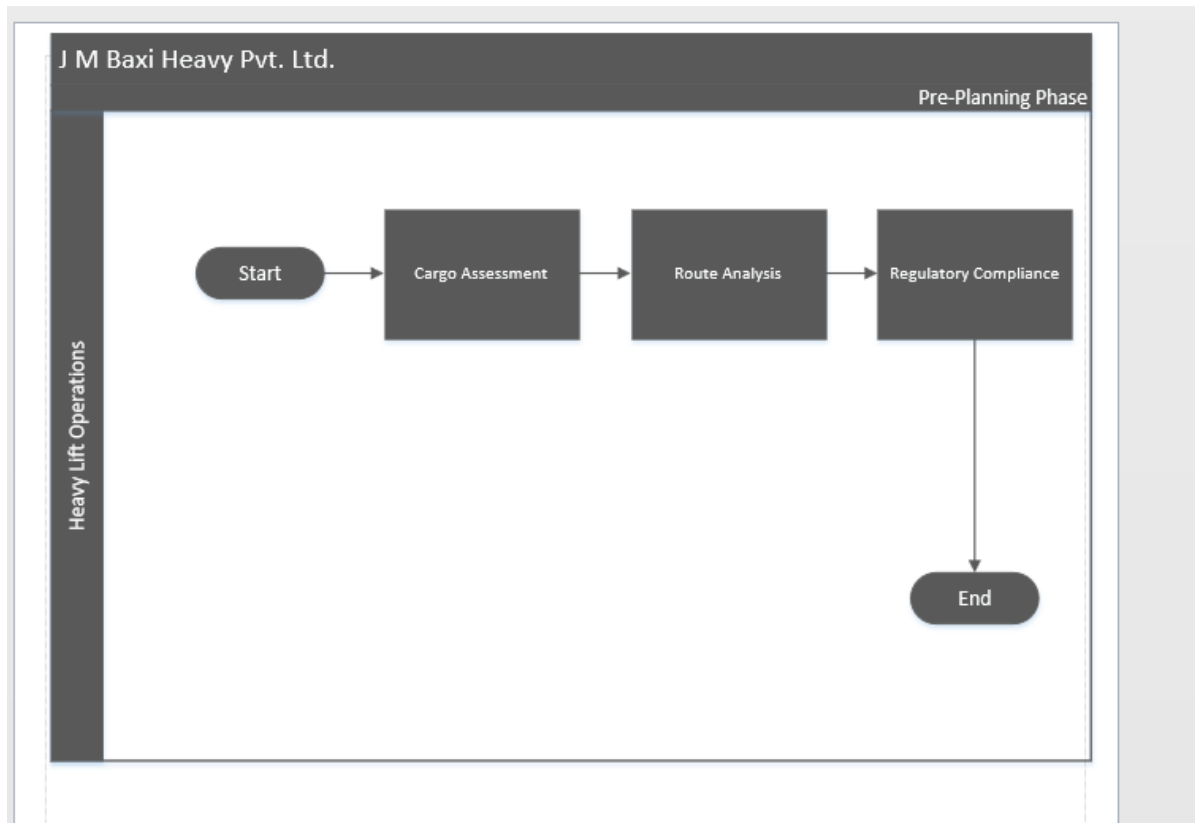
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## Abbreviations and Definitions

Abbreviations	Details
AM	Assistant Manager
GPS	Global Positioning System
MS	Method Statement
HASOP	Health and Safety Operation
COG	Center of Gravity
MORTH	Ministry of Road Transport and Highways
RTA	Road Transport Authority
SPMT	Self-propelled Modular Transporter
HSE	Health Safety and Environment
IWAI	Inland Water Authority of India
IRS	Indian Register of Shipping

## 1. Pre-Planning Phase

### Process Flow



## Process Narrative

Description	Responsibility	Accountability	Frequency	Manual/ System
<b>1.1 Cargo Assessment</b> EXEC – Operations Checks the feasibility of the cargo for intended operation at the time of receipt of inquiry.	EXEC - Engineering	Manager - Engineering	As and when	Manual
<b>1.2 Route Analysis</b> Supervisor - Engineering conducts a multi-model route analysis to assess the feasibility of transporting the cargo via specific routes. Supervisor – Engineering also Identifies alternative routes during the inquiry stage. In case of transportation of cargo from start to end, Supervisor – Engineering uses Barging via Marine route as per the feasibility based on the Cargo dimensions and weight.	Supervisor - Engineering and Operations	Manager – Engineering and Operations	As and when	Manual
<b>1.3 Regulatory Compliance</b> In case of Road transport, the following approvals may be required: <ul style="list-style-type: none"> <li>a) Road permits, and Approvals from the Ministry of Road Transport and Highways(MORTH) or State Highways(as applicable)</li> <li>b) Permissions for private property areas(as applicable)</li> <li>c) In case route involves Flyovers, Railway shutdowns, or Canals, permission from the Ministry of Railways or the Canal authority wherever required.</li> <li>d) In case of Marine Transport using Barges, permission from IWAI (Inland Waterways Authority of India), Local Maritime Board, Towing approval from respective authorities, Permissions from Local</li> </ul>	EXEC - Operations	Manager - Operations	As and when	Manual



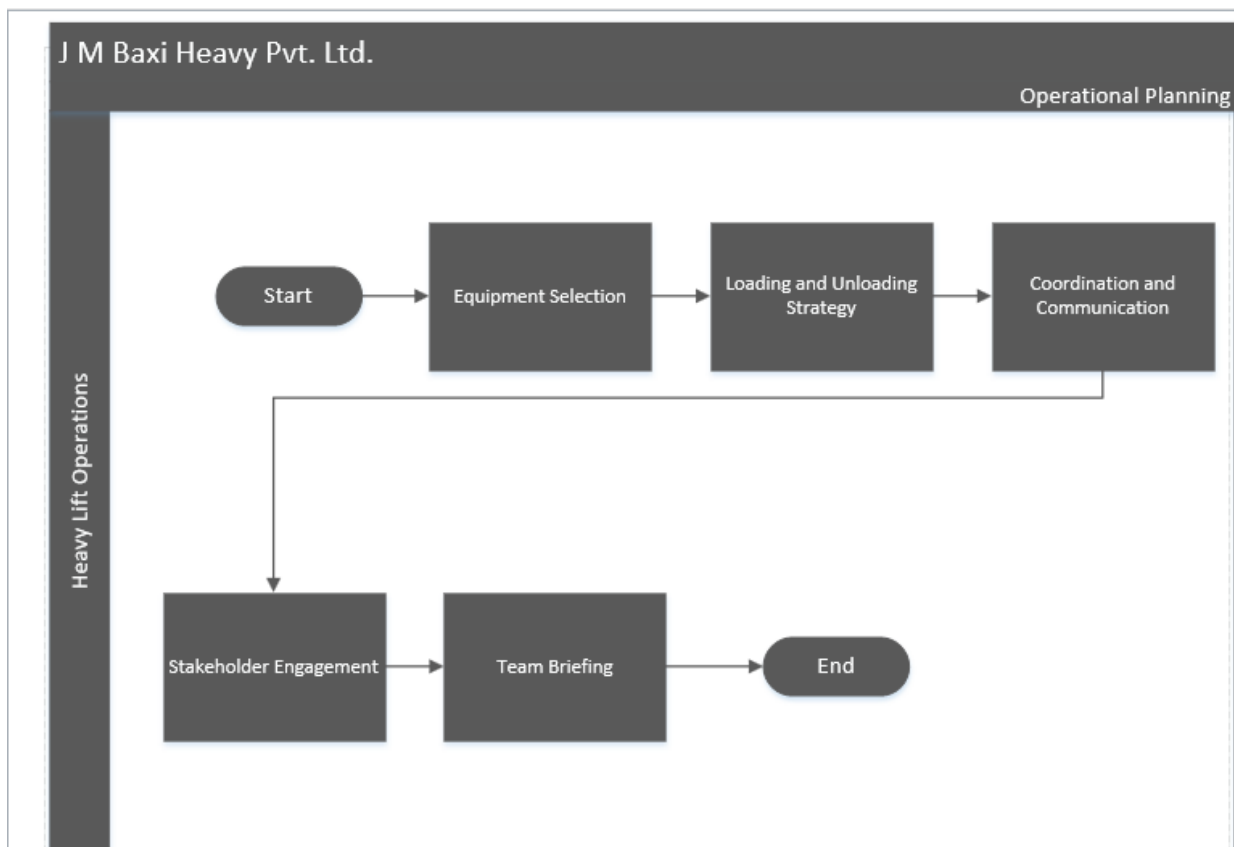
Port for Pilotage and Loading- Unloading of cargo.  EXEC / Manager – Operations makes online and offline applications for the required relevant permits wherever applicable.				
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### Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Cargo Feasibility Timeliness	Ensure quick evaluation of cargo feasibility to maintain operational timelines.	XX	XX	XX
Alternative Route Identification	Ensure flexibility in route planning, especially in case of unforeseen roadblocks.	XX	XX	XX
Route Safety and Risk Assessment	Ensure that safety and risk factors are evaluated to minimize disruptions during transport.	XX	XX	XX
Regulatory Compliance Completion Rate	Ensure that all necessary approvals are obtained without any delays or issues.	XX	XX	XX

## 2. Operational Planning

### Process Flow



## Process Narrative

Description	Responsibility	Accountability	Frequency	Manual/ System
<p><b>2.1 Equipment Selection</b></p> <p>Manager – Engineering checks the expected weight, center of gravity, Self-Propelled Modular Transporter(SPMT) Axles requirement for the proposed cargo, other equipment, Tractor, load spreading on Tractor upon receipt of the inquiry followed by the review of HOD – Operations(HL).</p> <p>For bridges and culverts, Manager – Engineering conducts analysis and calculations to ensure safe transportation over these structures. These calculations are performed both in-house and outsourced as needed.</p> <p>For marine transportation using barges, the design of the jetty for loading and unloading is determined. If a new jetty needs to be constructed, the design is created in-house, with the design vetted by external experts/Consultants.</p> <p>Regarding marine transportation, the necessary calculations for barge stability, sea fastening, and the selection of the appropriate tug based on pulling capacity are carried out in-house.</p> <p>Additionally, based on the type of loading and unloading operations on the barge, ballast calculations are also performed in-house.</p>	Manager - Engineering	HOD – Operations(HL)	As and when	Manual
<p><b>2.2 Loading and Unloading Strategy</b></p> <p>EXEC – Engineering prepares Loading and unloading diagram based on the expected weight, dimension, weight, support location and Centre of Gravity(COG) provided by the client.</p> <p>Cargo diagram will be provided by the client based on which EXEC - Engineering prepare the loading diagram followed by the review of Manager- Engineering and shared with the client for approval.</p>	EXEC / Manager - Engineering,	Manager - Operations	As and when	Manual

In case the customer has not approved the diagram, arrangement needs to be modified. EXEC - Engineering along with Manager-Engineering will modify the diagram and share it with Manager – Operation followed by the Client’s approval.				
<b>2.3 Coordination and Communication</b>  Manager – Engineering shares the respective diagram to Manager - Operation post approval of diagram from the client.	<b>Manager - Engineering</b>	<b>Manager - Operations</b>	<b>As and when</b>	<b>Manual</b>
<b>2.4 Stakeholder Engagement</b>  Manager – Engineering will communicate with client whereas, Manager – Operations Communicates with other approving authority such as Road and Transport Authority(RTA), Ministry of Road Transport and highways(MORTH), IWAI, IRS, Local Port, Local Maritime Board, etc.	<b>Manager - Engineering</b>	<b>Manager - Operation</b>	<b>As and when</b>	<b>Manual</b>
<b>2.5 Team Briefing</b>  Manager – Engineering conducts Team briefings to the Team for Technical understanding depending on the nature of jobs, wherever required.  Manager – Engineering and HSE conducts Risk assessment factoring Safety Protocols and prepares risk-assessment document that addresses the issues, Control measures, and risk mitigation strategies wherever required.  Safety protocol will be detailed in the MSD and HASOP.	<b>Manager – Engineering</b>	<b>-</b>	<b>As and when</b>	<b>Manual</b>

### Key Performance Indicators (KPI's)

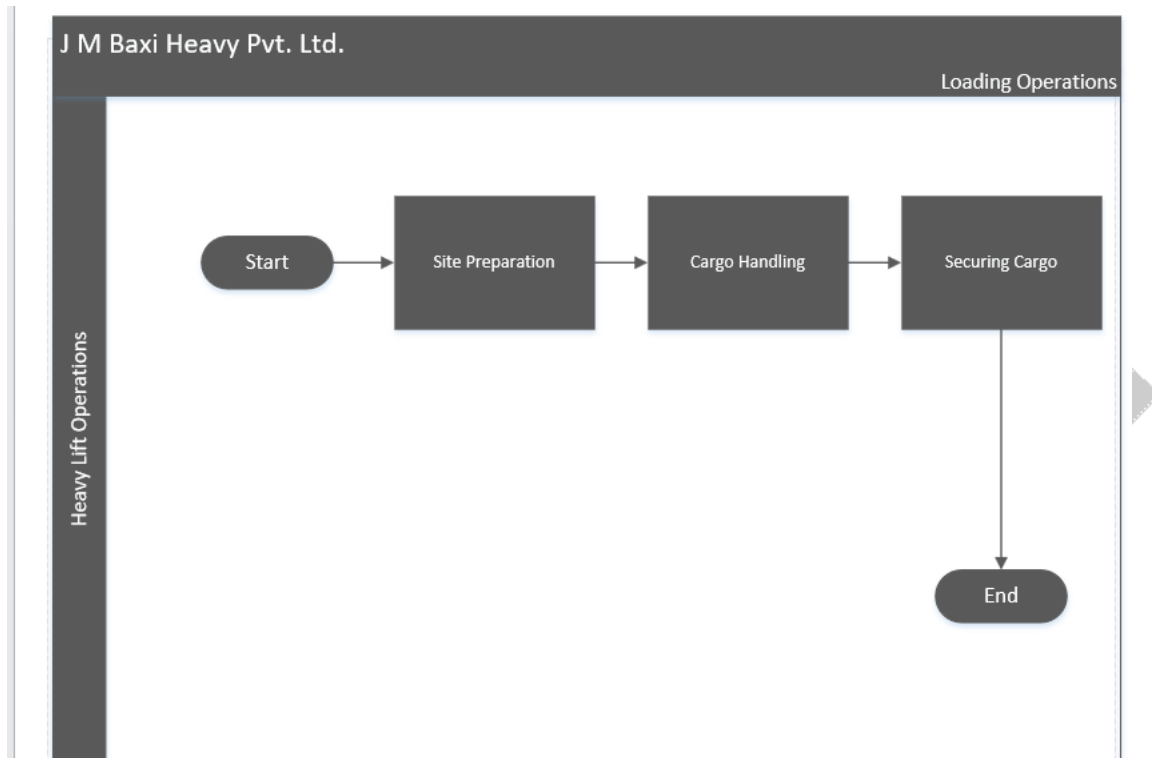
Attribute	Objective	Base Line	Target	Action Plan
Equipment Compatibility Accuracy	Ensure that the selected equipment is optimal for the cargo to prevent inefficiencies or safety issues during transport.	XX	XX	XX
Loading Diagram Preparation Timeliness	Ensure that the diagrams are prepared promptly to maintain project timelines and avoid delays.	XX	XX	XX
Communication Timeliness	Ensure smooth coordination between teams, preventing delays in operations.	XX	XX	XX

Team Understanding of Technical Requirements	Ensure that the team is fully prepared to carry out the operation as per the technical and safety requirements.	XX	XX	XX
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### 3. Loading Operations

#### Process Flow



## Process Narrative

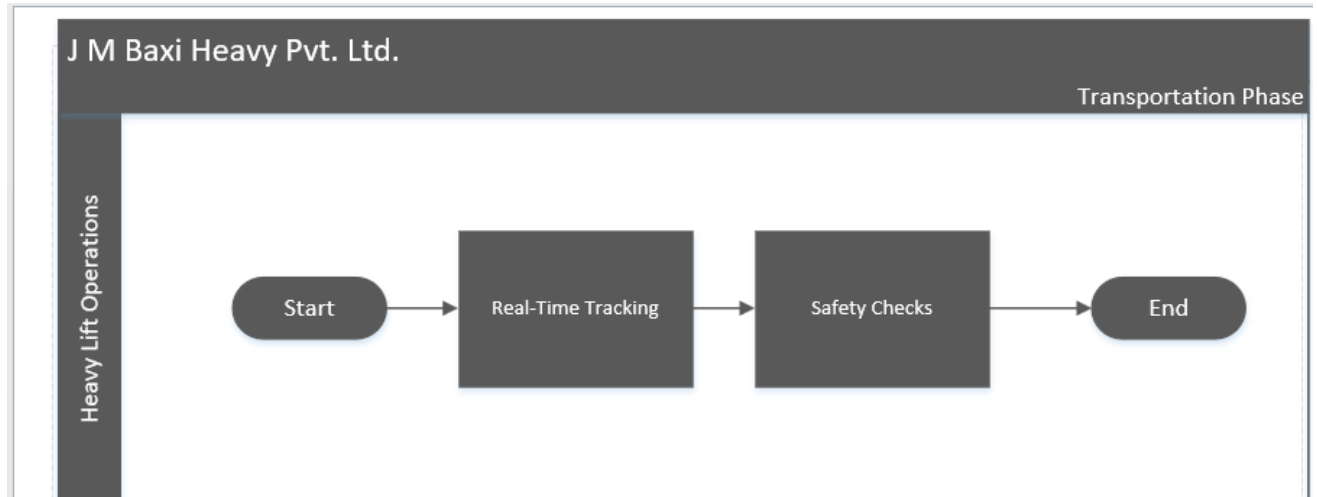
Description	Responsibility	Accountability	Frequency	Manual/ System
<b>3.1 Site Preparation</b>  Manager – Engineering / Project / Operations (depending on the nature of Job) will ensure that the loading area is in accordance with the approved Loading diagram, safe and accessible, free from obstructions for the personnel working on the site.  Client will ensure safety of Operations during the Loading /Transportation process.	<b>Manager - Engineering / Project / AM - Operation</b>	-	As and when	Manual
<b>3.2 Cargo Handling</b>  EXEC – Engineering prepares the Engineering document followed by the review of Manager – Engineering.  In certain situations, when company assets are unavailable or occupied, third-party assets may be rented to complete the operation, ensuring proper supervision.	<b>EXEC - Engineering</b>	<b>Manager - Engineering</b>	As and when	Manual
<b>3.3 Securing Cargo</b>  EXEC – Engineering / Operations will use Stopper cleat, and lashing chains for securing the cargo wherever applicable.	<b>Executive - Engineering / Operation</b>	<b>Manager – Engineering / Operations</b>	As and when	Manual

## Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Site Preparation Timeliness	Ensure that the site is prepared well in advance to avoid delays during the loading process.	XX	XX	XX
Equipment Utilization Rate	Ensure that equipment is used optimally for cargo handling operations.	XX	XX	XX
Cargo Securing Accuracy	Ensure that all cargo is properly secured to prevent shifting during transport.	XX	XX	XX
Cargo Damage During Transport	Ensure that cargo is securely fastened to prevent damage during transportation.	XX	XX	XX

## 4. Transportation Phase

### Process Flow





## Process Narrative

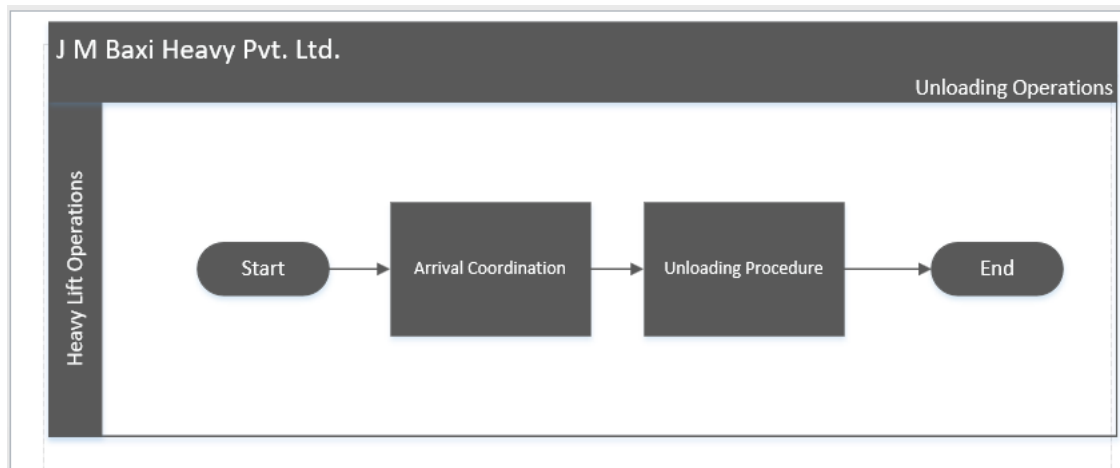
Description	Responsibility	Accountability	Frequency	Manual/ System
<p><b>4.1 Real-Time Tracking</b></p> <p>GPS is used for tracking the transportation however, in case of critical jobs, Escort team updates the Manager - Operations.</p> <p>The Trailer Transporting Team will provide updates via phone calls, WhatsApp messages, and will share videos and photos. In case any issue arises, the driver / Escort Team will communicate with the Manager - Operations.</p> <p>Whereas there is a Escort team available to address any problems. However in case of extended tour, the backend team will provide support.</p> <p>EXEC – Operations prepares Daily status Report(DSR) and Manager – Operations shares the DSR with the Client which will provide an update about the distance covered and the plan of action(distance expected to be covered) for the next day.</p>	EXEC – Transportation Team	Manager - Operations	As and when	Manual / System
<p><b>4.2 Safety Checks</b></p> <p>Site Supervisor(Equipment) ensures there is method statement which includes a standard checklist and a regular maintenance checklist is in place before starting each operation.</p> <p>Regular updates will be provided throughout the route. In case any issues arises, the Site Supervisor(Equipment) will inform the Manager - Operations, who will then notify the client.</p> <p>Manager - Operations will work to resolve the issue or manage the incident as needed.</p>	Site Supervisor	Manager - Operations	As and when	Manual

### Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Update Frequency	Ensure continuous communication between the transportation team and AM - Operations to avoid gaps in tracking.	XX	XX	XX
Support Response Time	Minimize response times to issues to avoid delays.	XX	XX	XX
Incident Reporting and Resolution Time	Ensure that any issues identified during the safety checks are handled promptly, minimizing operational disruption.	XX	XX	XX
Compliance with Safety Standards	Ensure that all operations follow safety protocols and are in full compliance with safety standards.	XX	XX	XX

## 5. Unloading Operations

### Process Flow



## Process Narrative

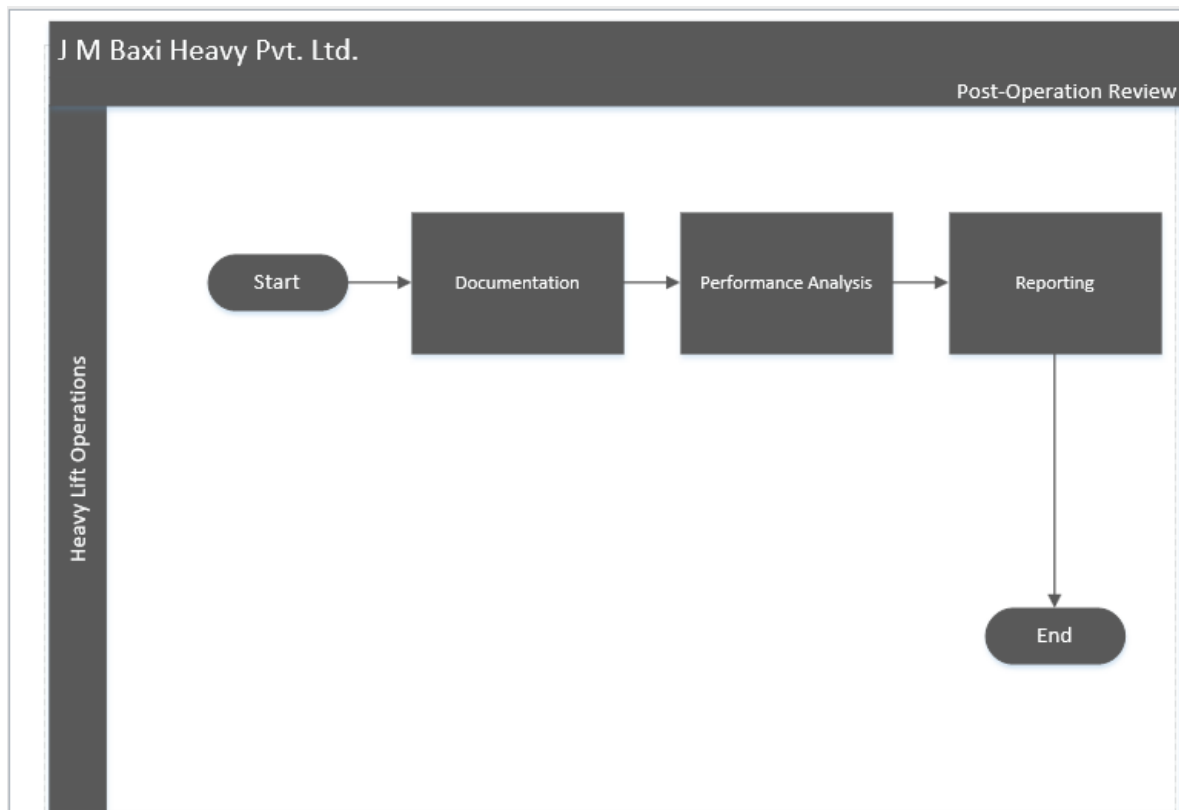
Description	Responsibility	Accountability	Frequency	Manual/ System
<b>5.1 Arrival Coordination</b>  EXEC / Manager – Operations will coordinate with the client through mail/ over phone call/WhatsApp, and the client will accordingly coordinate with the Receiving party.  EXEC / Manager – Operations ensures that the unloading site is prepared and Communicates with the client in case of any changes in schedule or requirements to the client accordingly.	EXEC - Operations	Manager - Operation	As and when	Manual
<b>5.2 Unloading Procedure</b>  Manager – Operations will inform the client to inspect the condition of the cargo after unloading. The client will then conduct inspections to verify the cargo's condition post-unloading, as unloading falls within the client's scope of responsibility.	Manager - Operations	-	As and when	Manual

## Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Communication Timeliness	Ensure that the client is informed in a timely manner so that necessary preparations can be made for the unloading.	XX	XX	XX
Unloading Site Preparation Compliance	Ensure that the unloading site is always properly prepared to avoid delays or safety concerns.	XX	XX	XX
Unloading Timeliness	Ensure that unloading is completed on time to minimize delays and maintain operational efficiency.	XX	XX	XX
Unloading Incident Rate	Minimize incidents during unloading operations to maintain safety and cargo integrity.	XX	XX	XX

## 6. Post-Operation Review

### Process Flow



## Process Narrative

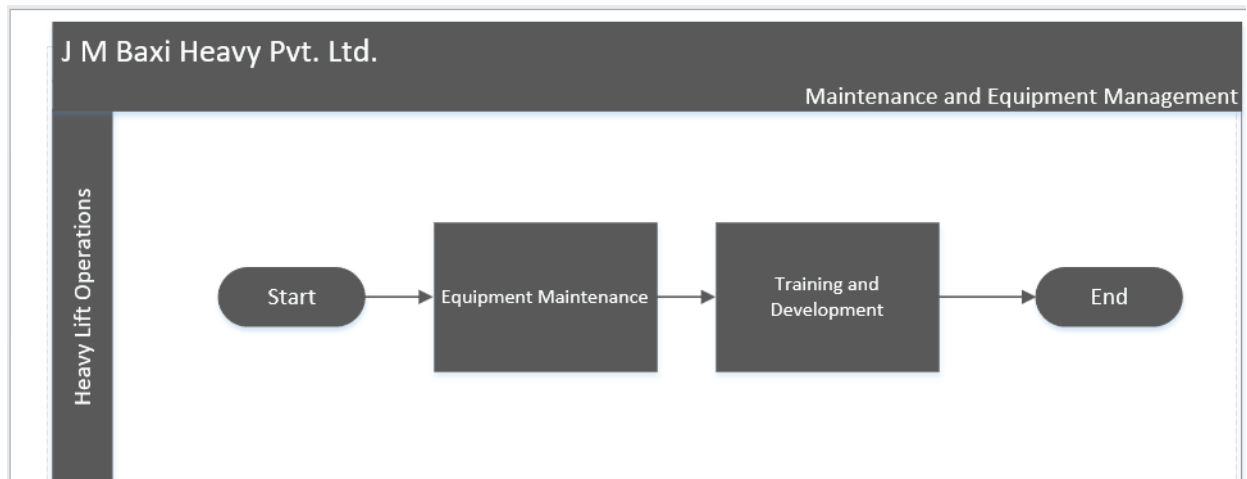
Description	Responsibility	Accountability	Frequency	Manual/ System
<b>6.1 Documentation</b>  Post completion of Unloading activity, Client Issues the Work Completion Certificate, delivery receipts as acknowledgement.	Site Supervisor	Manager- Operation	As and when	Manual
<b>6.2 Performance Analysis</b>  In case of Long duration projects, Repetitive projects and on special request of client, Manager – Operations conducts Performance analysis.  Additionally, if any incidents occurs during the project, Manager – Operations conduct a performance analysis for that particular project.  Manager – Operations / Engineering gathers feedback from team members and clients to identify areas for improvement.	Manager – Operations	-	As and when	Manual
<b>6.3 Reporting</b>  Manager – Sales prepares detailed Operational report summarizing challenges faced, successes, and lessons learned for future reference based on the relevant data obtained from the Operations, Engineering Team and HSE team	Manager - Sales	-	As and when	Manual

### Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Performance Analysis Completion Rate	Ensure that performance analysis is performed for all relevant projects to assess effectiveness and identify opportunities for improvement.	XX	XX	XX
Incident Review Rate	Ensure that any incidents during a project are thoroughly reviewed to understand the underlying issues and prevent recurrence.	XX	XX	XX
Report Completion Timeliness	Ensure that operational reports are generated promptly to capture lessons learned and inform future projects.	XX	XX	XX

## 7. Maintenance and Equipment Management

### Process Flow





## Process Narrative

Description	Responsibility	Accountability	Frequency	Manual/ System
<b>7.1 Equipment Maintenance</b>  Site Supervisor conducts routine inspections and maintenance on all equipment used during the Operation.  Manager - Operations Keep an inventory of Equipment and spare parts for efficient management.	Site Supervisor	Manager - Operations	Monthly	Manual
<b>7.2 Training and Development</b>  Manager – Operations / Engineering / HSE provides Ongoing training for staff on Operational best practices, Equipment handling, and Safety best practices respectively.	Manager- Operation / Engineering / HSE	-	As and when	Manual

## Key Performance Indicators (KPI's)

Attribute	Objective	Base Line	Target	Action Plan
Routine Maintenance Completion Rate	Ensure all scheduled maintenance tasks are performed on time to prevent equipment failure.	XX	XX	XX
Equipment Downtime	Total number of hours equipment is out of operation due to unplanned maintenance or failures.	XX	XX	XX
Training Completion Rate	Ensure all relevant staff members are trained to operate safely and efficiently.	XX	XX	XX
Training Effectiveness	Ensure that the training provided is perceived as valuable and leads to improved performance in operations.	XX	XX	XX
Incident Reduction Post-Training	Ensure that the training leads to fewer incidents in operations, indicating improved skills and safety awareness.	XX	XX	XX