Irrigation Phase 1 Initial Training

Team Member Name: _____

CHK 2004 Irrigation Phase 1 Initial Field Training Checklists

Description

This checklist verifies that a new Irrigation Specialist can safely **and correctly perform fundamental irrigation tasks under direct supervision**. It covers controller programming and manual operation, electrical testing and wiring, valve function, general irrigation parts, sprinkler installation and adjustment, pressure testing, and pump/water meter identification.

All items are **verifiable through direct observation** in the field and/or service center. Selected items require **structured observations** and **mandatory comments** to document findings, decisions, or measurements.

Checklist items with a mandatory comment are marked with this symbol: 🛑 .

⚠️ **Real-Time Verification Required**
Checklists must be filled out **in real time** as the team member performs each activity. Do **not** wait until the end of training to complete or upload them.

Evaluator Instructions

Observation Guidelines

- Complete all observations **in real field or service center conditions** using the tools and parts listed in the checklist.
- Ensure the Team Member has **all required tools, PPE, and parts** before beginning each section.
- Observe **technique, safety, accuracy, and adherence to product specifications** (e.g., controller settings, valve operation, nozzle adjustments).
- For electrical readings and pressure checks, verify results are **recorded accurately** in the checklist and comment fields.
- Require the Team Member to **identify and explain parts and functions**, not just perform mechanical steps.

Manager Responsibilities

- Provide **direct supervision** or assign a qualified trainer and confirm objectives were met.
- Validate that the Team Member can:
    - Correctly program and manually operate controllers.
    - Use a multimeter to take both ohm and voltage readings.
    - Perform wire connections using waterproof wire nuts.

    - Identify irrigation components (controllers, valves, pumps, sprinklers, etc.).
    - Safely connect and install sprinkler heads using PVC and fittings.
- Offer **structured, specific feedback** on performance and safety practices.
- Record observations in the **Manager Notes** section, highlighting strengths, improvement needs, and next-step coaching.

How to Complete This Checklist

- Print this list and neatly print the name of the trainee on in the provided space above.
- Check off items *as they are demonstrated and completed*.
- Where indicated, enter **mandatory comments** following the instructions given.
    - Write neatly and legibly!
- Scan the completed checklist, along with any required attachments, to a .pdf format.
- Name the file in the following format: Last Name_EmployeeID_Course Number
    - EX: Massey_000000_CHK2004
- Upload the file to the Massy Initial Training Paperwork Upload Portal on Armyant and submit.

Required Materials

Follow the list below to ensure that all parts and tools are available. Some parts, such as the Hunter Pro-C controller and the Hunter Rain-Clik sensor may be found during maintenances in the field.

Tools Needed

- Rotor pitot gauge and MP gauge assembly
- Flathead screwdriver
- Philips-head screwdriver
- Shop towel
- Hunter wrench
- MP tool
- Multi-meter
- Wire stripers

Parts needed:

- Flexible PVC pipe
- PVC pipe
- PVC primer
- PVC solvent weld cement
- Various fittings: straight slip, slip t, street l, 90* slip, ect.
- PGV valve with solenoid
- Hunter Pro Spray 4”, 6”, 12” bodies
- Various Hunter Pro Adjustable nozzles with filters
- Various Hunter MP Rotator nozzles with filters
- Hunter PGP-04 rotor with nozzle tree
- Hunter Pro-C controller
- Hunter Rain-Clik sensor
- Irrigation wire
- Wire nut with waterproof casing

Checklist Items

Section 1: Controllers

☐ The Team Member can open the control to identify internal components.

1. Identify terminal strip
2. Identify faceplate connection wire
3. Identify rain sensor wire
4. Identify pump start relay wire
5. Identify zone wires
6. Identify common wire
7. Identify internal or external transformer

Date: _____ **Time:** _____

☐ The Team Member demonstrates basic controller programming

1. Open controller panel
2. Turn controller dial to Date/Time
3. Press the right arrow button to scroll through date and time settings
4. Adjust date and time for month, day, and time using the + and – buttons
5. Turn controller dial to Start Times
6. Press the program button to confirm there is only one program with time settings
7. Navigate to program with set run times, typically program A
8. Press the + or – button to adjust the program start time to desired time
9. Turn controller dial to Run Times
10. Adjust zone 1 run time using the + or – button
11. Press the right arrow to navigate through each zone
12. Adjust remaining zone times using the same technique used to adjust zone 1
13. Open faceplate to expose terminal strip
14. Verify the number of zones programed equals the number of hot wires leading to zone valves
15. Close faceplate
16. Turn controller dial to Water Days
17. Examine the days to verify which days are programed to run by looking at the 🚫 or 💧
18. Press the right or left arrow to navigate through each day while pressing the + or – button to set the day to water or not water
19. Turn dial to Seasonal Adjust and verify the adjustment is set to 100%
20. Press the + or – button to adjust seasonal percent to 100%

21. Turn dial to Run and close the controller panel

Date: _____ **Time:** _____

☐ The Team Member demonstrates manual operation of a controller

1. Open controller panel
2. Press the right arrow button and hold for 3 seconds
3. Press the right arrow to navigate through the zones
4. Turn controller dial to System Off and wait 10 seconds
5. Turn controller dial to Run and close the controller panel

Date: _____ **Time:** _____

☐ The Team Member can open the controller to identify internal components

1. Identify terminal strip
2. Identify faceplate connection wire
3. Identify rain sensor wire
4. Identify pump start relay wire
5. Identify zone wires
6. Identify common wire
7. Identify internal or external transformer

Date: _____ **Time:** _____

Section 2: Electrical

☐ The Team Member using a multi-meter, can take an ohm reading of each zone on a controller

1. Set multimeter to measure ohms (Ω)
2. Open controller face panel to expose terminal strip
3. Place black lead on common wire
4. Place red lead on each hot wire
5. Take reading of each zone and note the account

Date: _____ **Time:** _____

☐ The Team Member using a multi-meter while a zone is running, can take a voltage reading at a controller's terminal strip

1. Set multimeter to measure voltage
2. Manually turn on zone 1
3. Open controller faceplate to expose the terminal strip
4. Place black lead on common wire
5. Place red lead on hot wire

6. Read meter and note the account

Date: _____ **Time:** _____

☐ The Team Member using a multi-meter, can take a voltage reading at a wall outlet

1. Set multimeter to measure voltage
2. Insert red and black leads into outlet slot
3. Take reading of voltage

Date: _____ **Time:** _____

☐ The Team Member can complete a wire connection using a waterproof wire nut

1. Strip the wires so 1” of copper is exposed
2. Lay exposed copper wires perpendicular to each other
3. Twist the two different wires together
4. Cut off .25” of wire from the end of the connection
5. Insert connected wires into the wire nut
6. Twist wire nut clockwise until snug
7. Insert wire nut 100% into waterproof casing
8. Separate wires at the top of the casing
9. Close the casing to lock the wires inside

Date: _____ **Time:** _____

☐ The Team Member can identify and review wire type

- Identify if the wires are multi-strand or single strand

Date: _____ **Time:** _____

☐ The Team Member can identify electric valve external parts and manually operate the valve

- Identify electric valve external parts
  1. Locate valve box
  2. Open valve box
  3. Remove dirt to expose valve
  4. Identify valve body
  5. Identify valve solenoid
  6. Identify valve bleed screw
- Activate a valve manually using the bleed port
  1. Identify bleed screw and turn counterclockwise until valve opens
  2. Turn bleed screw clockwise to close the valve
- Activate a valve manually using the solenoid
  1. Identify solenoid and turn 90 degrees counterclockwise to open the valve

2. Turn solenoid 90 degrees clockwise to close the valve

Date: _____ **Time:** _____

Section 3: General

☐ The Team Member can demonstrate testing a rain sensor

1. Make sure that rain sensor bypass is set to active
2. Manually turn on a zone near the rain sensor location
3. Locate rain sensor
4. Press down the button located on the sensor
5. Verify the zone stops watering while the button is being pressed

Date: _____ **Time:** _____

☐ The Team Member can review and identify various irrigation parts

- Spray/MP Rotator:
  1. Identify Hunter Pro-Spray 4" body
  2. Identify Hunter Pro-Spray 6" body
  3. Identify Hunter Pro-Spray 12" body
  4. Identify the proper spray nozzle needed to cover an 8 ft. spray radius and explain the reasoning behind the decision
  5. Identify the proper spray nozzle needed to cover a 10 ft. spray radius and explain the reasoning behind the decision
  6. Identify the proper spray nozzle needed to cover a 17 ft. spray radius and explain the reasoning behind the decision
  7. Identify the proper spray nozzle needed to cover a 10 ft. spray radius and explain the reasoning behind the decision
  8. Identify the proper spray nozzle needed to cover a 20 ft. spray radius and explain the reasoning behind the decision
  9. Identify the proper spray nozzle needed to cover a 35 ft. spray radius and explain the reasoning behind the decision
- Rotor:
  1. Identify PGP-04 rotor
  2. Identify rotor nozzle tree

Date: _____ **Time:** _____

☐ The Team Member can disassemble a spray and rotor sprinkler, point out the internal components

- Spray:
  1. Identify spray body

2. Identify spray filter
3. Identify spray nozzle

- Rotor:
  1. Identify rotor body
  2. Identify rotor nozzle
  3. Identify filter

Date: _____ **Time:** _____

☐ The Team Member can connect, using flex PVC, a sprinkler head to rigid PVC pipe

1. Remove dirt around old sprinkler head
2. Cut hard PVC pipe to remove old sprinkler head
3. Deburr the PVC pipe where the cut was made
4. Cut an 18” piece of flexible PVC pipe
5. Apply primer to outside of rigid PVC pipe and inside of fitting
6. Apply solvent weld cement to outside of rigid PVC pipe and inside of fitting
7. Insert rigid PVC pipe into fitting and turn fitting 90 degrees and hold 30 seconds until weld is completed
8. Apply primer to outside of flexible PVC pipe and inside of fitting attached to rigid PVC pipe
9. Apply solvent weld cement to outside of flexible PVC pipe and inside of fitting attached to rigid PVC pipe
10. Insert flexible PVC pipe into fitting attached to rigid PVC pipe then turn the flexible PVC pipe 90 degrees and hold 30 seconds until weld is completed
11. Remove excess PVC solvent weld cement
12. Apply primer to inside of Street L fitting and outside of flexible PVC pipe
13. Apply solvent weld cement to inside of Street L fitting and outside of flexible PVC pipe
14. Insert flexible PVC pipe into Street L fitting and turn Street L 90 degrees and hold 30 seconds until weld is completed
15. Remove excess PVC solvent weld cement
16. Screw Street L to new spray body until fully seated
17. Install new spray body into the ground, level the body, and replace the soil around the body
18. Verify the top of the new spray body is 1/8th inch above grade
19. Run system to purge any debris from the head

Date: _____ **Time:** _____

☐ The Team Member can locate a backflow prevention device and measure pressure at backflow preventer

1. Locate and identify the backflow prevention device
2. Identify the bleed cup on the backflow preventer
3. Thread in pressure gauge to the bleed cup
4. Insert flathead screwdriver into the bleed screw
5. Turn the bleed screw 90 degrees counterclockwise
6. Read pressure on the pressure gauge and note the account
7. Turn the bleed screw 90 degrees clockwise

Date: _____ **Time:** _____

☐ The Team Member can identify a submersible pump

Date: _____ **Time:** _____

☐ The Team Member can locate water meter and record water meter reading

1. Locate water meter box
2. Clean out dirt/debris to expose water meter
3. Note account on the current water meter number

Date: _____ **Time:** _____

☐ The Team Member can identify a centrifugal well pump

Date: _____ **Time:** _____

Section 4: Sprinklers

☐ The Team Member can install and adjust various nozzles

- Spray:
  1. Open or close spray nozzle to fit the needed application

  Date: _____ **Time:** _____
- MP Rotator:
  1. Install an MP Rotator nozzle
     a. Remove nozzle preinstalled on new spray body
     b. Install filter and MP Rotator to body
     c. Using the MP Tool, adjust the throw distance of an MP Rotator
  2. Install MP1000 90-210, adjust throw from 8’-15’, adjust from 90 degrees to 210 degrees
  3. Install MP2000 90-210, adjust throw from 13’-21’, adjust from 90 degrees to 210 degrees

4. Install MP3000 90-210, adjust throw from 22’-30’, adjust from 90 degrees to 210 degrees

Date: _____ **Time:** _____

- Rotor:
  1. Adjust a PGP rotor arc from 5 degrees to 360 degrees
     a. Insert the plastic key end of the Hunter wrench into the adjustment socket
     b. While holding the nozzle turret at the right stop, turn the wrench counterclockwise
  2. Adjust a PGP rotor throw distance
     a. Insert the steel hex end of the Hunter wrench into the radius adjustment screw
     b. Turn the screw clockwise to decrease throw distance
     c. Turn the screw counterclockwise to increase throw distance

Date: _____ **Time:** _____

☐ The Team Member takes pressure readings at a spray body

1. Remove nozzle from head
2. Install pressure gauge
3. Install nozzle
4. Take pressure reading

Date: _____ **Time:** _____

Manager Notes

Use this section to record specific examples of performance observed. Include positive behaviors, areas where additional training may be required, and any coaching or feedback provided during the observation.

Strengths observed 🛑

_____

_____

_____

_____

_____

Areas for Improvement 🛑

_____

_____

_____

_____

_____

Coaching & Next Steps 🛑

_____

_____

_____

_____

_____

Acknowledgement

By signing below, both the manager and the team member confirm that the manager directly observed the completion of the above tasks and that this checklist was completed accurately and honestly.

_____ Date: _____

Manager Signature

_____ Date: _____

Team Member Signature