Unpacking Lines

Overview of Unpacking Lines

- **Three product lines for unpacking**
  - **F-24 (~162K Gallons – initial unpacking volumes)**
  - **JP-5 (~215K Gallons – initial unpacking volumes)**
  - **F-76 (~72K Gallons – UGPH and LYT volumes)**

- **Three phases per product line/type**
  - **Phase I: Pre-Operation**
  - **Phase II: Gravity Drain Down**
  - **Phase III: Low Point Drain Transfer**

- **All Phase II Gravity Drain Down Fuel Movements will be conducted first**
  - **Day 1: F-24**
  - **Day 2: JP-5**

F-24 Unpacking Lines
Concept of Operation (Date: TBD)

Operations Summary

- **Phase I: Pre-Operation**
- **Phase II: Gravity Drain Down (Total ~144K Gallons)**
- **Phase III: Low Point Drain Transfer (~18K Gallons)**

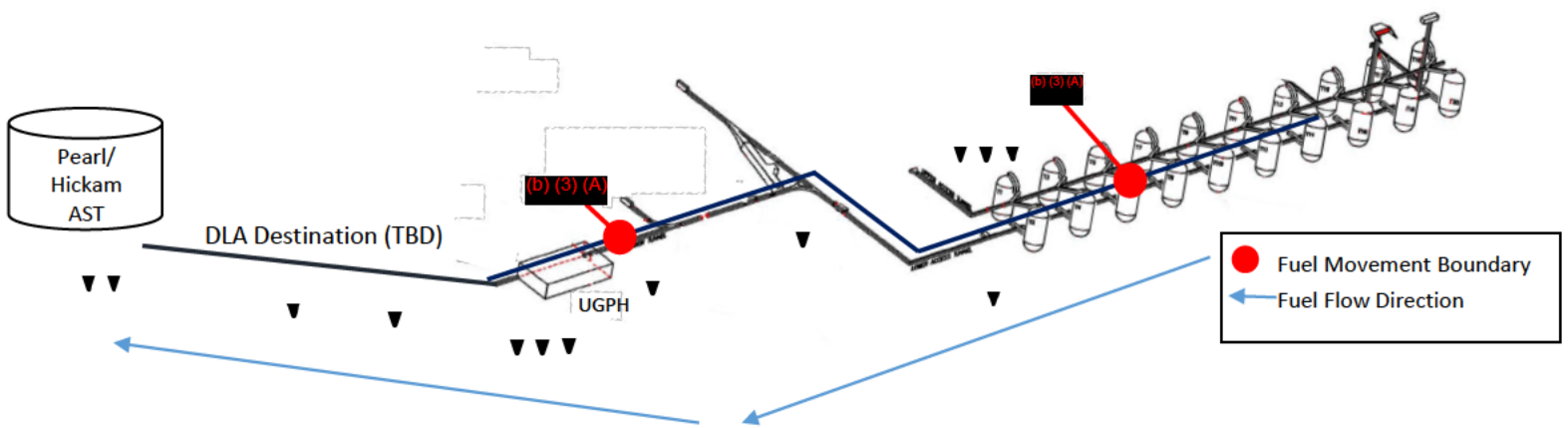
- **Phase I: Pre-Operation**
  - **Planning:** Data Gathering, Op Order
  - **Configuring:** Align valves per Baseline
  - **Training:** To Op Order and Emergency Response
  - **Evolution Walkthrough:** All Scheduled Watch-Standers

- **Phase II: Gravity Drain Down (~144K Gallons)**
  - **Evolution:** Drain F-24 line empty from Tank [redacted] Skillet to (b) (3) (A)
  - **Transferring Location:** TBD
  - **Ullage:** TBD Gallons
  - **Line Pressure Verification:** Pressure Equalization during Phase II
    - Pressure confirmed day of via Op Order
    - Pressure Equalization via empty tanks
  - **Return Valves to Baseline:** In sequence from Hickam to (b) (3) (A)
  - **Return HPV Valves to Baseline**

Phase II Operational Staffing

- Supervisor of the Watch
- Control Room Operator
- Asst. Control Room Operator
- Work Supervisor
- Work Lead
- Independent Validators
- Rovers

Phase II: Gravity Drain Down



Enclosure (4)

F-24 Unpacking Lines
Concept of Operation (Date: TBD)

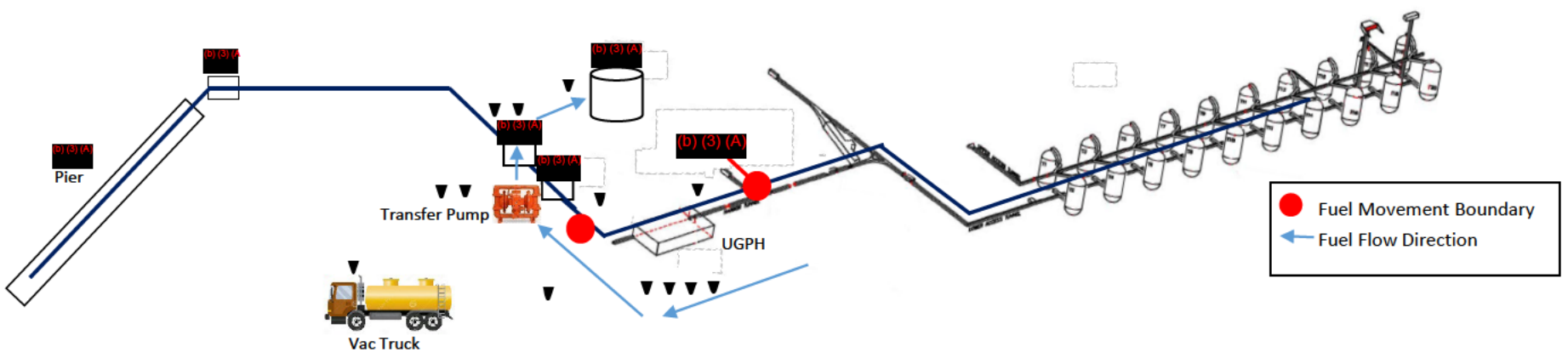
Operations Summary

- **Phase III: Low Point Drain Transfer (~18K Gallons)**
  - **Evolution:** Pump F-24 line empty from (b) (3) (A)
  - **Transferring Location:**
    - **1) From LPD at** (b) (3) (A) **Pump**
    - **2) From** (b) (3) (A)
    - **3) From**
  - **Tank** [redacted] **Capacity:** [redacted] Gallons
  - **Line Pressure Verification:** Pressure Equalization during Phase II and III
    - Pressure confirmed day of via Op Order
    - Pressure Equalization via empty tanks
  - **Transfer Pump:** Maximum (b) (3) (A) /hr flow rate
  - **Transfer Time:** [redacted] day
  - **Return Valves to Baseline:** In sequence from Tank [redacted] to Valve [redacted]
  - **Return HPVs Valves to Baseline**

Phase III Operational Staffing

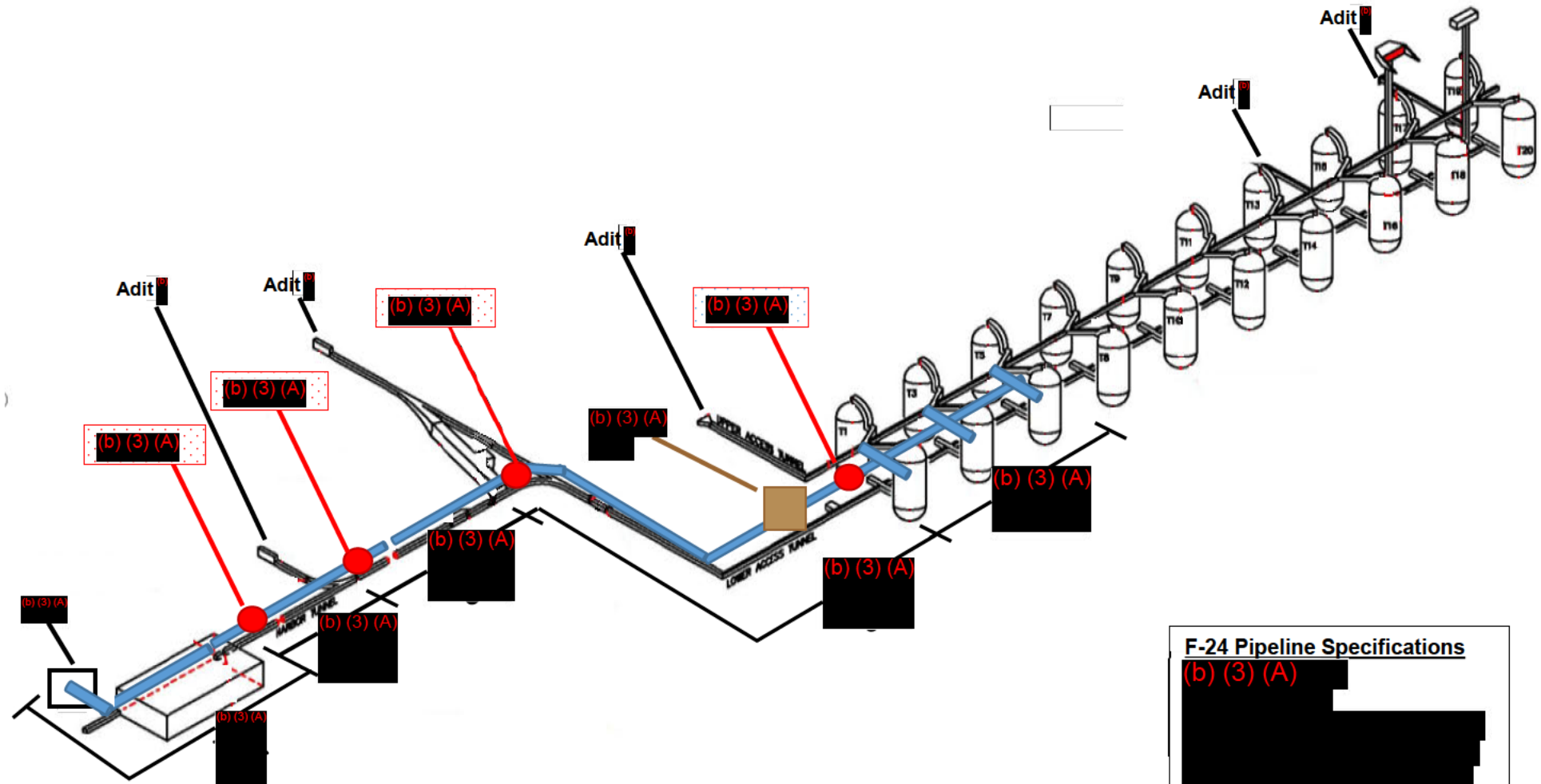
- Supervisor of the Watch
- Control Room Operator
- Asst. Control Room Operator
- Work Supervisor
- Work Leader
- Pump Operator
- Asst. Pump Operator
- Independent Validators
- Rovers
- Vacuum Truck Operator

Phase III: Low Point Drain Transfer



Enclosure (4)

F-24 Pipeline and Sectional Valve Volumes and Locations



F-24 Pipeline Specifications

(b) (3) (A)

Total Volume: 162,069 Gal.

Enclosure (4)

JP-5 Unpacking Lines
Concept of Operation (Date: TBD)

Operations Summary

- **Phase I: Pre-Operation**
- **Phase II: Drain Down (~194K Gallons)**
- **Phase III: Low Point Drain Transfer (~21K Gallons)**

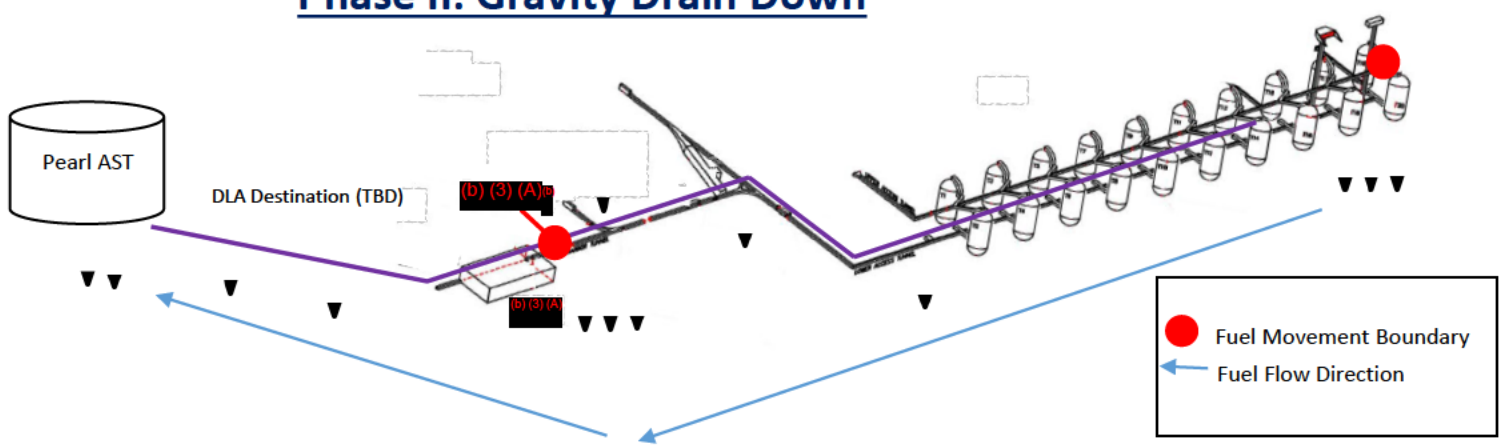
- **Phase I: Pre-Operation**
  - **Planning:** Data Gathering, OPORD
  - **Configuring:** Align valves per Baseline
  - **Training:** To OPORD and Emergency Response
  - **Evolution Walkthrough:** All Scheduled Watch-Standers

- **Phase II: Drain Down (194K Gallons)**
  - **Evolution:** Drain JP-5 line empty from end of line at Tank (b) (3) (A) (b) (3) (A)
  - **Transferring Location:** TBD
  - **Ullage:** TBD Gallons
  - **Line Pressure Verification:** Pressure Equalization during Phase II
    - Pressure confirmed day of via OPORD
    - Pressure Equalization via empty tanks
  - **Return Valves to Baseline:** In sequence from destination to (b) (3) (A)
  - **Return HPV Valves to Baseline**

Phase II Operational Staffing

- Supervisor of the Watch
- Control Room Operator
- Asst. Control Room Operator
- Work Supervisor
- Work Lead
- Independent Validators
- Rovers

Phase II: Gravity Drain Down



Enclosure (4)

JP-5 Unpacking Lines
Concept of Operation (Date: TBD)

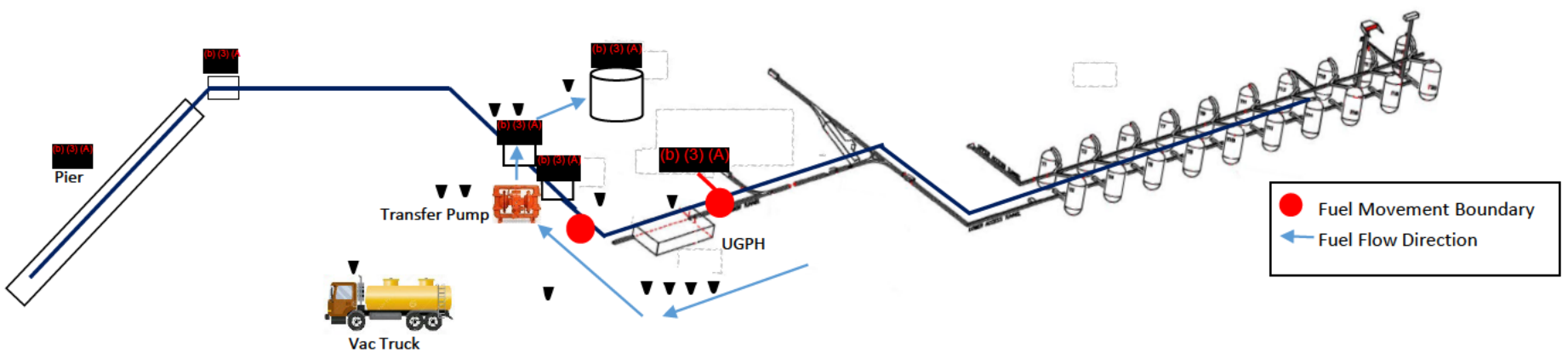
Operations Summary

- **Phase III: Low Point Drain Transfer (~21K Gallons)**
  - **Evolution:** Pump JP-5 line empty from (b) (3) (A)
  - **Transferring Location:**
    - **1) From** (b) (3) (A) **Pump**
    - **2) From** (b) (3) (A)
    - **3) From** (b) (3) (A)
  - **Tank 301 Capacity:** (b) (3) (A)
  - **Line Pressure Verification:** Pressure Equalization during Phase II and III
    - Pressure confirmed day of via Op Order
    - Pressure Equalization via empty tanks
  - **Transfer Pump:** Maximum (b) (3) (A) /hr flow rate
  - **Transfer Time:** (b) (3) (A)
  - **Return Valves to Baseline:** In sequence from Tank (b) (3) (A) to Valve (b) (3) (A)
  - **Return HPVs Valves to Baseline**

Phase III Operational Staffing

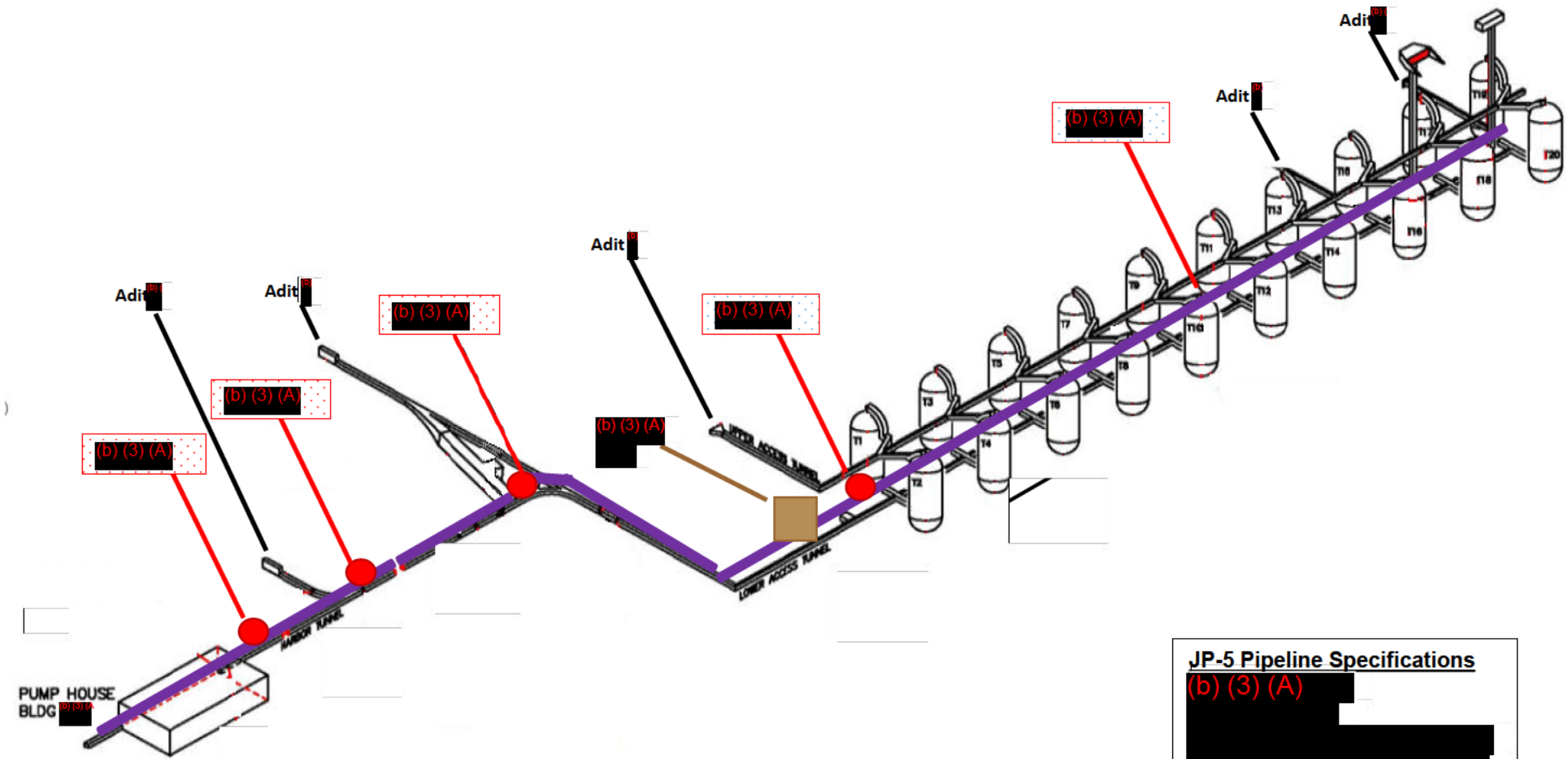
- Supervisor of the Watch
- Control Room Operator
- Asst. Control Room Operator
- Work Supervisor
- Work Leader
- Pump Operator
- Asst. Pump Operator
- Independent Validators
- Rovers
- Vacuum Truck Operator

Phase III: Low Point Drain Transfer



Enclosure (4)

JP-5 Unpacking Lines
Sectional Valve Locations



JP-5 Pipeline Specifications

(b) (3) (A)

Total Volume: 215,242 Gal.

Enclosure (4)

F-76 Unpacking Lines
Concept of Operation (Date: TBD)

Operations Summary

- **Phase I: Pre-Operation**
- **Phase II: Does Not Apply to F-76**
- **Phase III: Low Point Drain Transfer (~72K Gallons)**

- **Phase I: Pre-Operation**
  - **Planning:** Data Gathering, OPORD
  - **Configuring:** Align valves per Baseline
  - **Training:** To OPORD and Emergency Response
  - **Evolution Walkthrough:** All Scheduled Watch-Standers

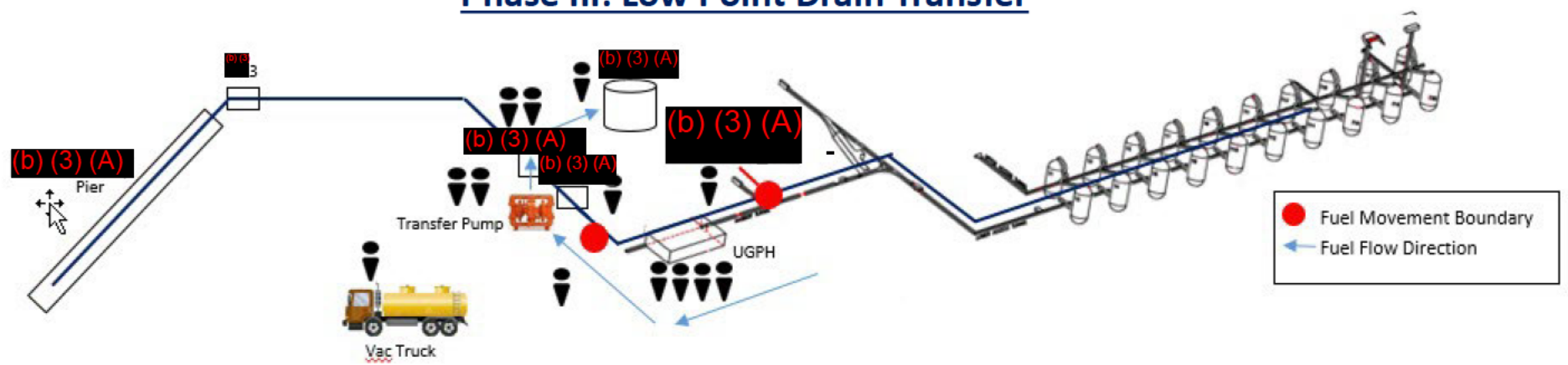
- **Phase II: Does Not Apply to F-76**

- **Phase III: Low Point Drain Transfer (~72K Gallons)**
  - **Evolution:** Pump F-76 line empty from (b) (3) (A)
  - **Transferring Location:**
    - **1) From** (b) (3) (A) **Pump**
    - **2) From** (b) (3) (A)
    - **3) From** (b) (3) (A)
  - **Tank** (b)(3)(A) **Capacity:** (b) (3) (A) Gallons
  - **Line Pressure Verification:** Pressure Equalization during Phase II and III
    - Pressure confirmed day of via Op Order
    - Pressure Equalization via empty tanks
  - **Transfer Pump:** Maximum (b) (3) (A) /hr flow rate
  - **Transfer Time** (b)(3)(A)
  - **Return Valves to Baseline:** In sequence from Tank (b)(3)(A) to Valve (b)(3)(A)
  - **Return HPVs Valves to Baseline**

Phase III Operational Staffing

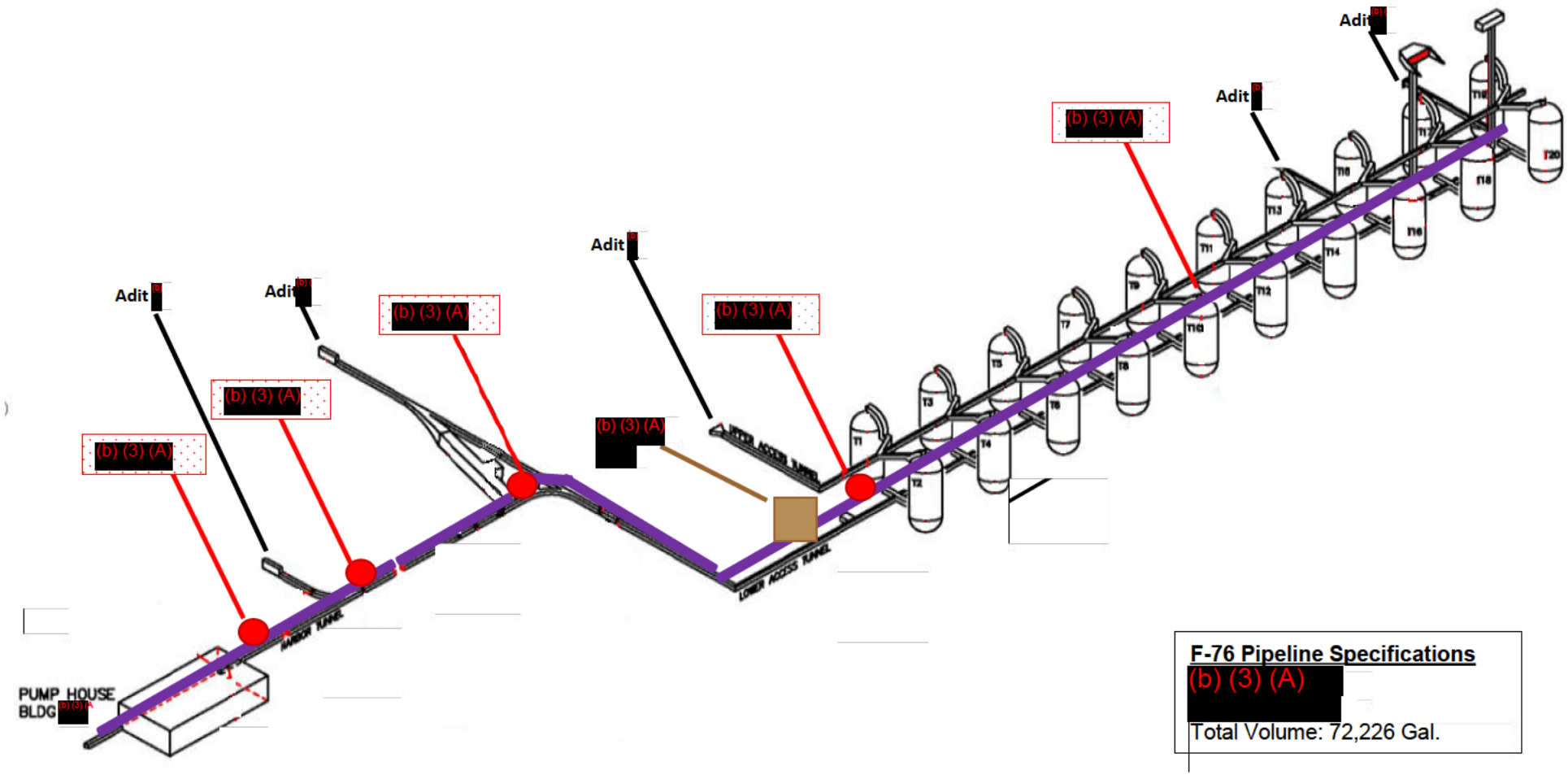
- Supervisor of the Watch
- Control Room Operator
- Asst. Control Room Operator
- Work Supervisor
- Work Leader
- Pump Operator
- Asst. Pump Operator
- Independent Validators
- Rovers
- Vacuum Truck Operator

Phase III: Low Point Drain Transfer



Enclosure (4)

F-76 Unpacking Lines
Sectional Valve Locations



Enclosure (4)