

Historic DACUM Chart for Irrigation Technologist

COMPETENCY PROFILE OF IRRIGATION TECHNOLOGIST

Duties: A. BASIC ADMINISTRATION & SUPERVISORY

Tasks:

A1. Follow safety practices	A2. Comply with all government regulations	A3. Process company paperwork	A4. Report to supervisor	A5. Operate within budget guidelines	A6. Maintain appropriate inventory
--------------------------------	---	----------------------------------	-----------------------------	---	---------------------------------------

Duties: B. CUSTOMER RELATIONS

Tasks:

B1. Listen and interpret customer needs	B2. Sell to customer's "best interest"	B3. Communicate options to customer	B4. Maintain current knowledge of products and practices	B5. Identify prospective customers	B6. Utilize internal resources (including coworker knowledge)
B7. Perform necessary communications with suppliers	B8. Close sale	B9. Train customer in system operations	B10. Maintain ongoing customer contact		

Duties: C. DESIGN SYSTEM

Tasks:

C1. Determine cropping sequence	C2. Assess topography (weather & water source)	C3. Assess soil	C4. Determine system type	C5. Analyze and research alternatives (cost & availability)	C6. Develop plot plan
C7. Develop sprinkler head layout	C8. Determine system pressure requirements	C9. Determine hydraulic parameter	C10. Determine pump and station type and size	C11. Size pipe and components	

Duties: D. INSTALL SYSTEM

Tasks:

D1. Inspect site	D2. Mark field location of all system components	D3. Determine necessary tools and equipment for installation	D4. Deliver products	D5. Install underground piping, valves and wire	D6. Build pump stations, if required
D7. Assemble or install above ground irrigation components	D8. Install electrical components	D9. Flush and adjust system			

Duties: E. OPERATE SYSTEM

Tasks:

E1. Review system design	E2. Control system operation	E3. Adhere to correct operating procedure	E4. Follow irrigation schedule	E5. Adjust equipment	E6. Monitor crop and soil for irrigation schedule
E7. Adjust irrigation schedule as needed	E8. Apply chemical/fertilizer products	E9. Monitor system operation	E10. Maintain operation record		

Duties: F. MAINTAIN & REPAIR SYSTEM

Tasks:

F1. Perform preventative maintenance	F2. Update system	F3. Winterize system	F4. Perform annual system start-up procedures	F5. Fill ruts	F6. Control Pests
F7. Respond to customer needs	F8. Troubleshoot mechanical equipment	F9. Troubleshoot electrical equipment	F10. Identify computerized equipment	F11. Dig up underground irrigation pipe & accessories for repair	F12. Repair or replace system components
F13. Locate and repair underground electrical faults	F14. Unplug nozzles, filters, and screens				