

POSITION DESCRIPTION

Internship Petroleum Engineer Office of Field Operations, Alaska Region Bureau of Safety and Environmental Enforcement

INTRODUCTION

This position is part of a Doctoral Degree Program under the authority of a Cooperative Agreement of a university or college. This position is considered part of a work study program for the incumbent while they are completing their degree requirements.

The primary purpose of this position is to perform engineering analysis of routine documents required for facilities and operations of the Outer Continental Shelf (OCS).

MAJOR DUTIES AND RESPONSIBILITIES

1. ENGINEERING ANALYSIS

As a trainee, the incumbent performs duties which are designed to provide orientation in the application of academic theories and basic principles to general engineering work associated with oil and gas. The incumbent's assignments are similar to non-professional employees, but are primarily for training purposes and, in some cases, to relieve higher-graded engineers of routine work. This engineering analysis includes analyzing applications for permit to modify, applications for permits to drill, end of operation reports, production safety systems, etc.

The incumbent conducts engineering analysis of production, drilling, and workover equipment and operations on the OCS and prepares engineering reports under the direction of the supervisor.

2. TRAINING

The incumbent receives classroom and on-the-job training in oil, gas, or other mineral safety and environmental requirements. The incumbent also attends selected training seminars, meetings, or other organizational activities. The purpose of the training is to provide experience in the practical application of basic petroleum engineering principles, techniques, and concepts.

III. FACTORS

Factor 1. Knowledge required by the position

The incumbent is required to possess the following knowledge:

- Professional knowledge of specialized principles and applications of engineering practices applicable to petroleum operations.
- General knowledge of the processes, systems, equipment, and methods involved in offshore oil, gas, and mineral activities, proper maintenance and use of safety/environmental equipment
- Ability to communicate effectively orally and in writing.
- Knowledge of various computer programs and database management techniques, including system control language and extracting information and data from large data files.

Factor 2. Supervisor Controls

The supervisor assigns projects with detailed instructions and provides direct, ongoing review of the work performed by the incumbent. The work is evaluated by the supervisor to assure accuracy/compliance. Immediate assistance is provided by the supervisor. Negative findings are treated as preliminary until official confirmations occurs and appropriate action is taken by the supervisor.

Factor 3. Guidelines

The guidelines include lease terms, OCS regulations, applicable state regulations, NTLs, internal policy guidance, regulations and policies of other agencies, technical material and literature, API specifications and recommended practices, manufacturers' material PINC list, and standard practices in the field. The supervisor provides directions as to which guidelines and precedents are applications are applicable. The incumbent makes recommendations as to as to whether violations exist. The supervisor is available for advice and guidance if the incumbent has difficulty applying established guidelines. The incumbent provides makes recommendations on drilling and production operations to the supervisor.

Factor 4. Complexity

The incumbent is participating in a doctoral program under the authority of a Cooperative Agreement E14AC00001 between BSEE and members of Texas A&M University Engineering Experiment Station,

University of Texas at Austin, and University of Houston (Ocean Energy Safety Institute – OESI). Working in partnership with BSEE, will provide an opportunity to work within their designated career field in the Federal government while applying this experience to degree completion requirements. In turn, the Government is obtaining valuable manpower assets that will assist in carrying out the overall mission of BSEE. Assignments include making observations of conditions and behavior that are readily apparent, compiling and documenting information to facilitate technical studies and engineering analysis. Assignments involve work in a broad range of activities and petroleum engineering actions requiring a series of related steps or processes.

Factor 5. Scope and Effect

The incumbent performs duties that involve segments of engineering analysis, environmental compliance documents and accident investigation reports. The primary focus of the work is provide exposure to the OCS activities of the BSEE, as well as contributing to the review of efficient and safe operations of complex oil and gas facilities on the OCS. The findings and reports provide information about environmental and safety conditions on offshore facilities and are used as the basis for further investigation, decisions, and actions by the supervisor.

Factor 6. Personal Contacts

Personal contacts are typically with the supervisor, but may include other engineers and inspectors.

Factor 7. Purpose of the Contacts

The purpose of the contacts is to discuss facility engineering and/or drilling issues in order to provide the supervisor on routine safety and environmental issues and questions. During inspections, the incumbent questions workers about environmental and safety conditions at the facility.

Factor 8. Physical Demands

The work is primarily sedentary.

Factor 9. Work Environment

The work is performed and conducted in an office setting. Physical location of work will require travel and perhaps duty location in the BSEE Field Operations Alaska region office located in Anchorage Alaska.