

# LOGISTICS

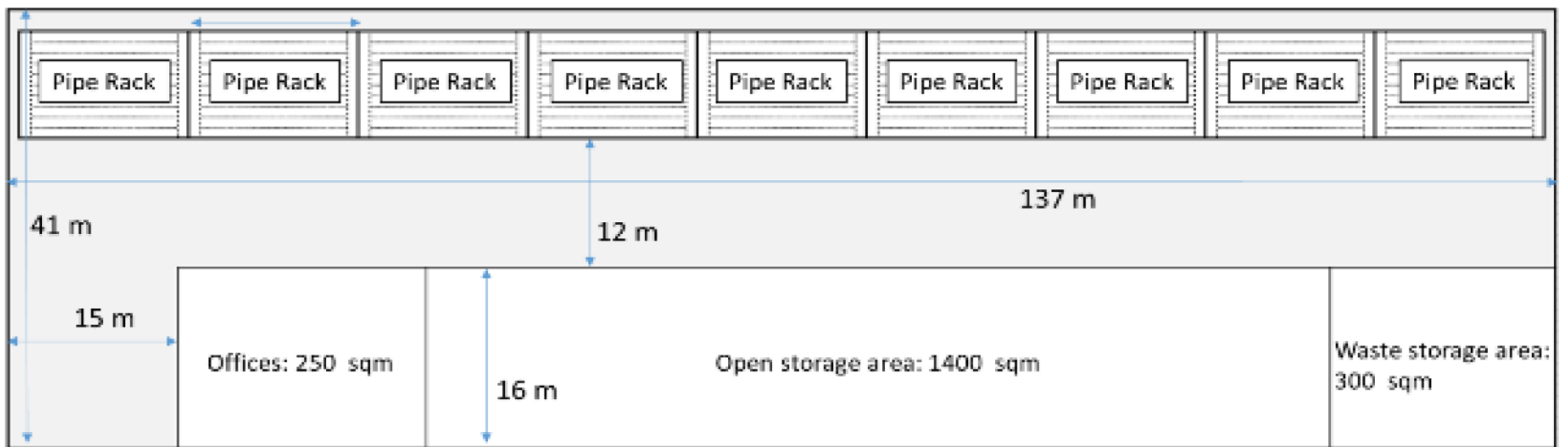
## INTRODUCTION

The onshore impact from the project include mobilization and demobilization of goods, materials, personnel from and to onshore logistic base and offshore drilling site.

## ONSHORE LOGISTICS BASE

The onshore logistics base will be located in Richards Bay or Durban, on an existing brownfield site (previously developed land) within the Port or the Industrial Development Zone (IDZ). It will include the following facilities:

- An open storage area with a pipe rack yard for drilling equipment: up to 6000 m<sup>2</sup>;
- A covered warehouse for drilling material and other minor equipment: up to 500 m<sup>2</sup>;
- A shelter for storage of consumables (cement, barite, bentonite): up to 100 m<sup>2</sup>;
- Temporary confined storage for waste (hazardous and not hazardous) prior of delivery to waste treatment and disposal facilities;
- Temporary mud plant and storage tanks for brine and mud: around 80 m<sup>3</sup>;
- A crane for heavy lift and forklift for internal movements;
- Temporary offices for logistic base personnel.



## OFFSHORE LOGISTICS

Source: Eni, 2015 and Saipem, 2017

- 500 m Exclusion Zone
- Movements of materials and drilling fluids (mud, industrial water, waste) by dedicated supply vessels
- Transport of personnel (around 200 people will work offshore) to the drillship will probably be by helicopter

### Drillship:

It is a self-propelled vessel used to drill wells in deepwater with the flexibility to move from location to location. Its navigation equipment will keep the ship stable above the well location through all over operations.

### Standby vessel:

Used to patrol the area surrounding the drillship 24/24h 7/7 days to provide assistance in case of emergency and reinforce 500 m exclusion zone. It will support contingency operations in case of spill.

### Supply vessel:

Used to transport materials and goods, including tubulars, wellhead, chemicals and drilling fluid (mud, industrial water), fuel, food, waste. In case of emergency or spill it will support contingency operations (e.g. booms deployment, skimmer installation, capping system).

### Helicopters:

Used to transport crew from land airport to the drillship during crew change and medical evacuation

## DRILLSHIP SPECIFICATIONS

Principal Dimensions / Operating Parameters		Storage Capacities	
Length	228 m	Active mud	2 000 bbl
Breadth	42 m	Reserve mud	10 000 bbl
Depth	19 m	Brine water	3 000 bbl
Operational draft	12 m	Base oil	3 000 bbl
Transit draft	13 m	Bulk mud/cement	34 500 bbl
Maximum water depth	3 658 m	Drill water	18 000 bbl
Maximum drilling depth	10 660 m	Fuel oil	50 000 bbl
Moonpool	25.6 m x 10.26 m	Personnel On Board	
Main generator sets	6 x diesel generators, 9, 900 HP each	Available Accommodation	200 People

Source: Eni, 2015 and Saipem, 2017