Shift Handover Report

Refinery: Sandy Point Refinery (150,000 bpd capacity)

Date: Sept 18, 2024

From: Steve Perry (Night Shift Operator)

To: Maxine Hebert (Day Shift Operator)

1. General Operations Status:

- All units operating at normal capacity except Distillation Unit (see Critical Event below)

- No safety incidents reported

- Environmental compliance maintained

2. Production Overview:

- Crude throughput: 145,000 bpd

- Gasoline production: 70,000 bpd

- Diesel production: 50,000 bpd

- Jet fuel production: 15,000 bpd

- Other products: Within normal ranges

3. Critical Equipment Event - Distillation Unit:

At approximately 0300 hours, a significant pressure drop was observed in the main atmospheric distillation column (ADU-101). Initial investigation revealed the following:

- Pressure at the top of the column dropped from 1.2 bar to 0.8 bar

- Temperature profile in the column became erratic, with the top stage temperature increasing by 15°C

- Reflux flow rate decreased by 30%

- Product draw-off rates became unstable

Immediate actions taken:

- Reduced crude charge to the furnace by 20%

- Increased reflux pump speed to maximum capacity

- Adjusted steam input to the column

- Monitored all associated parameters closely

Suspected cause: Partial fouling or damage to one or more trays in the upper section of the column, potentially due to corrosion or mechanical failure.

4. Required Follow-up Actions:

- Conduct a detailed inspection of the column internals during the day shift

- Prepare for potential shutdown and maintenance if the issue persists

- Review recent operational data and maintenance records for any indicators of developing problems

- Consult with process engineers to develop a mitigation plan

5. Other Noteworthy Items:

- Sulfur Recovery Unit (SRU) catalyst bed temperature slightly higher than normal; monitor closely

- FCC regenerator differential pressure increasing gradually; may need to consider catalyst addition in coming days

- Tank 15 (gasoline blending component) level low; schedule transfer from Tank 22

6. Ongoing Maintenance:

- Cooling tower CT-03 fan motor replacement scheduled for 1000 hours

- Routine maintenance on Pump P-201 completed during night shift

7. Laboratory Results:

- All product quality parameters within specification

- Crude assay for incoming shipment (arriving tomorrow) received; sulfur content higher than usual

8. Safety Reminders:

- Scaffold erection ongoing near Reformer Unit; ensure proper PPE and clearance

- H2S monitor near SRU due for calibration today

9. Shift KPIs:

- Energy consumption: 2% above target

- Flaring: Within permitted limits

- Product giveaway: 0.5% (within acceptable range)

Please acknowledge receipt of this handover and contact me if any clarification is needed.

Signed: Steve Perry (Night Shift Operator)

Time: 0700 hours