

**HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA -VIJAYAWADA-SECUNDERABAD PIPELINE**

**JEELA KARRA GUDEM BOOSTER STATION (JBS)  
OPERATIONS MANUAL**



**INTEGRATED MANAGEMENT SYSTEMS  
(ISO 9001:2015, ISO 14001:2015, ISO 45001:2018)**

	HINDUSTAN PETROLEUM CORPORATION LIMITED VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE VISAKHAPATNAM ANDHRA PRADESH	ISSUE NO: 1 REVISION NO.: 0 EFFECTIVE DATE: 24/10/2020 SHEET: 1 OF 1
INTEGRATED MANAGEMENT PROCEDURES		DOCUMENT NO.: IMP/OJK
TITLE	INDEX	

S.No	Description
1	List of documents (IMS Procedures/IMS Instructions)
2	Amendment record Sheet
3	IMS Procedures
4	List of Forms
5	IMS Forms
6	Annexure I – SOPs and Dos & Don’ts

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IMF/DCL/02  
Rev: 00; Issue:2

HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA-VIJAYAWADA-SECUNDERABAD PIPE LINE

**LIST OF DOCUMENTS**  
(IMS Procedures & IMS Instructions)

DEPARTMENT/SECTION: OPERATIONS - J K GUDEM BOOSTER STATION

SI No	IMP/IMI Title	IMP / IMI No.	Rev. No./ Amendment No.	Effective Date
1	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	IMP/OJK/01	00	24/10/2020
2	PRODUCT SAMPLING, STORAGE AND DISPOSAL	IMP/OJK/02	00	24/10/2020
3	STATION LINE-UP DURING STATION BYPASS	IMI/OJK/01	00	24/10/2020
4	STATION LINE-UP OF JEELA KARRA GUDEM STATION BEFORE START THE MAINLINE PUMP	IMI/OJK/02	00	24/10/2020
5	MAINLINE PUMP LINE UP & OPERATIONS	IMI/OJK/03	00	24/10/2020
6	PUMP SWITCH OVER JEELA KARRA GUDEM BOOSTER STATION	IMI/OJK/04	00	24/10/2020
7	SHUT DOWN OF J K GUDEM BOOSTER STATION	IMI/OJK/05	00	24/10/2020
8	OPERATION UNDER EMERGENCY CONDITION	IMI/OJK/06	00	24/10/2020
9	SUMP TANK OPERATION	IMI/OJK/07	00	24/10/2020
10	WORK PERMIT SYSTEM	IMI/OJK/08	00	24/10/2020
11	PIG RECEIVING	IMI/OJK/09	00	24/10/2020
12	PIG LAUNCHING	IMI/OJK/10	00	24/10/2020

\_\_\_\_\_  
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 <b>HP</b> 	<b>HINDUSTAN PETROLEUM CORPORATION LIMITED</b> <b>VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE</b> <b>VISAKHAPATNAM</b> <b>ANDHRA PRADESH</b>	<b>ISSUE NO: 1</b> <b>REVISION NO.: 00</b> <b>EFFECTIVE DATE: 01.01.2020</b> <b>SHEET: 1 OF 1</b>
	<b>INTEGRATED MANAGEMENT PROCEDURE</b>	<b>DOCUMENT NO.: IMP/OJK</b>
<b>TITLE</b>	<b>AMENDMENT RECORD SHEET</b>	

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	HINDUSTAN PETROLEUM CORPORATION LIMITED VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE VISAKHAPATNAM ANDHRA PRADESH	ISSUE NO: 1 REVISION NO.:00 EFFECTIVE DATE: SHEET: 1 OF 8
INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/01
TITLE	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	

## 1.0 PURPOSE

To lay down activities involved in operation of JEELA KARRA GUDEM BOOSTER STATION Control room involved for pumping of the POL products

## 2.0 SCOPE

This is applicable to operation activities of JEELA KARRA GUDEM BOOSTER STATION Control Room as per the pumping schedule in co-ordination with other VVSPL stations

- Vizag Control Room
- Mallu Bhupala Patnam Booster station
- Vijayawada Terminal
- Rajahmundry Booster Station
- Suryapet Booster station
- Bogaram Booster Station
- Secunderabad Receiving station
- 

## 3.0 REFERENCES

IMS/AM/04

IMS/AM/08

## 4.0 RESPONSIBILITY

### Shift In-charge/Location in charge

#### 4.1 Location in charge

- 4.1.1 To Coordinate with Vizag Control Room regarding the pumping program.
- 4.1.2 Issuing the work permit
- 4.1.2 Overall responsibility of the station.

#### 4.2 SHIFT-IN-CHARGE

- 4.1.1 To implement the pumping program in coordination with Vizag Control Room
- 4.1.2 To monitor the operations parameters (Annexure-I) in co-ordination with VDS and other station and record the relevant parameters in operation log book (IMF/OJK/01)
- 4.1.3 Note down each and every critical events in shift log book (IMF/OPN/01)

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<b>INTEGRATED MANAGEMENT PROCEDURE</b>		DOCUMENT NO: IMP/OJK/01
<b>TITLE</b>	<b>JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES</b>	

- 4.1.4 To coordinate with maintenance department for availability of the facilities.
- 4.1.5 To monitor pipeline integrity by monitoring and analyzing the PIDS, LDS alarms in coordination with maintenance department.
- 4.1.6 To issue cold / hot / working at height permit for work inside premises and outside in the ROU area along the pipeline.
- 4.1.7 To monitor the report of security guards and bring it to the notice of relevant officer for attending any issue.
- 4.1.8 Carryout weekly inspection of fire siren equipment & PAGA system in co-ordination with F&S Officer.
- 4.1.9 Surprise checks to be carried out to ensure alertness of Security Guards, activities of valve operators & electricians and identification/correction of any abnormality in station. Findings to be recorded in the shift log book of C/R.
- 4.1.10 To record, at the end of the shift, all the relevant events occurred during the shift requiring the attention of the next shift in charge by preparing Handing over Note (HON) in IMF/OPN/01 and discuss briefly about the same.
- 4.1.11 To acknowledge the HON prepared by the previous shift in charge and discuss briefly about the same.
- 4.1.12 To carry out the roles and responsibilities as per the ERDMP.

#### 5.0 PROCEDURE

- 5.1 To ensure safe operations, the activities as detailed in the following integrated management instructions are carried out.

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/01
TITLE	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	
TITLE OF IMS INSTRUCTION	IMS INSTRUCTION No.	
STANDARD CHECKS FOR SMOOTH OPERATIONS	IMI/OJK/01	
LINING UP OF J K GUDEM BOOSTER STATION	IMI/OJK/02	
OPERATION OF BOOSTER PUMPS AT BBS	IMI/OJK/03	
SWITCH OVER OF PUMPS AT J K GUDEM STATION	IMI/OJK/04	
SHUT DOWN OF J K GUDEM BOOSTER STATION	IMP/OJK/05	
OPERATION OF J K GUDEM BOOSTER STATION UNDER EMERGENCY CONDITION	IMP/OJK/06	
SUMP TANK OPERATION	IMI/OJK/07	
ISSUE OF HOT/ COLD/ HEIGHT/ ELECTRICAL ISOLATION WORK PERMITS	IMI/OJK/08	

## 5.2 General Inspection

The Shift Officers carries out at least one General Inspection round during the shift and checks at least two areas. Observation can be related to safety aspects PPEs etc in the critical behavior checklist IMF/OPN/11. The inspection covers but not confined to below guidelines:

### 5.2.1 Checks for Sub Standard Conditions

#### 1. Common for All areas

- Sufficient Illumination
- Housekeeping
- Condition in structures
- Condition of Buildings

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/01
TITLE	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	

## 2. Mainline Pump House& Piping

- Abnormal Noises
- Any Leaks through Pump's Mechanical Seal, body, Valves, piping, PTs, TTs etc.
- Visually inspect EOT crane
- Condition of Emergency Shower
- Condition of Control Valve (PCV)
- Condition of Pipe Supports
- Condition & Status of critical Valves
- Level of Pumps' lube oil, seal plan
- Differential pressure across the Pump Suction and inform M&R (Mech) to clean the filter element when pressure drop exceeds 0.2 Kg / cm2.

## 3. Sub Station

- Any alarms in panels & status of relays.
- Condition of Exhaust Fans
- Any spillages in Battery Bank
- Any Vapors in Battery Bank
- Condition of eyewash unit of battery bank
- Any alarms in VFD panel
- Condition of ACs in VFD room
- Cleanliness in substation & cellar
- Abnormal Noise from transformers
- Any leak through transformer oil tank

## 4. Sample Room

- Operation of Exhaust System
- Any spillages
- Proper stacking of Samples

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/01
TITLE	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	

**5. Field Piping Area**

- Any Leakages through flanges, Valves, PCV, Sample Points, PTs, TTs etc.
- Abnormal Sounds from PCV
- Condition of Walkovers
- Differential pressure in the Basket filter 101A and 101B and inform M&R (Mech) to clean the filter element when pressure drop exceeds 0.2 Kg / cm2.

**6. Fire water Tank Farm**

- Any leakages from the tank
- Condition of Tank Body & other valves
- Position of all HOVs should be as per requirement

**7. Fire Water Pump House& Piping**

- Abnormal Noises
- Any Leaks through Main/Jockey Pump's, body, Valves, piping, PGs etc.
- Visually inspect Battery condition
- General Housekeeping
- Fuel level/Oil level

**8. In and Around C/R Building**

- Any abnormality in C/R building, Worker's amenities Room
- Condition of Roads & Drains
- Condition of Worker's amenities Room
- Condition of PLC & SCADA Software & Hardware
- Working of PAGA System
- Whether Spark arrestors installed to vehicles

**9. Examples of Above Standard Conditions:**

- All exhaust fans found in working condition
- In Day time illumination is switched off wherever not required
- No Wild growth in the field is found
- Workers are using PPE even during idle time

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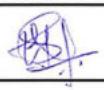
	HINDUSTAN PETROLEUM CORPORATION LIMITED VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE VISAKHAPATNAM ANDHRA PRADESH	ISSUE NO: 1 REVISION NO.:00 EFFECTIVE DATE: SHEET:6 OF 8
INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/01
TITLE	JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES	

- The observations or findings during the above checks are recorded in shift log book (IMF/OPN/01) and the Location In charge reviews the log on daily basis and thereby assesses the condition of the plant.
- Any reported substandard condition is brought to notice of concerned departmental head through maintenance log book (IMF/OPN/02), which is reviewed by Location In charge at least once in a month and the departmental heads are advised in written for early rectification.
- Any event observed during the inspection is recorded in Event Register kept in control room and dealt as per Event Management System.
- Any substandard condition recorded more than once is treated as repetitive and necessary remedial actions are initiated to eliminate the root cause.
- For any recorded above standard condition positive recognition is given verbally/e-mail on as and when required basis.

- 5.2.2 In case of above mentioned abnormalities, if any corrective actions other than the maintenance activity are required, the same is initiated by the shift in-charge on advice by the concerned department head. This advice can also be accepted telephonically with a corresponding note in the maintenance log book (IMF/OPN/02).
- 5.2.3 The impugned facility is isolated and the same is accepted back only on advise of the concerned Manager with the corresponding note on the maintenance log book. (IMF/OPN/02).

### 5.3 Co-ordination with other station's Control Rooms

- 5.3.1 The RBS/VBS will inform J K GUDEM about starting and Tripping of pumps so that the station parameters at J K GUDEM could be adjusted.
- 5.3.2 To advise the other locations' control room about the various operating parameters when the pumping Is 'ON' and also to exchange the pumped quantity FC data on hourly basis. Exchange the hourly data with VDS, RBS & VBS and record relevant details in IMF/OJK/01.

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	<b>RELEVANT RECORDS</b> <b>HINDUSTAN PETROLEUM CORPORATION LIMITED</b> VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE VISAKHAPATNAM ANDHRA PRADESH	<b>ISSUE NO: 1</b> <b>REVISION NO.:00</b> <b>EFFECTIVE DATE:</b> <b>SHEET:7 OF 8</b>
<b>INTEGRATED MANAGEMENT PROCEDURE</b>		<b>DOCUMENT NO: IMP/OJK/01</b>
<b>TITLE</b>	<b>JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES</b>	

#### 6.0 RELEVANT RECORDS:

SI. No	Format Title	Format No.	Location	Responsibility
1	Shift log book	IMF/OPN/01	Control Room	Shift In-charge
2	Maintenance log book	IMF/OPN/02	Control Room	Shift In-charge
3	Cold work permit	IMF/OPN/03	Control Room	Shift In-charge
4	Hot work permit	IMF/OPN/04	Control Room	Shift In-charge
5	Certificate for Thermometer calibration	IMF/OPN/05	Control Room	Shift In-charge
6	Certificate for Hydrometer calibration	IMF/OPN/06	Control Room	Shift In-charge
7	PLC & Safety by-pass register	IMF/OPN/07	Control Room	Shift In-charge
8	Working at heights permit	IMF/OPN/09	Control Room	Shift In-charge
9	Electrical isolation & energization permit	IMF/OPN/10	Control Room	Shift In-charge
10	Operation log book	IMF/OJK/01	Control Room	Shift In-charge
11	Quality Control Register	IMF/OJK/02	Control Room	Shift In-charge
12	Product sample label - BBS	IMF/OJK/03	Control Room	Shift In-charge
13	Report from security guards	IMF/ROW/02	Control Room	Shift In-charge

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ISSUE NO:1  
REVISION NO.:00  
EFFECTIVE DATE:  
SHEET:8 OF 8

**INTEGRATED MANAGEMENT PROCEDURE**      **DOCUMENT NO: IMP/OJK/01**

**TITLE**      **JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM ACTIVITIES**

**JEELA KARRA GUDEM BOOSTER STATION CONTROL ROOM OPERATION KEY PARAMETERS**

**ANNEXURE -1**

SN	PARAMETERS	VALUE	STATUS
1	Low Suction Pressure Mainline Pump	1.7 Kg/Sq.cm	Alarm
2	Low-Low Suction Pressure Mainline Pump	1.2 Kg/Sq.cm	Tripping
3	Low-Low Pressure Suction Header	1.2 Kg/Sq.cm	Tripping
4	High Pressure Discharge Header	114.0Kg/Sq.cm	Alarm
5	High Pressure Discharge Header	119.0Kg/Sq.cm	Tripping
6	High-High Pressure Discharge Line	72.0 Kg/Sq.cm	Tripping
7	Pump casing Temperature	85 deg c	Alarm
8	Pump casing Temperature	90 deg c	Tripping
9	Pump Bearing DE Temperature	85 deg c	Alarm
10	Pump Bearing DE Temperature	90 deg c	Tripping
11	Pump Bearing NDE Temperature	85 deg c	Alarm
12	Pump Bearing NDE Temperature	90 deg c	Tripping
13	Pump Thrust Bearing Temperature	85 deg c	Alarm
14	Pump Thrust Bearing Temperature	90 deg c	Tripping
15	Motor Bearing DE Temperature	95 deg c	Alarm
16	Motor Bearing DE Temperature	105 deg c	Tripping
17	Motor Bearing NDE Temperature	95 deg c	Alarm
18	Motor Bearing NDE Temperature	105 deg c	Tripping
19	Motor winding -R	145 deg c	Alarm
20	Motor winding -R	155 deg c	Tripping
21	Motor winding -Y	145 deg c	Alarm
22	Motor winding -Y	155 deg c	Tripping
23	Motor winding -B	145 deg c	Alarm
24	Motor winding -B	155 deg c	Tripping
25	Pump Radial Vibration	3 MILS	Alarm
26	Pump Radial Vibration	4 MILS	Tripping

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27	Pump Axial Vibration	+/- 0.45 mm	Alarm
28	Pump Axial Vibration	+/- 0.50 mm	Tripping
29	Motor Radial Vibration	3 MILS	Alarm
30	Motor Radial Vibration	4 MILS	Tripping
31	Low Level Sump Tank	300.0 mm	Alarm
32	Low Low Level Sump Tank	150.0 mm	Trip sump Pump
33	High Level Sump Tank	1600.0 mm	Alarm
34	High High Level Sump Tank	1800.0 mm	Trigger Station ESD

## 7.0 Performance indicators

Efficient and safe pipeline operation (Pumping and receiving petroleum product)

## 8.0 Risks

Refer Risk file IMS/RISK

## 9.0 Opportunities

1. Leverage with technology
2. Training to employees and Contract workmen

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/02
TITLE	PRODUCT SAMPLING, STORAGE AND DISPOSAL	

## 1.0 PURPOSE

To provide guidelines for product sampling, storage and disposal at JEELA KARRA GUDEM BOOSTER STATION.

## 2.0 SCOPE

This is applicable to all petroleum products pumped via or through JEELA KARRA GUDEM Station.

## 3.0 REFERENCES

- i) ASTM& QC Manuals for Non-aviation products.

## 4.0 RESPONSIBILITY

Shift in-charge

## 5.0 PROCEDURE

### 5.1 PRODUCT SAMPLING:

Sampling required to be done for the product line sample and the sump product before transferring to the mainline. Product quality and blending advise to be established before transferring to the mainline by QC officer or lab in-charge.

5.1.1 Product Line sampling to be done every two hours and Test A to be performed for checking Appearance, Density @ 15°C, Colour -Visual on minimum quantity of 500 ml. Any abnormality to be informed to VDS & SRS. Sample may be retained as advised by VDS/SRS.

5.1.2 Sampling Apparatus and Containers are used separately product wise.

5.1.3 Sample needs to be drawn and test A to perform before transferring sump tank contents into mainline.

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/02
TITLE	PRODUCT SAMPLING, STORAGE AND DISPOSAL	

**5.1.4 Precautions to be taken for sampling:**

5.1.4.1 When samples are required from various levels in a tank, the order of sampling should be from the top downwards so that each sample is obtained before the liquid at that level is disturbed.

5.1.4.2 Careless pouring and splashing will cause loss of light fractions and the sample must be poured from the sampling can into the sample containers by making use of funnels.

5.1.4.3 The sample should always be poured gently down the side of a funnel and never in a stream at the center.

5.1.4.4 The sample containers shall be closed immediately after the sample has been taken (within one minute of drawing).

5.1.4.5 The apparatus should be rinsed with the material to be sampled at least twice (or adequately) and allowed to drain before drawing sample. Sampling Apparatus and Containers are used separately product wise.

**5.1.5 Sample Containers:** The recommended sample container is a metal can with a screw cap. Colour coding for the sample container (cap/containers body to be colored coded) as per IQCM

**5.1.6 Sample labelling:** Sample container is labelled immediately after a sample is obtained. Gummed labels shall be used on aluminum and glass sample bottles only (IMF/OJK/03).

**5.1.7 Sample Collection:** In addition to the samples taken from the tanks, samples are to be collected as per the Latest Industry quality control manual. Samples are properly labelled and retained till the pumping batch is established in the receiving locations. Details of sample collection are recorded in QC Register (IMF/OJK/02).

**5.1.9 Sample Retention:**

5.1.9.1 Sample of materials which may be affected by light or heat are stored in a cool, dark place. Periodical examination is made for leakage.

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INTEGRATED MANAGEMENT PROCEDURE		DOCUMENT NO: IMP/OJK/02
TITLE	PRODUCT SAMPLING, STORAGE AND DISPOSAL	

5.1.9.2 Sample of product is kept in a separate chamber/Sample Room in order to prevent them from being misused. Adequate ventilation is provided in the chamber.

#### 5.1.10 Sample disposal:

5.1.10.1 Critical tests are carried out by the receiving locations as per test category 'A' of Industry Quality Control manual while receipt is on and any variations from the mother sample, specifications are investigated by the receiving location in coordination with the pumping location.

5.1.10.2 Once the product is received in the storage tanks of the receiving location, the receiving location carries out batch formation test as per Appendix 15 of Industry Quality control manual and then the product is re-warehoused under specific batch No.

5.1.10.3 Any variation beyond the limits with the mother sample vis-à-vis is investigated by the pumping location. The sample retained is sent to the refinery or marketing laboratory for further investigations.

5.1.10.4 After ascertaining the above, the product sample is disposed of under the supervision of the shift in-charge. The sample thus collected is poured back in the sump tank through sample point. While pouring the product back into the tank care is taken not to splash the product nor any plastic funnel is used for pouring. Details of sample disposed are entered in Quality Control register (IMF/OJK/02).

The details of the sample disposed to be recorded in shift log book (IMF/OPN/01).

5.1.10.5 The empty sample containers are cleaned and kept for future sampling.

#### 6.0 RELEVANT RECORDS

Quality Control Register	IMF/OJK/02
Sample Label	IMF/OJK/03
Shift log book	IMF/OPN/01

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INTEGRATED MANAGEMENT INSTRUCTION		DOCUMENT NO.: IMI/OJK/01
TITLE	STATION LINE -UP DURING BYPASS	

#### 1.0 PURPOSE

To provide instructions for lining up in station by pass mode of JEELA KARRA GUDEM Station.

#### 2.0 REFERENCES

IMS Procedure:

#### 3.0 RESPONSIBILITY

Shift In-charge

#### 4.0 INSTRUCTIONS

##### 4.1 If the station is in pump bypass mode

4.1.1 Open station bypass valve -MOV 1403

4.1.2 After Station bypass valves is completely open close station inlet valve- MOV 5018 and station outlet valve - MOV 5019.

4.1.3 After closing MOV 5018 & 5019, close 18" Hand operated valves adjacent to the MOV's.

4.1.4 Inform Vizag and Vijayawada before and after performing above steps.

#### 5.0 RELEVANT RECORDS

Shift log book

IMF/OPN/01

PLC & Safety By-pass register

IMF/OPN/07

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VISAKHAPATNAM  
ANDHRA PRADESH

ISSUE NO: 1  
REVISION NO.:00  
EFFECTIVE DATE: 24/10/2020  
SHEET:1 OF 3

**INTEGRATED MANAGEMENT INSTRUCTIONS**

DOCUMENT NO: IMI/OJK/02

<b>TITLE</b>	STATION LINE-UP OF JEELA KARRA GUDEM STATION BEFORE START THE MAINLINE PUMP
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**1.0 PURPOSE**

To provide instructions for lining up of JEELA KARRA GUDEM Station.

**2.0 REFERENCES**

IMS Procedure: IMP/OJK/01

**3.0 RESPONSIBILITY**

Shift In-charge

**4.0 INSTRUCTIONS**

Before line –up the station for pumping from JBS following to ensure

**4.1.1 ELECTRICAL:**

- 4.1.2 Incoming Voltage level to be monitored and adjusted using OLTC by keeping it in Auto/Manual Mode.
- 4.1.3 Transformer HVWS system line up to be checked and pressure to be monitored in each shift.
- 4.1.4 DG to be kept in Auto mode whenever pumping is going on.

**4.2 OPERATIONAL:**

- 4.2.1 Check the differential pressure across the basket filter under operation in each shift and inform M&R (Mech) to clean the filter element when pressure drop exceeds 0.2 Kg / cm<sup>2</sup>.
- 4.2.2 Check the differential pressure across the Strainer of the Pump under operation in each shift and inform M&R (Mech) to clean the same when pressure drop exceeds 0.3 Kg / cm<sup>2</sup>.

**4.3 SAFETY**

- 4.3.1 Ensure Jockey Pumps and Fire water pumps are kept in Auto Mode.
- 4.3.2 Fire Water tank level to be monitored and recorded in Operation log book at the beginning in each shift.
- 4.3.3 Fire Hydrant line Pressure to be monitored and recorded in Operation log book at the beginning in each shift.

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HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA- VIJAYAWADA- SECUNDERABAD PIPELINE  
VISAKHAPATNAM  
ANDHRA PRADESH

ISSUE NO: 1  
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**INTEGRATED MANAGEMENT INSTRUCTIONS**

DOCUMENT NO: IMI/OJK/02

**TITLE** STATION LINE-UP OF JEELA KARRA GUDEM STATION BEFORE START THE MAINLINE PUMP

**4.4 AT SUBSTATION:**

- 4.4.1 Ensure selection/line up of appropriate DOL/VFD breaker.
- 4.4.2 Check the voltages at 33 KV and 6.6 KV breaker and 415 V incoming breaker are within ( $\pm 10\%$ ) limit.
- 4.4.3 Ensure that PCV breaker is switched on.
- 4.4.4 Put Motor breaker of selected pumps in service position and ensure DC supply is ON.
- 4.4.5 Check the readiness of respective breakers/feeders/drives either in VFD mode or DOL mode.
- 4.4.6 Make sure all the relays are reset in the breaker.
- 4.4.7 Ensure 6.6 KV capacitor feeder is in service position with DC supply on and close the breaker.
- 4.4.8 Ensure that the selected pumps suction and discharge MOVs are in remote and feeder is ON.

**4.5 LINEUP OF JEELA KARRA GUDEM STATION:**

- 4.5.1 Lining up of the station to be done taking the product quality into consideration. Alternate equipment(when redundancy is available) with appropriate product quality to be made online, wherever required.
- 4.5.2 Open the MOV-5017 (Pump by pass valve).
- 4.5.3 Ensure either side HOVs of PCVs are open and PCV bypass Globe Valve is closed. PCV bypass valve may be used if PCV is under maintenance or for the reasons deemed fit by Shift In-charge.
- 4.5.4 Keep the stop switch of PCV in released position and reset the PCV.
- 4.5.5 Line up the Flow meter (FT-5001 or FT-5002). Open MOVs on either side of selected Flow meter.
  - a. Open MOV-5005 and MOV-5006 for lining up FT-5001
  - b. Open MOV-5007 and MOV-5008 for lining up FT-5002
- 4.5.6 Line up the Basket filters (101A or 101B or both) by opening either side MOV.
  - c. Open MOV-5001 and MOV-5002 for lining up BK-101A
  - d. Open MOV-5003 and MOV-5004 for lining up BK-101B

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/02
<b>TITLE</b>	<b>STATION LINE-UP OF JEELA KARRA GUDEM STATION BEFORE START THE MAINLINE PUMP</b>	

- 4.5.7 Open JEELA KARRA GUDEM Station Inlet MOV 5018 and outlet MOV 5019 .Ensure that station inlet and outlet HOVs are open.
- 4.5.8 Open MOV-1401 & MOV-1405, if not open and Pipeline was under shutdown.
- 4.5.9 Close MOV-1403
- 4.6 Make sure priming of mainline pumps is done before starting.
- 4.7 Inform Vizag, Rajahmundry and Vijayawada before starting pumping operation.
- 4.8 Ensure all SVs valve is open under controlling .
- 4.9 Take clearance VDS, RBS and VBS before start of pumps.
- 4.10 As deemed fit by the shift in-charge, some set alarms may be temporarily bypassed in PLC Input if suspected to be malfunctioning. This will be done strictly based on urgent requirements and the same to be logged in PLC Bypass Register (IMF/OPN/07) for the intimation of the concerned maintenance officer. Shift in-charge to modify set pressures, if required, keeping the same within station parameters and the same to be entered in Shift log book.

#### 5.0 RELEVANT RECORDS

Shift log book	IMF/OPN/01
PLC & Safety By-pass register	IMF/OPN/07

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HINDUSTAN PETROLEUM CORPORATION LIMITED  
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ISSUE NO: 1  
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SHEET: 1 OF 3

INTEGRATED MANAGEMENT INSTRUCTION

DOCUMENT NO.: IMI/OJK/03

TITLE

MAINLINE PUMP LINE UP & OPERATIONS

**1.0 PURPOSE**

To provide guide lines for lineup and operations of mainline pumps at JEELA KARRA GUDEM Booster station.

**2.0 REFERENCES**

IMS Procedure: IMP/OJK/01.

**3.0 RESPONSIBILITY**

Shift In-charge

**4.0 INSTRUCTIONS**

**4.1** Carryout out following checks 4.2 to 4.5 to start pumping operation.

**4.2 AT SUBSTATION:**

4.2.1 Check the voltages at 33 KV and 6.6 KV breaker and 440 V incoming breaker are within ( $\pm 10\%$ ) limit.

4.2.2 Ensure selection/line up of appropriate DOL/VFD breaker.

4.2.3 Make VFD and HVAC ready if pump will be operated in VFD mode.

4.2.4 Ensure that PCV breaker is switched on.

4.2.5 Put Motor breaker of selected pumps in service position and ensure DC supply is ON.

4.2.6 Ensure 6.6 KV capacitor feeder is in service position with DC supply on and close the breaker.

4.2.7 Ensure that the selected pumps suction and discharge MOVs are in remote and feeder is ON.

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	INTEGRATED MANAGEMENT INSTRUCTION	DOCUMENT NO.: IMI/OJK/03
TITLE	MAINLINE PUMP LINE UP & OPERATIONS	

**4.3 AT THE PUMP HOUSE:**

- 4.3.1 Selected pump motor bearing oil level and color to be checked. Always keep the bearing oil bath topped up.
- 4.3.2 Release Local STOP button.
- 4.3.3 Open the suction MOVs of the pump to be operated and prime the pump by proper venting.

**4.4 IN THE CONTROL ROOM:**

- 4.4.1 Select DOL/VFD mode of operation appropriately.
- 4.4.2 Reset the batch in the flow computer/ PLC, if necessary.
- 4.4.3 Select the PCV in MANUAL mode.
- 4.4.4 Check Drain Valves, Vent valve and common rain valve are closed from Pump permissive. Pump Permissive all conditions to be Healthy. Pump Interlocks conditions to be Healthy.
- 4.4.5 Select Manual Selection from Pump Train and from PLC start Pump auxiliaries namely DE seal fan (A OR C), NDE Seal fan (B or D), Cooler fan (A or B) and AOP.
- 4.4.6 When the sequence completes and UCP Pump permissive & interlocks are Ok, Pump ready to Start indication will become green in PLC Pump control screen.

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<b>INTEGRATED MANAGEMENT INSTRUCTION</b>		DOCUMENT NO.: IMI/OJK/03
<b>TITLE</b>	<b>MAINLINE PUMP LINE UP &amp; OPERATIONS</b>	

#### 4.5 START PUMPS AS PER FOLLOWING

- 4.5.1 Confirm flow rates to be pumped from Vizag/Rajahmundry/Vijayawada.
- 4.5.2 Take clearance from the Shift In-charge at Vizag Control Room and inform Shift engineers at Rajahmundry & Vijaywada Control Room.
- 4.5.3 Open PCV 2 to 3% manually in case of DOL (In case of VFD, PCV will be opened fully).
- 4.5.4 Give START command to selected pump (If the pump is in Manual mode after following the sequence of activities as per 4.4.5 to 4.4.6.).
- 4.5.5 In case of DOL operation, operate PCV suitably to control flow, line pressure, and suction pressure and discharge header pressure as specified in KEY PARAMETERS.
- 4.5.6 In case of VFD operation, enter the required flow rate in VFD control system, if VFD PID is in Auto Mode or Enter %Speed, if VFD is manual mode.
- 4.6.6 Monitor Pump and Motor parameters from UCP regularly.

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<b>INTEGRATED MANAGEMENT PROCEDURES</b>		DOCUMENT NO.: IMI/OJK/04
TITLE	PUMP SWITCH OVER JEELA KARRA GUDEM BOOSTER STATION	

#### 1.0 PURPOSE

To provide guide lines for switching over of pumps at JEELA KARRA GUDEM station.

#### 2.0 REFERENCES

IMS Procedure: IMP/OJK/01.

#### 3.0 RESPONSIBILITY

Shift In-charge

#### 4. INSTRUCTIONS

4.1 Take clearance from Vizag Control room for pump switch over(S/O PUMP).

4.2 S/O PUMP to be kept ready for operation by proper venting and other precautions before starting as displayed in PLC before Switch Over and suction MOV should be kept open.

4.3 Tripp the running pump

4.4 S/O PUMP to be start immediately as per instructions mentioned in IMI/OJK/03.

4.5 Set the flow rate as per requirement and inform Vizag, Rajahmundry & Vijayawada C/R about the pump S/O.

4.6 Once the pump started inform VDS,RBS & VBS immediately.

4.7 Record the events in shift log book.

#### 5.0 Documents to be maintained

1. Shift Log Book (IMF/OPN/01)
2. Operations Log Book (IMF/OSP/01)

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/05
<b>TITLE</b>	<b>SHUT DOWN OF JEELA KARRA GUDEM BOOSTER STATION</b>	

#### 1.0 PURPOSE

To provide guide lines for taking Shutdown of pumps at JEELA KARRA GUDEM

#### 2.0 REFERENCES

IMS/MR/7.5

#### 3.0 RESPONSIBILITY

Shift In-charge

#### 4.0 INSTRUCTIONS

4.1 Take clearance from VDS for shutdown of JEELA KARRA GUDEM Booster Station as per Pumping plan or as instructed by VDS.

4.2 Stop the pump running by giving stop command from PLC. Stop all auxiliaries one by one of the pump if pump stopped in manual mode.

4.3 If pumping towards VBS is ON, Open MOV-1403(Station Bypass Valve) . Else after taking VSPL shutdown as per QMP/OPN/02,close MOV-1401 and MOV-1405.

4.4 Then follow sequence mentioned below for shutting down the station.

4.4.1 close MOV-5018.

4.4.2 Close MOVs on either side of basket filter whichever is online.

4.4.3 Close MOVs on either side of FT whichever is online.

4.4.4 Close MOV-5019.

#### 5.0 RELEVANT RECORDS

Operations log book IMF/OJK/01  
Shift Log Book IMF/OPN/01

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/06
TITLE	OPERATION UNDER EMERGENCY CONDITION	

## 1.0 PURPOSE

To provide guidelines for operation of JEELA KARRA GUDEM station under emergency conditions.

## 2.0 REFERENCES

IMS Procedures: IMP/OJK/01

## 3.0 RESPONSIBILITY

Shift In-charge

## 4.0 INSTRUCTIONS

### 4.1 In case of power failure while pumping is 'ON' follow below guidelines :

4.1.1 Inform Vizag, Rajahmundry and Vijayawada.

4.1.2 Start DG Set (If not started in Auto mode).

4.1.3 Through power from DG close both Suction and Discharge MOVs of mainline pumps.

4.1.4 Once supply resumes, start operations after intimating Vizag, Rajahmundry and Vijaywada.

### 4.2 In case of pipeline failure, follow below guidelines:

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/06
TITLE	OPERATION UNDER EMERGENCY CONDITION	

- 4.2.1 Any leakage in the pipeline can be detected by comparison of (i) flow rate of dispatch station and receipt station in respective Volume Balance Section (ii) increase in flow and drop in pressure and (iii) LDS/PIDS alarms. This may be reconfirmed by site report.
- 4.2.2 Actuate ESD through SCADA. Inform LIC and all location C/R along with VDS. Ensure closure of SVs on the both sides of the leak location both from SCADA as well as Security Guard of concerned SV/IP station.
- 4.2.3 Follow procedure of Emergency Control Plan (OFF SITE/ON SITE) as the case may be.
- 4.2.4 Clear the spillage.
- 4.2.5 Arrange for the repairs.
- 4.3 In case of Major Spillage in Booster Station, follow below guidelines:
- It may be due to Joint Failure or gasket failure.
- 4.3.1 Take shutdown of the system by informing the other stations, or activate the 'ESD' button depending upon the gravity of the situation.
- 4.3.2 Inform Head-Operations and Head – Maintenance and LIC.
- 4.3.3 Co-ordinate with Maintenance group for attending the job.
- 4.3.4 Follow procedure of Emergency Control Plan (OFF SITE/ON SITE) as the case may be.
- 4.3.5 Record report of operation under emergency conditions in Shift log book (IMF/OPN/01), Maintenance log book (IMF/OPN/02) and Operation log book (IMF/OJK/01) as applicable.

#### 5.0 RELEVANT RECORDS

Shift log book IMF/OPN/01

Maintenance log book IMF/OPN/02

Operations log book IMF/OJK/01

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INTEGRATED MANAGEMENT INSTRUCTIONS		DOCUMENT NO: IMI/OJK/07
TITLE	SUMP TANK OPERATION	

## **1.0 PURPOSE**

To provide instructions for operation of Sump tank.

## 2.0 REFERENCES

IMS Procedure: IMP/OJK/01

### **3.0      RESPONSIBILITY**

## Shift In-charge

## 4.0 INSTRUCTIONS

Sampling required to be done for the product line sample and the sump product before transferring to the mainline. Product quality and blending advise to be established before transferring to the mainline by QC officer or lab in-charge.

- 4.1 Two sump tanks (No.1 for HSD & SKO, No.2 for MS) are provided to accommodate product coming out of priming and Draining of pumps, TRVs, leakages, Basket filter operation and sample disposal.
  - 4.2 Sump tank level to be brought down to 15 cm. as and when it reaches 120 cm or it should be evacuated as and when required depending on the product being pumped and O & M requirements like before cleaning of basket filters etc.
  - 4.3 Monitor Sump tanks level at the start of each shift.

If there is any abnormal increase in the level, investigate the reason and empty out tank. Care is to be taken that sump tank no.1 is emptied out only when HSD pumping is on and sump tank no.2 when MS pumping is on.

- 4.4 Sample to be collected before emptying out the tank. Test A to be performed on the sample collected and accordingly quantity to be emptied out to be determined. Sample details to recorded in the shift log book.
  - 4.4 High level sump tank alarm is set at 160 cm.
  - 4.5 High- High level sump tank alarm is set at 180 cm.
  - 4.6 Record details of operation of sump tank in the Shift log book (IMF/OPN/01).

## 5.0 RELEVANT RECORDS

Shift log book IMF/OPN/01

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/08
TITLE	WORK PERMIT SYSTEM	

## 1.0 PURPOSE

To provide guidelines for issue of Cold work, Hot work, work in confined spaces & Working at Height, Electrical Isolation and Energization Permit to carry out M & R jobs in station

## 2.0 REFERENCES

IMS Procedure: IMP/OJK/01, OISD-STD-105, Process Hazard Identification and Risk Assessment Procedure

## 3.0 RESPONSIBILITY

### For Cold Work Permit: (Station)

Receiver - Job Engineer  
Issuer - Shift - In-Charge

### For Cold Work Permit: (ROU)

Receiver - Job Engineer  
Issuer - Maintenance-In-Charge/Location-In-Charge

### For Hot Work/Work in Confined space/Working at Heights Permit

Receiver - Job Engineer  
Concurred - Shift - In-Charge  
Issuer - Location-In-Charge

### Electrical Isolation and Energization Permit

Receiver - Job Engineer  
Concurred - Shift - In-Charge  
Issuer - Maintenance-In-Charge/Electrical-In-Charge

## 4.0 INSTRUCTIONS

4.1 Generally Online work permit system shall be adopted for issuing/receiving of work permits. In case of jobs on ROU and failure of on line system, manual permit to be issued.

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/08
TITLE	WORK PERMIT SYSTEM	

4.2 The job engineer responsible for carrying out jobs apart from regular activities initiates the work permit and approaches the Shift In-charge for his concurrence (IMF/OPN/03, IMF/OPN/04, IMF/OPN/09).

4.3 In case of Electrical Isolation and Energization work permit (IMF/OPN/10) OIC-Electrical approaches the Maintenance In-charge for his concurrence.

4.4 The work permit for Working at Heights is applicable to all the jobs to be carried out at any elevation more than 3 mts.

4.5 Ensure the proper shielding of the work site, degassing of the equipment, isolating the equipment and other necessary activities as detailed in the permits. Ensure that fire hydrant line and fire extinguishers are available at the site as detailed in respective work permits.

(Responsibility: Job Engineer)

4.6 Make an inspection of the site and if satisfied with the arrangement made by the Job engineer, issue the permit for a specified duration on a particular working day at a particular work location inside J K GUDEM BOOSTER STATION. Also verify required PPEs, FF equipment as detailed in respective work permits and PPE matrix as given below are compiled in totality before issuing the permit. Informal personal risk assessments prior to authorizing to undertake tasks is performed and logged in the respective permits, if any. Based on a practical approach "STAR - Stop, Think, Act, Review" (Responsibility : Permit Issuer ).

4.7 All permits issued will be entered in Shift log book in Control room before starting the actual job.

[Responsibility: Shift In-charge/ OIC]

4.8 During the course of execution of the job, shift officer to make at least one round of the job location per shift and verify for compliance status of the requirements for PPE and FFE (Fire Fighting Equipment) as given in work permit and PPE matrix as per annexure A enclosed & log observations of the visit in respective work permits and/or critical behavioral check list (IMF/OPN/12).

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/08
TITLE	<b>WORK PERMIT SYSTEM</b>	

4.9 On completion of job, receiver of the permit shall approach the issuer for closure of the permit and hard copy of closed permit shall be submitted to shift-in-charge for records.

## 5.0

### RELEVANT RECORDS

- Cold Work Permit IMF/OPN/03
- Hot Work Permit IMF/OPN/04
- Working at Height Permit IMF/OPN/09
- Electrical Isolation & Energization Permit IMF/OPN/10
- PPE Matrix – Annexure-I IMP/OVZ/01
- Critical Behavioral check list IMF/OPN

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<b>INTEGRATED MANAGEMENT INSTRUCTIONS</b>		DOCUMENT NO: IMI/OJK/09
TITLE	PIG RECIEVEING	

#### 1.0 PURPOSE

To provide guidelines for Pig receiving.

#### 2.0 REFERENCES

QM Procedure: IMP/OJK/01

#### 3.0 RESPONSIBILITY

Shift In-charge

#### 4.0 INSTRUCTIONS

- 4.1.1 Co-ordinate with Rajahmundry Control Room for obtaining hourly flow and pig tracking team, from which the location of the PIG will be calculated.
- 4.1.2 Open MOV-1402 and the 10" by pass line for the scrapper barrel and close the MOV-1406, sufficient time before the expected arrival time of the PIG.
- 4.1.3 Ensure that the flaps of the PIG indicator mounted on the scrapper barrel be in horizontal position. As the pig is received alarm for scrapper detected XXIS-1401 & received XXIS-1402 actuates in panel.
- 4.1.4 Once the PIG is received, open MOV-1406 and close MOV-1402 and 10" bypass line.
- 4.1.5 Drain the scrapper barrel by opening the 4" drain valve and 3" vent valve.
- 4.1.6 Take out the PIG and inspect visually for any dents or scratches and cups condition.
- 4.1.7 Collect Pig residue and retain for lab test.

#### 5.0 RELEVANT RECORDS

Shift log book	IMF/OPN/01
Pigging report	IMF/OPN/08

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INTEGRATED MANAGEMENT INSTRUCTIONS		DOCUMENT NO: IMI/OJK/10
TITLE	PIG LAUNCHING	

## 1.0 PURPOSE

To provide guidelines for Pig Launching.

## 2.0 REFERENCES

IMF Procedure: IMP/OJK/01

## 3.0 RESPONSIBILITY

Shift In-charge

## 4.0 INSTRUCTIONS

- 4.1 After inserting the PIG in the launcher and ensuring closing of the barrel door properly, Open 10" kick off line valve of launcher.
- 4.1 Open MOV-1404 fully.
- 4.2 Close MOV-1407.
- 4.3 After conforming that pig has launched (XXIS-1403 activates), open MOV-1407.
- 4.4 Close barrel isolation MOV-1404 and 10" kick off line valve.
- 4.5 De pressurise / drain the launcher as decided by location in-charge.

## 6.0 RELEVANT RECORDS

Shift log book	IMF/OPN/01
Pigging Report	IMF/OPN/08

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	<i>Dev</i>	<i>B.J.</i>
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

Annexure A

Sr.No.	Activity	Personal Protective Equipments (PPE'S) to be used in operating area											
		Helmet	Safety Shoes	Goggles	Hand Gloves Cot.	Hand Gloves PVC	Hand Gloves ASB	Ear Plug s	Canister	B. Apparatus	Gas Mask	Dust Mask	Safety Belt
1	Visitors / Employees in Plant Area	Yes	Yes	--	--	--	--	--	--	--	--	--	--
2	Taking Sample in Plant	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--
3	Tank gauging	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--
4	Mechanical /FAS jobs- Pigging/ valve maint/pump maint./FE maint.	Yes	Yes	--	Yes	--	--	--	--	--	--	--	--
5	Noisy Area - pump /DG shed	Yes	Yes	Yes	Yes	--	--	Yes	--	--	--	--	--
6	Welding	Yes	Yes	Yes	Yes	--	Yes	--	--	--	Yes	--	--
7	Grinding	Yes	Yes	Yes	Yes	--	--	Yes	--	--	--	Yes	--
8	Working at Height - Painting, crane maint. & b.filter	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	Yes
9	Chemicals Handling - Battery maint. & CI handling	Yes	Yes	Yes	--	Yes	--	--	--	--	Yes	--	--
10	Electrical & Instrumentation Jobs	Yes	Yes	--	--	Yes	--	--	--	--	--	--	--
11	Working in shed/stores	Yes	Yes	Yes	Yes	--	--	--	--	--	--	--	--
12	Confined Space	Yes	Yes	Yes	Yes	--	--	--	--	Yes	--	--	--

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balu	Aw	BS.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

**HINDUSTAN PETROLEUM CORPORATION LIMITED**  
**VISAKHA-VIJAYAWADA-SECUNDERABAD PIPE LINE**

**LIST OF FORMS**

Dept/Section: OPERATIONS JK GUDEM BOOSTER STATION

Sl. No.	Form No.	Form Title	Reference IMP/IMI No.	Retention Period
1	IMF/OPN/01	Shift log book	IMP/OPN/01	3 years
2	IMF/OPN/02	Maintenance log book	IMP/OPN/01	1 year
3	IMF/OPN/03	Cold work permit	IMI/OPN/08	1 year
4	IMF/OPN/04	Hot work permit	IMI/OPN/08	1 year
5	IMF/OPN/05	Certificate for Thermometer calibration	IMI/OPN/01	1 year
6	IMF/OPN/06	Certificate for Hydrometer calibration	IMI/OPN/02	1 year
7	IMF/OPN/07	PLC & Safety by-pass register	IMI/OPN/02	1 year
8	IMF/OPN/09	Working at heights permit	IMI/OPN/08	1 year
9	IMF/OPN/10	Electrical Isolation & Energization Permit	IMI/OPN/08	1 year
10	IMF/OPN/11	Critical Behavior Checklist	IMP/OPN/01	1 year
11	IMF/OJK/01	Operations log book	IMP/OJK/01	2 years
12	IMF/OJK/02	Quality Control Register	IMP/OJK/02	1 year
13	IMF/OJK/03	Sample label	IMP/OJK/02	Till batch clearance at receiving locations/As advised by VDS
14	IMF/ROW/01	Daily line walkers report	IMP/ROW/01	1 year
15	IMF/ROW/02	Report from security guards	IMP/ROW/02	1 year
16	IMF/OPN/08	Pigging report	IMI/OJK/09 & IMI/OJK/10	2 Year

Signature of Department Head

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balaji		
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



IMF/OPN/01  
ISSUE 2; Rev: 00

**हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड  
विशाख विजयवाडा सिकंदराबाद पाईपलाईन विशाखापटनम  
HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE**

## **पाली लाग पुस्तिका/SHIFT LOG BOOK**

दिनांक/Date \_\_\_\_\_ पाली/Shift \_\_\_\_\_ स्टेशन/Station \_\_\_\_\_  
विशाखापटनम/Visakhapatnam \_\_\_\_\_ राजमन्डी/Rajahmundry \_\_\_\_\_ विजयवाडा/Vijayawada \_\_\_\_\_  
सुर्यपेठ/Suryapeta \_\_\_\_\_ IPS-1 \_\_\_\_\_ IPS-2 \_\_\_\_\_  
सिकन्दराबाद/Secunderabad \_\_\_\_\_ IPS-3 \_\_\_\_\_

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	AJW	ASL
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



**हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड**  
विशाख विजयवाडा सिकंदराबाद पाईपलाईन विशाखापट्टनम  
HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE

## अनुरक्षण लाग पुस्तिका/MAINTENANCE LOG BOOK

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narash Balaji	A.	B.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



**हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड**  
विशाख विजयवाडा सिंकंदराबाद पाईपलाईन विशाखापटनम  
**HINDUSTAN PETROLEUM CORPORATION LIMITED**

## अनुरक्षण लाग पुस्तिका/MAINTENANCE LOG BOOK

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balaji	Dw	RJ
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



**हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड**  
**विशाख विजवाडा सिंकंदराबाद पाईपलाईन विशाखापटनम**  
**HINDUSTAN PETROLEUM CORPORATION LIMITED**  
**VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE**

IMF/OPN/03

ISSUE 2 ; REV. 00

कार्यस्थल/LOCATION:

क्रम संख्या/Sl. No. \_\_\_\_\_

**शीत कार्य अनुज्ञाप्ति/ COLD WORK PERMIT**

कार्यानुज्ञाप्ति/WORK CLEARANCE \_\_\_\_\_ दिनांक के/ of date \_\_\_\_\_ समय से/FROM hrs \_\_\_\_\_ दिनांक के/ of date \_\_\_\_\_ समय तक/TO hrs. (पाली के लिए वैध यदि पुनः नुतनीकृत न किया जाए /valid for the shift unless renewed)  
 (विभाग/शाखा/ठेकेदार) के किए जारी/ ISSUED TO : DEPARTMENT/SECTION/CONTRACTOR) : \_\_\_\_\_  
 कार्य का सही स्थान(क्षेत्र/इकाई/उपकरण संख्या)/EXACT LOCATION OF WORK (AREA/UNIT/EQUIPMENT NO. etc): \_\_\_\_\_

## कार्य-विवरण/DESCRIPTION OF WORK:

अनुज्ञाप्ति देने से पूर्व निम्नलिखित मदाँ की जाँच सुनिश्चित करें/THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT  
 उचित खानों में सही (/) का निशान लगाएँ. (\*) निशान वाले खानों की पालना प्राप्तकर्ता सुनिश्चित करें./(Tick (/) mark in the appropriate box.  
 Checklist items marked with asterisk (\*) shall be complied by receiver}

क्रम संख्या/Sl. No.	मद/Item	किया / Done	आवश्यक नहीं/Not Reqd.
1	उपकरण/कार्यक्षेत्र का निरीक्षण किया /Equipment / work Area Inspected		
2	आसपास की जगह जाँची, साफ की और ढक दिया /Surrounding area checked, cleaned and covered		
3	उपकरण ढका/बिच्छेदित/बंद/ पृथकीकृत / जड़ किया हुआ है./ Equipment / blinded/ disconnected /closed / isolated/wedge opened.		
4	उपकरण को भलिभाँतिरूप से निर्गमित/ दबावमुक्त किया/ Equipment properly drained and depressurized		
5	उपकरण को विद्युत बिच्छेदित किया गया/ Equipment electrically isolated तथा परमिट संख्या _____ द्वारा टैग किया गया /and tagged vide permit No.....		

क्रम संख्या/Sl. No.	मद/Item	किया / Done	आवश्यक नहीं/Not Reqd.
6	उपकरण पानी से साफ किया / Equipment water flushed		
7	उपकरण को वाष्प से भलिभाँति साफ किया /Equipment properly steamed/ purged		
8	हवा एवम प्रकाश की उचित व्यवस्था की /Proper ventilation and lighting provided		
9	क्षेत्र हदबंदी की तथा सावधानी बोर्ड लगाए गए/Area cordoned off & caution boards / tags provided		
10	गैस टेस्ट:Gas test : HCs/Toxic etc. हाइड्रोकार्बन HCs = %एलईएल/LEL जहरिली गैस Toxic gas = पीपीएम/ ppm		

## अभियुक्तियाँ/Remarks:

- 1) गतिविधि से निम्नलिखित अवायिकात्मक खतरा आपेक्षित है. (उपयुक्त मद पर निशान लगाएँ): आपेक्षित की कमी/एच2एस, विषेशी गैस/जलनशील गैस/पेरोफेरिक लौह/क्षयकारी रसायन/वाष्प संक्षेपण/कोई अन्य/ The activity has the following expected residual hazards (Tick the relevant items )Lack of Oxygen / H2S, Toxic Gases / Combustible gases/ pyro-phoric Iron / Corrosive Chemicals / Steam – condensate / Others
- 2) सामान्य संरक्षी उपकरण के अतिरिक्त निम्नलिखित अतिरिक्त स्वयम सुरक्षा उपकरणों का उपयोग करें(सुरक्षा टोपी/ सुरक्षा बूट/ दस्ताने/ब्वाईलर सुट/चेहरे का कवच/एपरन/धूप- चर्सें/घुल से चवाच के लिए श्वास यंग/शुद्ध हवा मुखबटा/जीवन रेखा/ सुरक्षा पेटी/हवा की लाईन/ कर्ण गुलबंद इत्यादी) Following additional PPE to be used in addition to standards PPE (Helmet, Safety Shoes, Hand gloves, Boiler suit)Face shield / Apron / Goggles / Dust Respirator / Fresh Air Mask / Life line / Safety Belt / Airline / Earmuff etc.

3) विधि कोई अतिरिक्त सावधानी /Additional precaution if any:

4) सामान्य निर्देश निम्नलिखित है/General Instructions are overleaf

परमिट देने वाले का नाम तथा पदनाम Issuer Name & Designation	परमिट देने वाले के हस्ताक्षर Issuer Signature	प्राप्तकर्ता का नाम तथा पदनाम Receiver Name & Designation	प्राप्तकर्ता के हस्ताक्षर Receiver's Signature

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balu		
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

**प्राप्तकर्ता/कार्यस्थल प्रति/RECEIVER COPY / LOCATION COPY**  
(After Completion of job please return the permit to the issuer)

### नवीकृत अनुज्ञाप्ति/CLEARANCE RENEWAL

## सामान्य निर्देश / General Instructions

1) वर्क परमिट सावधानीपूर्वक सही सही साफ अक्षरों में भरते हुए सुनिश्चित करते हुए कि सभी शाखा/प्रशाखा को संपूर्ण जानकारियाँ दे दी गयी हैं। जहाँ आवश्यक हो खाकाचित्र भी मुहैया कराएँ। The work permit shall be filled up carefully and accurately in clear handwriting ensuring that complete information is provided in all the sections/ subsections. Sketches should be provided wherever possible to avoid miscommunication.

2) कार्य शुरू करने से पूर्व संरक्षी उपकरणों का निरधारण, किए जाने वाले परिचालन एवम उनसे संभावित दुर्घटनाओं को ध्यान में रखकर समुचित सावधानी एवम ध्यानपूर्वक विश्लेषण के पश्चात करें।Appropriate safe guards and required personnel protective equipment (PPEs) shall be determined by a careful analysis of the potential hazards and the operations to be performed prior to starting the work.

3) यदि परिचालन-रखरखाव/ठेकेदार/अग्नि/सुरक्षा विभागों से अतिरिक्त कर्मचारी की आवश्यकता हो तो अतिरिक्त आवश्यता में दर्ज करें/Requirement of standby personnel from process / maintenance / Contractor / Fire / Safety etc if any shall be mentioned in the additional requirement.

4) अग्नि संकेत सिलते ही सभी कार्य रोक दिए जाए। In case of fire alarm / siren, all work must immediately be stopped.

5) अनुज्ञपति का नुतनिकरण के लिए जारी कर्ता सुनिश्चित करें कि परिस्थितियाँ कार्य जारी रखने के लिए संतोषजनक हैं। यदि परिस्थितियाँ बदली हुई हैं तो नयी अनुज्ञपति/मीजुदा अनुज्ञपति में सुधार करें। For renewal of work clearance, the issuer shall ensure that the conditions are satisfactory for the work to continue. If the conditions have changed, it may be necessary to issue a new permit or amend the existing permit.

6) इस अनुशासित का नुतनीकरण/विस्तार अधिक से अधिक 7 दिनों तक कर सकते हैं/The clearance on the same permit can be renewed / extended up to a maximum of seven calendar days.

7) यह अनज़पि कार्य स्थल पर सदैव उपलब्ध रहनी चाहिए।/This permit must be available at work site at all times.

8) कार्य पूर्ण होने पर अनुमति को बंद करें/On completion of the work, the permit shall be closed.

**कार्य अनुबंध को समाप्त करना**/Closing of the Work Permit:

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayanan Balaji	RW	P.S.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

प्राप्तकर्ता: कार्य पूर्ण किया/ रोक दिया/स्पल साफ किया/Receiver: Certified that the subject work has been completed / stopped and area cleared			जारीकर्ता: सत्यापित किया कि कार्य पूर्ण किया/ रोक दिया तथा स्पल साफ और दुर्घटनारहित है /Issuer: Verified that the job has been completed and area cleared and is safe from any hazard.		
दिनांक व समय Date & Time	नाम व पदनाम Name & Designation	हस्ताक्षर Signature	दिनांक व समय Date & Time	नाम व पदनाम Name & Designation	हस्ताक्षर Signature

(कृपया अनुज्ञाप्ति जारीकर्ता को वापस करें/PLEASE RETURN PERMIT TO ISSUER)

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayn Babu	Nu	
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA VIJAYAWADA SECUNDERABAD PIPELINES

LOCATION:

WORK PERMIT  
FOR  
HOT WORK / ENTRY TO CONFINED SPACE

Sl. No. \_\_\_\_\_

WORK CLEARANCE FROM \_\_\_\_\_ hrs of date \_\_\_\_\_ TO \_\_\_\_\_ hrs of date \_\_\_\_\_ (valid for the shift unless renewed)  
ISSUED TO : (DEPARTMENT/SECTION/CONTRACTOR) : \_\_\_\_\_

EXACT LOCATION OF WORK (AREA/UNIT/EQUIPMENT NO., etc) \_\_\_\_\_

DESCRIPTION OF WORK \_\_\_\_\_

THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THE PERMIT

(Tick mark in the appropriate box. Checklist items marked with asterisk (\*) shall be complied by receiver)

Sl. No.	Item	Done	Not Reqd.
A.	<b>General Points</b>		
1	Equipment / work Area Inspected		
2	Surrounding area checked, cleaned and covered		
	Sewers, manholes, CBD etc and hot surfaces nearby covered		
3	Considered hazard from other operations and concerned persons alerted.		
4	Equipment /blinded/disconnected/closed/isolated/wedge opened		
5	Equipment properly drained and depressurized		
6	Equipment properly steamed / purged		
7	Equipment water flushed		
8	Iron sulfide removed / kept wet		
9	Equipment electrically isolated and tagged vide permit No.....		
10	Gas test : HCs = % LEL Toxic gas = ppm, O2 = %		
11	Running water hose / Fire extinguisher provided Fire Water system available		
12*	Area cordoned off and precautionary tags / boards provided		

Sl. No.	Item	Done	Not Reqd.
B	For Hot work / Entry to confined Space		
1	Proper ventilation and lighting provided		
2	Proper means of exit / escape provided		
3	Standby personnel provided from process/maint/contractor/Fire/Safety dept.		
4	Checked fro oil and Gas trapped behind the lining in equipment		
5*	Shield provided against spark		
6*	Portable equipment/nozzles properly grounded		
7*	Standby persons provided for entry to confined space		

C	For vehicle Entry		
1	Spark Arrestor on the mobile equipment/vehicle provided		

D	For Excavation works		
1	Clearance obtained for excavation / road cutting/Dyke cutting from concerned depart.		

Remarks:

1. The activity has the following expected residual hazards (Tick the relevant items )Lack of Oxygen / H2S, Toxic Gases / Combustible gases / pyrophoric Iron / Corrosive Chemicals / Steam – condensate / Others \_\_\_\_\_

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayana Balu	Av	PS
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

2. Following PPE to be used in addition to standards PPE (Helmet, Safety Shoes, Hand gloves, Boiler suit) Face shield / Apron / Goggles / Dust Respirator / Fresh Air Mask / Life line / Safety Belt / Airline / Earmuff etc.
3. Additional precaution if any: \_\_\_\_\_
4. General Instructions are overleaf

Issuer Name & Designation	Issuer Signature	Concurred by Name & Designation	Signature	Receiver Name & Designation	Receiver Signature

RECEIVER COPY / FIRE SECTION COPY / SAFETY COPY / LOCATION COPY

#### CLEARANCE RENEWAL

Date	Time		Gas Test Values for HC's Toxic, O2 etc.	Additional Precautions if any, Otherwise mention "NIL"	Issuer's Name, Designation & Signature	Concurred by Name, Designation & Signature	Receiver's Name, Designation & Signature
	From	To					

#### General Instructions:

1. The work permit shall be filled up carefully and accurately in clear handwriting ensuring that complete information is provided in all the sections/ subsections and none of column is left blank. Sketches should be provided wherever possible to avoid miscommunication.
2. Appropriate safe guards and required personnel protective equipment (PPEs) shall be determined by a careful analysis of the potential hazards and the operations to be performed prior to starting the work.
3. In case of fire alarm / siren, all work must immediately be stopped.
4. Only certified vehicle / engines and permitted type of electrical equipment and tools are allowed in operating areas.
5. Welding machines should be located in non-hazardous and ventilated areas.
6. No hot work should be permitted unless the explosive meter reading is zero.
7. When a person is entering confined space, the receiver must keep minimum two standby – designated persons at the manhole or entry point.
8. Before box up of any vessel manhole cover, ensure that no men / materials are inside the vessel.
9. For renewal of work clearance, the issuer shall ensure that the conditions are satisfactory for the work to continue. If the conditions have changed, it may be necessary to issue a new permit or amend the existing permit.
10. This clearance on the same permit can be renewed/extended upto a maximum of seven calendar days.
11. This permit must be available at work site at all times.
12. On completion of the work, the permit must be closed and kept as record.

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balu	Aw	DR
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

**Closing of the Permit:**

Receiver: Certified that the subject work has been completed / stopped and area cleared

Date & Time	Name & Designation	Signature

Concurred By

Date & Time	Name & Designation	Signature

Issuer: Verified that the job has been completed and area cleared and is safe from any hazard.

(PLEASE RETURN PERMIT TO ISSUER)

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balaji	A.	R.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



IMF/OPN/05  
ISSUE 2; REV.00

**हिन्दुस्तान पेट्रोलियम कॉर्पोरेशन लिमिटेड**  
विशाख विजयवाडा सिकंदराबाद पाईपलाईन विशाखापटनम  
**HINDUSTAN PETROLEUM CORPORATION LIMITED**  
**VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE**

**थर्ममीटर का कैलिब्रेशन सर्टिफिकेट/ CERTIFICATE FOR THERMOMETER CALIBRATION**

वर्दि सुधारक  $+/- 1^{\circ}\text{C}$  से अधिक हो तो सेवा से निष्कासित करें

If correction is  $> +/- 1^{\circ}\text{C}$ , same to be discarded.

1. सर्टिफिकेट संख्या/CERTIFICATE NO. :
  2. थर्ममीटर की पहचान संख्या/THERMOMETER IDENTIFICATION NO. :
  3. थर्ममीटर की बनावट/THERMOMETER MAKE :
  4. परिसीमा/RANGE :
  5. सुधारक/.CORRECTION TO BE APPLIED :

**नोट:** उपर्युक्त धर्मामीटर को \_\_\_\_\_ के कैलिब्रेट किए हुए धर्मामीटर संख्या \_\_\_\_\_ जो \_\_\_\_\_ बनावट का है, के साथ तुलना किया गया, जिसको नेशनल स्टेंडर्ड से अनुरेखण एवम कैलिब्रेशन की वैधता दिनांक \_\_\_\_\_ से \_\_\_\_\_ तक प्राप्त है। उपर्युक्त धर्मामीटर उपयोग के लिए सही पाया गया।

**NOTE:** The above thermometer has been compared with calibrated thermometer No. \_\_\_\_\_  
of \_\_\_\_\_ make received from \_\_\_\_\_ having traceability to National Standards  
with calibration validity from \_\_\_\_\_ to \_\_\_\_\_. Above thermometer is found fit for use.

अगले कैलिब्रेशन की तिथि/Next Calibration due on

**दिनांक/Date:** पाली

अधिकारी/Shift In charge

સાયક/Shift in-charge

पाली

अधिकारी/Shift

સાયકાપ/Shift in-charge

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	Ary	BH
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



IMF/OPN/06  
ISSUE 2: REV.00

**हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड**  
**विशाख विजयवाडा सिकंदराबाद पाईपलाईन विशाखापटनम**  
**HINDUSTAN PETROLEUM CORPORATION LIMITED**

### कार्यस्थल / Location :

वदि सुधारक +/- 0.001 ग्राम/मीली. से अधिक हो तो सेवा से निष्कासित करें

If correction is  $> +/-0.001$  gm/ml, same to be discarded.

1. सर्टिफिकेट संख्या/CERTIFICATE NO. :
  2. हाईड्रोमीटर की पहचान संख्या/ HYDROMETER IDENTIFICATION NO. :
  3. हाईड्रोमीटर का बनावट /HYDROMETER MAKE :
  4. परिसीमा /RANGE :
  5. सुधारक /CORRECTION TO BE APPLIED :

**नोट:** उपर्युक्त हाईड्रोमीटर को \_\_\_\_\_ के कैलिब्रेट किए हुए हाईड्रोमीटर संख्या \_\_\_\_\_ जो \_\_\_\_\_ बनावट का है के साथ तुलना किया गया, जिसको नेशनल स्टेंडर्ड से अनुरेखण एवं कैलिब्रेशन की वैधता दिनांक \_\_\_\_\_ से \_\_\_\_\_ तक प्राप्त है। उपर्युक्त हाईड्रोमीटर उपयोग के लिए सही पाया गया।

NOTE : The above hydrometer has been compared with calibrated hydrometer No. \_\_\_\_\_  
\_\_\_\_\_ of \_\_\_\_\_ make received from \_\_\_\_\_ having traceability to  
National Standards with calibration validity from \_\_\_\_\_ to \_\_\_\_\_. Above hydrometer is found fit for  
use.

अगले कैलिब्रेशन की तिथि/ Next Calibration due on :

दिनांक/Date:

### पाली अधिकारी/Shift In-charge

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balaji	Dev	B. J.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

**हिन्दुस्तान पेट्रोलियम कापोरेशन लिमिटेड**  
विशाख विजवाडा सिंकंदरबाद पाईपलाईन विशाखापट्टनम  
**HINDUSTAN PETROLEUM CORPORATION LIMITED**  
**VISAKHA-VIJAYAWADA-SECUNDERABAD PIPELINE**  
**पीएलसी और सूरक्षा बाईपास प्रस्त्रिका / PLC & SAFETY BY-PASS REGISTER**

**कार्यस्थल/LOCATION:**



REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayana Babu	Ahu	
LOCATION INCHARGE	Maintenance INCHARGE	IMS COORDINATOR

HINDUSTAN PETROLEUM CORPORATION LIMITED  
PERMIT FOR WORKING AT HEIGHT

Sl. No. \_\_\_\_\_

LOCATION:

VALID FROM \_\_\_\_\_ TO \_\_\_\_\_

PERMISSION IS GRANTED TO : SECTION / CONTRACTOR \_\_\_\_\_ NAME \_\_\_\_\_

NATURE OF WORK \_\_\_\_\_

LOCATION OF WORK \_\_\_\_\_

IF HOT WORK IN CONFINED SPACE IS AT ELEVATION A SEPARATE HOT WORK PERMIT SHOULD BE ISSUED FOR IT ALONG WITH THIS PERMIT. THE FOLLOWING ITEMS SHALL BE CHECKED BEFORE ISSUING THIS PERMIT.

Sl. No.	Item	Done	Not Reqd.
11	Proper means of exit provided		
12	Precautionary tags / boards provided		
13	Portable electrical equipment properly earthed and provided with ELCB switches.		
14	Standby contractor personnel provided for supervision		
15	Workers are trained in use of safety belts		
16	Operations in -charge kept informed		
17	Area cordoned off		
18	Precautions against public traffic taken		
19	Weather conditions are favourable for elevation work		
20	Additional safety measures double life lines safety nets roof ladder / crawlink board (in case working on fragile		

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	Duly	R.S.J.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

Sl. No.	Item	Done	Not Reqd.
1	Equipment / work area inspected / area kept clear		
2	Surrounding area checked / cleaned up		
3	Sewers, man holes, drains etc and hot surfaces nearby covered		
4	Scaffolds / Ladders checked by concern job supervisors		
5	Ensure all material carried up at elevation are fall protected		
6	ISI marked safety belts & helmets are provided for contractor workers		
7	Contractor certified that his crew is fit for working at height		
8	Instructions are given to workmen to tie the life lines of safety belt properly		
9	Proper illumination provided		
10	Adequate working platform & space is provided		

(PLEASE PUT (V) MARK IN THE APPROPRIATE BOX)

Permit issued by

Name \_\_\_\_\_

Signature of issuer \_\_\_\_\_

Telephone Extn \_\_\_\_\_

Permit concurred by

Name \_\_\_\_\_

Signature of issuer \_\_\_\_\_

Telephone Extn \_\_\_\_\_

Permit received by

Name \_\_\_\_\_

Signature of Receiver \_\_\_\_\_

Telephone Extn \_\_\_\_\_

(Note: Pink colour – First Copy – Contractor copy, Blue colour – 2 nd copy – Location copy, White Colour – 3rd Copy – Safety inspection copy)

REVIEWED BY	APPROVED BY	ISSUED BY
<i>S. Naresh Babu</i>	<i>Anu</i>	<i>Raj</i>
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

**SPECIAL INSTRUCTIONS**

1. The permit is applicable to all jobs to be carried out at elevation more than 3 meters, like painting, scrapping, cleaning instrument checks, working on scaffolds etc.
  2. Check all personal protective equipment required such as : Safety helmet/Gloves/Goggles/Proper foot wear/Boiler suit/Dust respirator/Life line/Safety belts are provided.
  3. In case of fire alarm, all work must be stopped. Running fire water must be closed. All personnel must leave work site and proceed to designated areas.
  4. In case of liquid/gas release, stop work and immediately advise concerned operation personnel.
  5. Only certified vehicles/engines and permitted type of electrical equipment and tools are allowed in operation areas.
  6. Ensure proper grounding/earthing/insulation of cables.
  7. If the job involves working on equipment, which are in service concerned person should be kept informed.
  8. Contractor must give assurance that all his worker are physically and psychologically fit for working at elevation.
  9. Work at heights should not be permitted in extreme weather conditions such as high wind, heavy rains, storms etc.
  10. This permit should be available at the work site at all times.
  11. Additional remarks, if any: \_\_\_\_\_

**PERMIT RENEWAL RECORD**

#### Condition for job completion

Time \_\_\_\_\_ a.m / p.m

Date \_\_\_\_\_

Work completed / Stopped at \_\_\_\_\_

Scaffolding pipes and other materials removed and area house keeping done \_\_\_\_\_

**Name of Issuer**

Concurred By

Name of Receiver

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	Arun	SKA
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA VIJAYAWADA SECUNDERABAD PIPELINES

LOCATION

Sl. No.

Electrical Isolation / Energisation Permit

**Section – A : Isolation Permit.**

**Request for Isolation**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Department / Section / Area issuing the permit \_\_\_\_\_

Equipment number to be isolated :\_\_\_\_\_

Name of the equipment / circuit to be isolated \_\_\_\_\_

The above-mentioned equipment / circuit shall be de-energized and isolated from all live conductors to carry out the maintenance work by \_\_\_\_\_ section / for operational requirement.

---

Issuer Name

---

Designation

---

Signature

**Certificate of Isolation:**

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Certified that Equipment / Circuit no.\_\_\_\_\_ of \_\_\_\_\_ plant has been electrically isolated by switches / isolators / links / fuses (tick as applicable) and the danger tag is put on the supply panel. Actions in respect of electrical isolation have been recorded in the electrical shift logbook.

---

Issuer Name

---

Designation

---

Signature

RECEIVER'S COPY / LOCATION COPY

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayana Balu		
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

Section – B      Energisation Permit:      Sl. No. \_\_\_\_\_

Request for energisation

Department / Section / Area issuing the permit \_\_\_\_\_

Equipment number to be energized \_\_\_\_\_

Name of the equipment / circuit to be energized \_\_\_\_\_

Work on the above mention equipment / circuit has been completed and all the applicable permits closed. This equipment / circuit may be energized.

---

Issuer Name \_\_\_\_\_      Designation \_\_\_\_\_      Signature \_\_\_\_\_

---

Certificate of Energisation:      Date: \_\_\_\_\_      Time: \_\_\_\_\_

Certified that Equipment / Circuit no. \_\_\_\_\_ of \_\_\_\_\_ plant has been electrically energized and the danger tag removed form the supply panel. This is also recorded in the electrical shift log book.

---

Name of Authorized person \_\_\_\_\_      Designation \_\_\_\_\_      Signature \_\_\_\_\_

---

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balu	Arun	
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR





**हिन्दुस्तान पेट्रोलियम कारपोरेशन लिमिटेड HINDUSTAN PETROLEUM CORPORATION LIMITED**

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REV  
NO.  
0; Issue1

**विशाख विजयवाडा सिंकंटराबाद पाईपलाइन विशाखापटनम VISAKHA VIJAYAWADA SECUNDERABAD PIPELINE**

**परिचालन लाग प्रस्तिका /OPERATIONS LOG BOOK**

**कार्यस्थल/Location: J K  
GUDEM BOOSTER  
STATION (IPS-2)**

**दिनांक/Date:  
Hrs हिनांक/Date:  
00:00 बजे से/ From  
23:00 बजे तक/To Hrs**

TI M E	LINE PRESSURE (Kg/Cm <sup>2</sup> )	PUMP PARAMETERS				VDS PUMPING DETAILS				RBS PRODUCT OUT & H/C DETAILS				IPS2 PUMPED QTY				VBS PRODUCT IN DETAILS				IPS-2 LINE SAMPLE				
		RBS OU T	IPS2 VB S IN	V D IN	PUM P M	101A/ B/C& VFD %	RP M A	V F A mp	BA TC H	OUT LET PRES SUR E	BA TC H	PRO D	CUM QTY	FL OW H	BA TC H	PRO D	CUM QTY	FLO W	BA TC H	PRO D	CUM QTY	FIE LD DEN SIT Y	DEN SIT Y	FIRE WAT ER NET WOR K PRES SUR E	PL AN T KV A	
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REVIEWED BY	APPROVED BY	ISSUED BY
S. Narush Balu		

LOCATION INCHARGE	Maintenance INCHARGE	IMS COORDINATOR
----------------------	-------------------------	-----------------

10:0	
0	0
11:0	0
12:0	0
13:0	0
14:0	0
15:0	0
16:0	0
17:0	0
18:0	0
19:0	0
20:0	0
21:0	0
22:0	0
23:0	0

## EQUIPMENT RUNNING HOURS

EQUIPMENT RUNNING HOURS												
SHIFT OFFICERS	MLP-101A			MLP-101B			MLP-101C			MLP-101D		
	SH	IF	FT	CU	M	ST	DUR	CU	M	ST	DUR	CU
ERS	ST	ST	ST	CU	M	ST	DUR	CU	M	ST	DUR	CU
	AR	AR	O	M	RUN	NIN	ATIO	M	RUN	NIN	ATIO	M
	T	T	P	G	AR	T	N	G	AR	T	N	G
				HOU	RS	RS	RS	HOU	RS	RS	HOU	RS
JP2												
SH	SHI	FT	AR	CUM	RUN	NIN	DUR	CU	M	ST	SHI	SHI
IF	FT	EN	AR	NIN	T	ATIO	ATIO	AR	AR	OP	FT	FT
FT	END	TIM	CU	G	CU	N	ATIO	CU	IN	D	END	AL
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	RUN	CU	RS	RS			RS	M	IN	RT	RUN	IN
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	SHI	ING						ING	FT	FT	FT	AL

REVIEWED BY	APPROVED BY	ISSUED BY
S. Narayana Reddy	T. R.	R. S. B.
LOCATION INCHARGE	Maintenance INCHARGE	IMS COORDINATOR

07:			
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22:			
00-			
07:			
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**REMARKS:**

REVIEWED BY	APPROVED BY	ISSUED BY
<i>S. Narayanan</i>	<i>[Signature]</i>	<i>[Signature]</i>
LOCATION	Maintenance INCHARGE	IMS COORDINATOR
INCHARGE		

REVIEWED BY	APPROVED BY	ISSUED BY
		
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

IMF/OJK/02

ISSUE 1; Rev: 00

**हिन्दुस्तान पेट्रोलियम कारपोरेशन लिमिटेड/ HINDUSTAN PETROLEUM CORPORATION LIMITED  
विशाख विजयवाडा सिंकंडराबाद पाईपलाइन विशाखापट्टनम/VIJAYAWADA-SECUNDERABAD PIPELINE  
गणवता नियन्त्रण प्रस्तिका/QUALITY CONTROL REGISTER**



कार्यस्थल/Location:

REVIEWED BY	S. Narash Bala	APPROVED BY		ISSUED BY	
LOCATION INCHARGE		Maintenance Incharge		IMS COORDINATOR	

IMF/OJK/03



ISSUE 1 ;REV.00

नमुना पत्र : Sample Label

विविएसपीएल/VVSPL

**कार्यस्थल/Location:**

उत्पाद/PRODUCT \_\_\_\_\_ नमुना संख्या/SAMPLE No. \_\_\_\_\_

दिनांक/ DATE \_\_\_\_\_ समय/TIME (HRS.) \_\_\_\_\_

साईकल/बैच संख्या/: CYCLE/BATCH No. \_\_\_\_\_

श्रेत्र: Source: \_\_\_\_\_

बैच का अग्र/मध्य/अंत/ FRONT/MIDDLE-END OF BATCH/INTERFACE

टैंक संख्या/TANK No. \_\_\_\_\_

अन्य/Any other: \_\_\_\_\_

घनत्व/Density @15 Degree C= \_\_\_\_\_

पाली अधिक्षक /SHIFT IN-CHARGE \_\_\_\_\_

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Balu		
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



**हिन्दुस्तान पेट्रोलियम कार्पोरेशन लिमिटेड  
विशाख विजयवाडा सिकन्दराबाद पाईप लाईन**

**प्रतिवेदित स्थलः**  
**REPORT LOCATION:**

दिनांकः  
DATE :

समीक्षात्मक प्रतिवेदन :: CRITICAL REPORT ::

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	B.	S. J.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR



हिन्दुस्तान पेट्रोलियम कापरेशन लिमिटेड  
विशाख विजयवाडा सिकन्दराबाद पाईपलाईन  
सुरक्षा कर्मियों से प्राप्त रिपोर्ट

HINDUSTAN PETROLEUM CORPORATION LIMITED  
VISAKHA VIJAYAWADA SECUNDERABAD PIPELINE  
REPORT FROM SECURITY GUARDS

IMF/ROW/02  
ISSUE 2 ;REV : 00

दिनांक

:

DATE :

प्रतिवेदित स्थल:

REPORT LOCATION :

स्थल LOCATION	पाली SHIFTS	सुरक्षा कर्मियों के नाम NAME OF THE SECURITY GUARDS	समय (घंटों मे) TIME (Hr)		बैट री वो ल्टेज BAT T VOL T	पावर की स्थिति POWER STATUS	रिपोर्ट REPORT	हस्ताक्षर SIGNAT URE
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लाईन पर्यवेक्षकों द्वारा प्राप्त रिपोर्ट / LINE

SUPERVISORS' REPORT

क्रम संख्या Sr. No.	विस्तार SPREA D	नाम NAME	आरंभ समय START TIME	अंत समय END TIME	क्षेत्र का दौरा AREA VISITED	रिपोर्ट REPORT	हस्ताक्षर SIGNAT URE

समीक्षात्मक प्रतिवेदन: CRITICAL REPORT

REVIEWED BY	APPROVED BY	ISSUED BY
S. Naresh Babu	N	R. S. B.
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR

REVIEWED BY	APPROVED BY	ISSUED BY
LOCATION INCHARGE	MAINTENANCE INCHARGE	IMS COORDINATOR