11. TERMINATION AND RESTORATION

The ASAP project is designed to provide a stable source of in-state natural gas energy supply for the productive life of the natural gas field(s) that supply it. The estimated useful life of the pipeline is the economic life (which is the controlling factor) and is estimated to extend past the maximum duration of the lease, which is 30 years. With appropriate maintenance, repair, and refurbishment, the physical life of the ASAP is indefinite. Upon completion of operations, the ASAP system will require restoration to the satisfaction of landowners and resource agencies. The State of Alaska ROW Lease ADL 418997 includes a Completion of Use Stipulation (1.11) that addresses Dismantle, Remove, and Restore (DR&R) requirements for the ASAP project on state lands. The federal grant of ROW will also likely contain an aligned stipulation for completion of use on federal lands. Completion of Use stipulations generally rely on the operative term "satisfaction of the State Pipeline Coordinator (SPC) or Authorized Officer" (AO).

Specific requirements and standards for DR&R have not been clearly established for other pipelines in Alaska, including the TAPS; therefore, specific requirements and standards are not explicitly documented for the ASAP. However, there are informal understandings and some precedents established for TAPS that may be used to develop a reasonable estimate for this future ASAP cost upon completion of use of the GCF, the pipeline, and associated facilities.

Exactly what constitutes the "satisfaction of the SPC or AO" for both removal and restoration has not been established. However, conversations and informal understandings between the TAPS permittees, the Federal AO, and the SPC have resulted in the development of general guidelines that appear to be acceptable and applicable to ASAP facilities and the pipeline. These guidelines are further bolstered by the acceptance of the interim status of several TAPS pipeline sections and facilities that are no longer in service. These include nearly 10 miles of TAPS mainline pipe in the Dietrich River and Atigun River floodplains, facilities at several rampdown pump stations, and nearly all of the original TAPS construction camps.

11.1 GENERAL DISMANTLE, REMOVE, AND RESTORE STANDARDS

The following general approach to DR&R of the ASAP are supported by generally available information and BMPs:

- Decommissioned aboveground structures and equipment should be removed (for example, modules, structures, and fencing).
- Dismantling and removal should employ reuse and recycling options where possible.
- Aboveground structures and equipment that will continue to be used should be left in place (for example, fiber-optic lines, communication stations, and bridges).

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

- Land identified for reuse by the landowner should retain improvements desirable by the landowner (for example, selected gravel pads, airstrips, and material sites).
- Land identified for restoration should employ DR&R methods that result in the least possible impact to the environment (for example, non-disturbance of buried mainline pipe and previously restored ROW or workpad).
- Restoration should maintain natural drainage, stream flow, and fish passage.

11.2 SPECIFIC FACILITY PROCEDURES

This section describes the initial planned DR&R requirements for the GCF, the pipeline, and associated facilities based on the general assumptions for TAPS.

Gas Conditioning Facility

DR&R requirements include:

- Purge and remove hazardous substances, and clean process vessels and lines.
- Remove facility modules and ancillary structures.
- Cut off VSMs 1 foot below grade, and cap.
- Remove aboveground pipe, and cut off and cap 1 foot below grade.
- Remove other remaining structures on State ROW lease land.
- Remove gravel pad and access road culverts, and convert to low water crossings.
- Contour gravel pads and access roads, and hydroseed/fertilize to prevent erosion.

Pipeline

DR&R requirements include:

- Purge and remove hazardous substances, and clean process vessels and lines.
- Remove aboveground pipe.
- Excavate and remove mainline block valves, aboveground power and control modules, and fencing.
- Remove aboveground cathodic protection equipment, structures, and devices.
- Cut off VSM 1 foot below grade, and cap.
- For transition sections, remove aboveground pipe to 1 foot below grade, and cap.
- Fill belowground mainline under river crossings with inert slurry, and cap.
- Remove other remaining structures on federal grant of ROW or State ROW lease land.
- Remove workpad culverts and bridges, and convert culvert locations to low water crossings.
- Remove aboveground river crossing structures.
- Contour gravel pads and access roads, and hydroseed/fertilize to prevent erosion.

Facilities on fee-simple land may remain in place and be sold if desired (possibly the Fairbanks and Wasilla bases), including the following:

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.

- Pipeline gravel workpads and access roads
- Belowground mainline piping
- Belowground mainline river crossings after being filled with inert slurry
- River training structures, except where breached to remove pipe or structures

NOTICE – THIS DOCUMENT CONTAINS CONFIDENTIAL AND PROPRIETARY INFORMATION AND SHALL NOT BE DUPLICATED, DISTRIBUTED, DISCLOSED, SHARED OR USED FOR ANY PURPOSE EXCEPT AS MAY BE AUTHORIZED BY AGDC IN WRITING.