

Job Description for: Engineer IV

Jobcode Selection Dt Review Date Job Suffix O/T Class Job Grade

20003887 06/02/2007 03/14/2004 G 2 011

9000 Basic Function

GIVE BRIEF SUMMARY OF THE PRIMARY PURPOSE(S) OF THE JOB.

Assist in engineering analysis, development, design and control of assigned projects within any one of the recognized engineering fields. Job requires that incumbents have training, knowledge and ability in his engineering speciality and a working knowledge of related engineering fields and of the applicable codes and standards. This job applies to any of the Company's recognized engineering pursuits such as Petroleum, Design, Process, Maintenance Engineering, etc. as approved on application.

9001 Scope

INDICATE AS APPROPRIATE SIZE, GEOGRAPHIC AREA, PLANT EQUIPMENT THROUGHPUT, ORGANIZATIONS SERVED, FINANCIAL RESPONSIBILITY, AUTHORITY, AND SUPERVISION RECEIVED, WHICH RELATE TO THE JOB.

This position differs from the Engineer III in that the incumbent is required to have the minimum experience and education to qualify for professional level employment performing supervised work on less complex projects independently or as an assistant to and co-worker with higher classified engineers. Incumbents may be rotated between various engineering activities of an application.

The desired experience includes some familiarity with plant operation in his related engineering fields. Incumbents may be rotated between various operation, maintenance, and engineering supporting staff in the plants.

9002 Principal Contacts

INCLUDE PURPOSE, FREQUENCY AND SIGNIFICANCE TO SAUDI ARAMCO.

Frequent contacts with operating Division and Unit Heads to ascertain problems, define scope of projects, and develop solutions. Occasional contacts with Managers and infrequent contact with Executive Management in responding to inquiries or presenting conclusions of studies. Frequent working contacts with suppliers of data and information such as estimating engineers, construction engineers, accountants, programmers, etc.

9003 Principal Duties

DESCRIBE CONCISELY EACH PRINCIPAL WORK ACTIVITY LISTED IN A LOGICAL ORDER; NORMALLY, THE ORDER WILL BE TO LIST THE MOST IMPORTANT DUTY FIRST. INCLUDE IMPORTANT DECISIONS AND RECOMMENDATIONS MADE, IF APPLICABLE. FOR SINGLE APPLICATION JOBS INDICATE APPROXIMATE PERCENT OF TIME SPENT ACCOUNTING FOR

AT LEAST 75% OF TOTAL TIME. START SENTENCES WITH ACTION VERBS. PLEASE INDICATE THE PERCENTAGE OF TIME AGAINST EACH PRINCIPAL DUTY.

A. Develops, in consultation with the proponent and/or with his supervision, a definition of the assigned problem, alternatives for solving it, and comparative cost analyses.

B. Prepares designs, processes, studies, reports, correspondence and related data.

C. Participates in engineering studies in any of several basic or special engineering fields by analyzing and evaluating all data pertinent to problems. Evaluates data as to scope, effect on existing installations or systems, economic value, long-range planning and budgetary considerations.

D. Develop alternatives for solving problems with comparative cost analysis and estimates costs, prepares justifications and expenditure requests as required.

E. Assists in designing new installations or modifications to existing facilities to improve quality, or throughput, work flow, or prevent losses. Participate in the review of, studies, reports, correspondence and related data.

F. Maintains up-to-date progress status of work assigned to assure that work does not digress from approved scope.

G. Participate in value engineering tasks and prepares initial revision of engineering design specification.

H. Assists in designing new installations or modifications to existing facilities to improve quality, or throughput, work flow, or prevent losses.

Following are specific applications of this job:

Civil Engineer - Normally designs or studies structural modifications to facilities such as industrial shop buildings, warehouses, residences, marine piers, oil handling, processing, storage and pipeline facilities, facilities, sewer systems, roads and streets. Occasionally called upon to design new facilities of the types mentioned.

Chemical Engineer - Normally handles process studies or design modifications in utilities, oil manufacturing or oil handling facilities , Occasionally called upon to design or evaluate new process installations.

Electrical Engineer - Formally designs or studies electrical modifications to oil processing and oil handling facilities, residences and utilities. Occasionally called upon to design electrical aspects of new facilities of the type mentioned.

Mechanical Engineer - Normally designs or studies mechanical modifications to oil processing, oil handling and utilities facilities. Occasionally called upon to design mechanical aspects of new facilities of the type mentioned.

Survey Engineering - Includes engineering analysis and the development of recommendations and alternatives in the solution of complex problems related to the surveys of company and government properties and facilities. This includes the recognition of problems, through analysis of present situation and objectives, development of comprehensive program and implementation to produce the desired end product. Typical projects would involve the establishment of high precision horizontal control in remote desert regions for future oil and gas development, evaluation and recommendation of state of the art photogrammetric equipment for digital mapping systems.

APPLICATION OF ENGINEER WHEN ASSIGNED AS ENGINEERING WRITER:

Writes and edits technical and administrative manuals, reports and procedures concerning the Engineering Services Organization's function

in the Company. May assist in proposal or special assignment writing efforts, including preparation of oral and graphic material used in executive management presentation.

The writer/editor produces, by assignment, various permanent-type

documents, normally relating to the technical operation or the administrative matters of the Company. Contacts may be with the top tier of management or engineering staff, or with any individual possessing knowledge considered as appropriate for data requirements. Incumbent should be readily able to become knowledgeable of any Aramco facility, area, discipline and/or organization. Incumbent must have ability to coordinate and gather information from various sources. Work must be performed with minimum supervision and writer/editor must be able to make decisions regarding valid inputs, layout and printing/distribution matters.

- a. Researches and compiles technical data utilizing blueprints, logic diagrams, schematics, records, specifications, contracts, work orders, maintenance and/or design data, notes and interviews with groups/individuals versed in subject discipline(s).
- b. Researches and compiles administrative data utilizing procedures, instructions, records and by personal interview with cognizant groups/individuals.
- c. Writes instruction, operating, maintenance and/or procedural manuals (or other documents) describing technical or administrative subjects, as assigned and researched.
- d. Organizes manual (or other document) into Logical material grouping and subject sequence. Provides adequate referencing and cross-referencing, abstracts or notes material from other sources, and accomplishes all details required to point of #Lock-up sheet# for printer.
- e. Provides for pre-printing review and content approval. Coordinates such review efforts to conclusion by approval acquisition, or by re-write directions.
- f. Edits all manuscript material prior to typing or reproduction.
- g. Proofreads all manuscript material subsequent collation subsequent to printing.
- h. Keeps material on-hand relevant to subsequent manual (or document).
- i. Revises manuals (or documents) as required or scheduled.
- j. Helps prepare periodic presentations for vice-president to be delivered to Board of Directors.

9004 Minimum Requirements

A- EDUCATION - DEGREES AND/OR LICENSES REQUIRED; B- PREREQUISTE WORK EXPERIENCE IN ADDITION TO EDUCATION; C- OTHER.

FOR SAUDIS ONLY:

A) B.S. in Applied Engineering or Engineering Technology (above junior college level).

B) Minimum of four years experience.

FOR ALL EMPLOYEES:

A) B.S. degree in any Engineering discipline (fully accredited).

B) Minimum two years experience.

C) Must have ability to communicate fluently in English both in writing and orally.