SAUDI ARABIAN OIL COMPANY (Saudi Aramco)

GENERAL INSTRUCTION MANUAL

ISSUING ORG. Utilities Department

NON-ELECTRIC UTILITIES PROCEDURES FOR CONNECTION / DISCONNECTION

TO SAUDI ARAMCO'S WATER, WASTEWATER, CHILLED WATER, OR FUEL GAS

SUBJECT DISTRIBUTION SYSTEMS

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CONTENT

This instruction outlines the rules and regulations governing the connection or disconnection of non-electric utilities to or from Saudi ARAMCO's water, wastewater, tertiary water, chilled water, or fuel gas utility networks. This instruction is applicable to any modification or upgrade to the existing non-electric utilities connections in Saudi ARAMCO Communities for projects of any magnitude. It is not applicable for non-electric utilities at industrial locations. The text includes:

- 1. Definitions
- 2. Responsibilities
- 3. Procedural Matters
- 4. Disconnection

1.0 DEFINITIONS

- Non-Electric Utilities Connections: Any connection or planned future capacity modifications to existing or new drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas utility networks. This includes pipe networks, booster stations, transfer stations, storage tanks, wells, or service equipment that are part of the drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas systems.
- 1.2 <u>Non-Electric Utilities Disconnection</u>: Any disconnection or removal of a utility from Saudi ARAMCO's drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas utility network. This includes "mothballing" of facilities.
- 1.3 <u>Proponent</u>: This is the requesting organization that owns the project to which the non-electric utilities connections are to be made.
- 1.4 <u>Infrastructure</u>: Non-Electric Utilities assets including all drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas pipelines, booster and lift stations, water production facilities, wastewater treatment facilities, and all equipment between the proponent connection point (tap) and the production plant or final treatment facility.

2.0 RESPONSIBILITIES FOR NON-ELECTRIC UTILITIES CONNECTION

- 2.1 Any project that requires non-electric utilities connections or additional drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas requirements for new or existing facilities, the Utility Department (UD) Manager shall be informed by the project proponent, in writing, during the project's conceptual planning stage.
- 2.2 UD Manager review and approval is required on the Design Basis Scoping Paper (DBSP) for any project that requires connection to the non-electric utilities infrastructure. All scope elements associated with the modification of the existing non-electric utilities infrastructure as a result of the proposed project will be clearly defined and included in the DBSP. The costs associated with these modifications shall be included in the proposed project.

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SAUDI ARABIAN OIL COMPANY (Saudi Aramco) G. I. Number Approved 1400.001 **GENERAL INSTRUCTION MANUAL** ISSUE DATE REPLACES ISSUING ORG. **Utilities Department** 07/27/2010 NEW NON-ELECTRIC UTILITIES PROCEDURES FOR CONNECTION / DISCONNECTION **APPROVAL** PAGE NO. TO SAUDI ARAMCO'S WATER, WASTEWATER, CHILLED WATER, OR FUEL GAS NAJ 2 OF 3 **SUBJECT** DISTRIBUTION SYSTEMS

- 2.3 The proponent shall provide UD with the drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas requirements for their new or existing facility by completing SA Form 9678.
- 2.4 If further coordination is required between several Departments, UD / Water & Sanitary Operations Division will be responsible for making further distribution of the non-electric utilities connection request (SA Form 9678) and coordinating with other responsible Saudi ARAMCO organizations.
- 2.5 UD shall be the responsible agency for determining the most viable sources of drinking water, raw water, wastewater, tertiary water, chilled water, or fuel gas connections for all new projects or expansion of existing facilities planned under corporate major capital outlay.
- 2.6 UD shall ensure that existing and proposed pipe networks, booster stations, transfer stations, storage tanks, wells, and service equipment are adequate to meet the demand. UD will insure that the current infrastructure is adequate to provide services including wastewater treatment and drinking water production. UD will approve the proposed method of connection or disconnection for the non-electric utilities connections before the final non-electric utilities connections are made and the facility is incorporated into the utilities networks. Prior to commissioning the non-electric utilities connections must be inspected and approved by representatives of the Proponent Organization, Projects Inspection Division and the respective UD Operating Divisions.
- 2.7 The UD Manager or his designee shall be responsible for ensuring that adequate capacity and suitable quality are available before authorizing any connection, including temporary connections to the utilities networks.
- 2.8 In addition to meeting the requirements of the Saudi ARAMCO Drafting Manual, the requester of the network connection shall have the responsibility to assure that "As Built" drawings are furnished to UD together with completed and updated drawings of new installations.
- 2.9 Upon request from Facilities Planning Department (FPD), the responsible division in Community Services shall provide within ten working days all available drawings showing the non-electric networks and facilities in the vicinity of the proposed project in order to determine the most cost effective connections for the project.
- 2.10 Upon request from FPD, the responsible division in Community Services shall provide within ten working days the available capacities of all non-electric facilities in the vicinity of the proposed project in order to determine if excess capacity is available for use with the new project.

3.0 PROCEDURAL MATTERS

- 3.1 During the conceptual planning stage of the project, SA Form 9678 shall be completed by the project's proponent (See Attachment). All supporting documents shall be attached in triplicate to this form and the entire package shall be submitted to UD/Water & Sanitary Operations Division for review, comment and distribution.
 - 3.1.1 SA Form 9678 can be obtained from the office of the Superintendent, Water and Sanitary Operations Division or by completing the on-line e-form.
- 3.2 Prior to making any non-electric utilities connections, the proponent shall comply with the following:

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**ATTACHMENT - I REFER TO SAUDI ARAMCO FORM SA-9678

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