Legend
- Monitoring Well
- Observation Well
- Recovery Well
- New Recovery Wells
- Installed Product Recovery System
- Manual Product Recovery
- Remediation System Piping
- FHRA Property Boundary

Notes:
*Product recovery systems installed in wells R-32 and R-33 are under evaluation.
Manual product recovery is completed with a vacuum truck or portable product pump.
Image provided courtesy of Pictometry International 2012.
Manual product recovery. An installed product recovery system was previously used.
CURRENT PROCESS FLOW DIAGRAM - GROUNDWATER CAPTURE AND TREATMENT SYSTEM

Recovery Wells

North Gravel Pit

South Gravel Pit

Pre-Filter

Coalescer

Airstrippers (4)

Gallery Pond

Granular Activated Carbon Filters (4)

Sand Filters (4)
Groundwater Extraction and LNAPL Dual-Phase Recovery

Proposed Expanded Groundwater Recovery and Treatment System

Legend:
- Monitoring Well
- Observation Well
- Recovery Well
- New Recovery Wells
- Proposed Recovery Wells
- Manual Product Recovery
- Installed Product Recovery System
- FHRA Property Boundary

Notes:
- *Product recovery systems installed in wells R-32 and R-33 are under evaluation.
- Manual product recovery is completed with a vacuum truck or portable product pump.
- *Manual product recovery. An installed product recovery system was previously used.

Image provided courtesy of Pictometry International 2012
Manual Product Recovery is completed with a vacuum truck or portable product pump.
Sulfolane will be monitored quarterly; BTEX will be monitored semi-annually.
EGWRT = Expanded Groundwater Recovery and Treatment
Image provided courtesy of Pictometry International 2012.
Legend
- Proposed Recovery Wells
- Proposed Performance Monitoring Well Nests
- Proposed Isolation Valves
- Remediation System Piping
- Proposed Remediation System Piping

Notes:
EGWRT = Expanded Groundwater Recovery and Treatment
Image provided courtesy of Pictometry International 2012

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NORTH POLE REFINERY, NORTH POLE, ALASKA

REVISED IRAP ADDENDUM
PROPOSED EXPANDED GROUNDWATER RECOVERY AND TREATMENT SYSTEM AND PERFORMANCE MONITORING LOCATIONS

FIGURE 4-4