

**CCOA WATER WELL  
EMERGENCIES  
STANDARD OPERATING  
PROCEDURES**

**CCOA NORTH WELL PRODUCTION @**

**NORMAL EXPECTED READINGS:**

**GPM = \_\_\_\_\_ VOLUME= \_\_\_\_\_**

**EMERGENCY LEVELS 1 – 3**

**LEVEL 1: GPM \_\_\_\_\_, VOLUME: \_\_\_\_\_**

**LEVEL 2: GPM \_\_\_\_\_, VOLUME: \_\_\_\_\_**

**LEVEL 3: GPM \_\_\_\_\_, VOLUME: \_\_\_\_\_**

**LEVEL ONE PROCEDURES (1) PUMP HOUSE**

Water Operator is aware of a VERY low loss of water.

1. Continue monitoring.
2. **NOTIFY MANAGER**, to prepare for leak detection with Maintenance Technician. (training needed)
3. CCOA to purchase their own detection equipment without interfering with owner's water supply while detecting. (training needed)

\*there are alternative locates/detecting equipment that would allow us to do this on our own. (procedure is now done by Water Op borrowing equipment)

**LEVEL TWO PROCEDURES (2) PUMP HOUSE**

**YELLOW FLASHING LIGHTS BEGIN**

1. Water Operator contacts Manager via text at 719.239.4788 advising situation.
2. CCOA President is notified by Manager.
3. Leak detection equipment is borrowed or used (if ccoa owned detection equipment) within \_\_\_\_ days.
4. Water Op and Water Repair Technician schedule time to meet within 72 hours to begin leak detection. *(see Diagram #2, Leak Detection SOP)*

**LEVEL THREE (3) PUMP HOUSE**

**RED FLASHING LIGHTS BEGIN**

1. THE YELLOW LIGHT WILL TURN OFF AND THEN BLINK RED WHEN WATER VOLUME OF N WELL IS ZERO (0).
  - a. NOTIFYING US OF NO WATER IN THE NORTH WELL.
2. Switch to South Well production for the park (? Derek, please explain current operations for the s well and if it's being utilized at all now.
3. South Well production is now \_\_\_\_\_
4. Pending South Well shock & fix existing S well or dig new well.

## DIAGRAM #2

### LEAK DETECTION

#### STANDARD OPERATING PROCDEDURES (SOP)

#### Yellow Flashing (Level 2)

Water Operator advises Manager when the leak detection is scheduled within 72 hours of initial yellow lights onset blinking.

#### Red Flashing (Level 3)

CONTINUE TO FOLLOW DIAGRAM #2, Leak Detection Standard Operating Procedures

IF NO CONTRACTORS ARE AVAILABLE to assist within \_\_\_\_\_ days then:

Call Scott at CRWA to advise.

Call President to advise.

Discuss COWARN options as a last resort if no water production continues within \_\_\_\_\_ days.

(If we had another well that was producing this would simply be a switch over from one well to another until issue was resolved.

#### Leak detection SOP:

1. Manager communicates to board the scheduled date for Level 2 detection.
2. On the date scheduled detection, Water Op and Water Repair will begin detecting the located areas of water loss by opening and closing water valves.
  - a. Water Op remains in the pump house while Water Repair Tech opens and closes one valve at a time. This location is estimated based on recent fixes and outstanding hydrant or infrastructure issue that is known & has not been fixed yet.
  - b. This can take 4-8 hours.
3. Once the approximate areas have been established then the sonic device is borrowed and used at each hydrant in the location detected (this can take several days or a week depending on availability).
4. Once the locations are found, this is then communicated to the Manager.
5. Manager and Water Operator discuss the plan for 811 locates, equipment and material, and repairs.
6. Manager emails the board of managers with the plan to our best ability of understanding prior to digging and proceeding.
7. Manager notifies the owners that we have 72 hours to fix the issue and CCOA will be doing the repairs and billing the owner unless it's a hydrant only repair, then a new hydrant is installed (we currently are keeping 5 in stock at one time)
8. Manager completes 811 for all locations detected.
9. After each site is excavated and opened, Water Operator then contacts Manager via text with pictures of the hole.
10. Water Op then contacts Manager with specific issue found.
11. Manager then assists in purchasing fittings, pipe, hydrants needed. If Water Operator has supplies on hand, then we use them.

(\*\* CCOA needs to have miscellaneous water plumbing fittings, hydrants, pvc, pex, valves (1-3") on hand always since our South well is not producing. In addition, there are unknown underground leaks that may be happening)
12. After the fixes have occurred (happens within 1-3 days), then the Water Operator will report to Manager the current GPM and water Volume status for Manager to relay to the board of Managers.
13. Water Repair Tech communicates 2 hours prior completion to manager. Manager calls in the equipment rental at this time for pickup (BV Rentals).
14. Billing to owner (if applicable) after costs are totaled. (Manager and Treasurer) Bill is sent by Treasurer and approved by Manager.
15. Manager updates the xls files tracking our upgrades.