



2/6/2024

### **Job Description: Process Engineer**

BC Biocarbon is looking for a Process Engineer to work on all stages of plant development, from preliminary design through final commissioning and handover, and ongoing process improvement and optimization projects. The chosen applicant will design and handover plant equipment used in the manufacturing of biochar and execute process improvement projects geared at operational targets and informing future facility designs. This job is a hybrid role (involving work from home and on project sites) and requires an on-site presence throughout the project lifecycle. The site location will change as projects complete and new projects commence. This job may require up to 50% travel at times.

#### **Core Job Responsibilities:**

- Design, implement, commission, handover Biochar production facilities
- Specify and procure production equipment
- Participate in or lead (level dependent) design reviews and safety assessments
- Write and produce technical documentation: specifications, process design criteria, design basis documentation, Process Flow Diagrams, material and mass balances, Process & Instrumentation Diagrams, plant layouts, equipment datasheets, control philosophies, commissioning documentation, standard operating procedures, lock-out-tag-out documents, preventative maintenance and spare parts lists, and training procedures
- Identify environmental constraints and impact on operating permits associated with modification of process equipment, fuels, and /or raw material(s) changes
- Develop and optimize plant process and control strategies (coding)
- Ensure successful handover of process equipment from engineering to end users, including thorough operator training
- Establish, monitor, and maintain standard operation procedures
- Collaborate with R&D and operations to scale up new products and technologies from lab to production
- Improve the efficiency, consistency and productivity of manufacturing processes
- Perform process monitoring, including collecting, analyzing, and reporting on data
- Use process data to identify and quantify opportunities for waste reduction and increases in machine utilization - propose solutions, write business cases, implement and handover changes to Operations
- Provide ongoing technical support, training and trouble-shooting to Operations
- Become a technical expert in all areas pertaining to the manufacturing of biochar
- Stay up to date on industry trends, emerging technologies, and best practices in process engineering
- Perform such other duties and responsibilities as may be reasonably assigned by BC Biocarbon from time to time
- Travel to project sites, including remote sites, as needed



**Required Qualifications:**

- Bachelor's Degree Engineering from an accredited university
- EIT or Professional Engineer in good standing
- Solid understanding of thermodynamics, fluid mechanics, chemistry, physics, and mathematics

**Desired Experience, Abilities and Skills:**

- Experience with Programmable Logic Controllers (PLCs)
- Hands-on experience in commissioning, operating, and optimizing new equipment
- Experience with plant operations, maintenance and safety
- Well-developed critical thinking skills, with an ability to apply logic and challenge assumptions, draw conclusions and make appropriate recommendations
- Excellent technical communication skills (oral and written)
- Strong interpersonal skills and emotional intelligence to support working with Operations
- Strong data acquisition and analysis skills, including statistical analysis skills

**Location:**

We are currently looking for a Process Engineer to primarily support us at our Carrot River facility. As noted above, the site location will change over time as projects finish and new projects commence.

The annual base salary for this job ranges from:

\$68,500 - \$115,000

BC Biocarbon determines an individual's pay within the range based on multiple factors including education, experience, job-related skills, knowledge, and abilities. Total compensation will include stock options and health and benefit package.

To apply for this position please email a cover letter and resume to:  
[careers@bcbiocarbon.com](mailto:careers@bcbiocarbon.com)