Work Process Schedule

Environmental Science and Protection Technicians	
Job Description: Perform laboratory and field tests to monitor the environment and investigate sources of pollution, including those that affect health, under the direction of an environmental scientist, engineer, or other specialist. May collect samples of gases, soil, water, and other materials for testing.	
RAPIDS Code: 0267CB	**O*NET-SOC Code:** 19-4042.00
Estimated Program Length: 2000 hours	
Apprenticeship Type:	
☒ Competency-Based ☐ Time-Based ☐ Hybrid	

On-the-Job Learning Outline

Competency Check List	**Demonstrates Fundamentals:** Apprentice can perform the task with some coaching.	**Proficient in Task:** Apprentice performs task properly and consistently.	**Completion Date:** Date apprentice completes final demonstration of competency.
	Demonstrates Fundamentals	**Proficient in Task**	**Completion Date/Initials**
Collect samples of gases, soils, water, industrial wastewater, or asbestos products to conduct tests on pollutant levels or identify sources of pollution.			
Record test data and prepare summaries or charts that interpret test results.			
Prepare samples for testing and analysis. Discuss test results and analyses with team members.			
Weigh, analyze, or measure collected sample particles, such as lead, coal dust, or rock, to determine concentration of pollutants.			

Calibrate microscopes or test instruments.			
Maintain files, such as hazardous waste databases, chemical usage data, personnel exposure information, or diagrams showing equipment locations.			
Support set up of equipment or stations to monitor and collect pollutants from sites, such as smokestacks, manufacturing plants, or mechanical equipment.			
Monitor emission control devices to ensure they are operating properly and comply with state and federal regulations.			
Learn about amounts and kinds of chemicals to use in destroying harmful organisms or removing impurities from purification systems.			
Project Management Software —Microsoft Teams: Utilize Microsoft Teams and Outlook to schedule and attend meetings, collaborate with team members, manage project tasks, and track progress.			
Spreadsheet software — Microsoft Excel: Use Microsoft Excel to analyze data, create spreadsheets, and perform calculations.			
Utilize Geographic Information Systems (GIS) to communicate and share data.			
Utilize graphics, photo imaging, or mapping software to communicate and share information.			
Utilize public and private databases and artificial intelligence to gather information related to pollution and conservation.			
Analyzing Data or Information — Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.			
Organizing, Planning, and Prioritizing Work — Developing specific goals and plans to prioritize, organize, and accomplish your work.			

Making Decisions and Solving Problems — Analyzing information and evaluating results to choose the best solution and solve problems.			
Communicating with Supervisors, Peers, or Subordinates — Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.			
Establishing and Maintaining Interpersonal Relationships — Developing constructive and cooperative working relationships with others.			
Communicating with People Outside the Organization — Communicating with people outside the organization, representing the organization to customers, the public, government, or other external sources.			

Related Core Subjects

Provider	
Name: Open Source Ag	
Address: 2620 Gray Hawk Way, San Miguel, CA 93451	
Email: kelly@opensource.ag	**Phone Number:** (559) 670-0352
Suggested Related Instruction Hours: 150	

Course Title	Contact Hours
Environmental Science and Protection Technicians Skills	60
Microsoft Office Suite	15
Technology	15
Communication	20
Analysis	20
Operations	20
TOTAL	**150**

See class information attached