

TITLE: Tritium Plant Technical Engineer		JOB CODE: CEP-101
REPORTS TO LINE MANAGER: Tritium Plant Section Leader, Fuel Cycle Engineering Division, Central Engineering and Plant Support Department		
DIRECT EMPLOYMENT: REQUIRED		GRADE: G5
Date Written: January 2009	Date Revised:	Date Revised:

Purpose:

To support the Atmosphere Detritiation Systems' development, procurement, systems integration and interfaces with the Tokamak Complex and Hot Cell Facility systems.

Major Duties/Responsibilities:

- Supports the process and mechanical design development of the Atmosphere Detritiation Systems and their components (Process Flow Diagrams and Piping & Instrumentation Diagrams, assembly drawings, pipe isometrics from CATIA V5, descriptive technical documentation, etc.);
- Carries out simulations of the Atmosphere Detritiation System in a steady state and also in dynamic operation (employs modeling tools to simulate the response of the equipment and the whole system to changes in the system's operation parameters);
- Supports the Atmosphere Detritiation Systems' process control development and also the simulations of their operation;
- Supports the work carried out on the interfaces between the Atmosphere Detritiation Systems and the other systems in the Tokamak Complex and Hot Cell Facility such as Heating, Ventilation and Air Conditioning (HVAC), tritium processing systems, buildings, etc.;
- Provides technical support for the preparation and execution of external contracts and tasks;
- Supports the design and integration activities undertaken in collaboration with the relevant ITER Domestic Agencies;
- Prepares procedures for the Atmosphere Detritiation Systems' assembly, testing and commissioning;
- Maintains a strong commitment to the implementation and perpetuation of the ITER Safety Program, values and ethics.

Qualifications and Experience:

- **Education:**
 - Degree at least equivalent to 3-5 years of study after the High School Diploma, in Chemical, Mechanical or Nuclear Engineering, or other related discipline.
- **Technical experience:**
 - At least 10 years' experience in the development, design, manufacturing, commissioning and operation of HVAC and/or ventilation systems;
 - Knowledge of instrumentation and process controls, sequences, and interlocks;
 - General understanding of ITER and particularly the operation of the fuel cycle would be advantageous.
- **Social Skills:**
 - Ability to work effectively in a multi-cultural environment;
 - Ability to work in a team and to promote team work.
- **Language requirements:**
 - Fluent in English (written and spoken).
- **Computer and IT skills:**
 - Good knowledge of software simulation tools for HVAC, ventilation system or other chemical engineering systems;
 - Very good command of the Microsoft Office Package, CATIA and other design tools.

Direct Supervisor and Interfaces:

- Reports to the Tritium Plant Section Leader for the Fuel Cycle Engineering Division (FCD);
- Receives direction from System Engineers within the Tritium Plant Section;
- Closely collaborates with other groups within the FCD;
- Interfaces occasionally with the Domestic Agencies (DA's) having Tritium Plant procurement packages and with the Industry developing the interface components and systems.

Authority / Approval Levels:

This position has authority and approval levels generally defined by the leader of the Tritium Plant Section for his/her scope of work

Measures of Effectiveness:

- Successfully supports the ITER Tritium Plant integration activities;
- Prepares the material required for the development and design of the plant interfaces and systems in a timely manner;

- Successfully communicates with the Tritium Plant section, other groups and with the Domestic Agencies.