PROCEDURES FOR WASTE WATER SAMPLES

(MONTHLY SAMPLE)

1. Check the **pH light** on the **MAIN CONTROL PANEL** on the **EAST WALL**. If the light is **RED** the pH is out of spec and must be corrected prior to taking a sample.
2. Check the 3 pH meters midpoint of the pit under grate. The final tank pH meter, is closest to the sink, should read between 6.5- 8.5. If not the pH must be corrected.
3. If the **pH is good**, take the **zip lock bag** containing 2 plastic bottles out of the refrigerator by exit door to alley. It contains **1 medium bottle** and **1 small bottle**. Next, get the 1 liter poly **pro beaker** and the **pH meter** in the blue box from the shelves behind carbon/multimedia filters.
4. Place pro beaker under the PVC pipe/faucet in the sink.
5. Open the **RED** valve (right side of the sink.)
6. Go to the main control panel on the **EAST WALL** and turn on the discharge pump, turn switch to **HAND**. Watch the numbers on the gray box to the left, when they begin to move the system is pumping.
7. Go behind the **RO SYSTEM** and locate the metal handle protruding through the grate. Close the valve by turning to the right (clockwise) 10-20 **TURNS.**
8. Go over to the sink, when the water flows let it fill and overflow the beaker for about 2-3 minutes.
9. Reopen the valve under the grate by turning the handle to the left (counter clockwise) 10-20 **TURNS**.
10. Close the **RED** valve (right side of the sink.)
11. Go back to the **MAIN CONTROL PANEL** and turn the pump back to **AUTO**
12. Open the **blue pH meter** box. Plug the **probe** into the top of the meter. **GENTLY** remove the liquid filled cover on the tip. Replace it with the plastic tip protector in the box. Take care the glass tip is very fragile and will break easily.
13. Verify that the **meter** is working correctly by first rinsing the **tip of the probe** in water then emerge it into the **pH 4 solution** in the box. Rinse again, and then emerge it into the **pH 7 solution**. If all is well, emerge the **probe** into the water in the **beaker** in the sink. Record the reading on the paperwork in the zip lock bag and also on the water room log sheet.
14. **Fill both plastic bottles*****the larger bottle has a small amount of **Nitric Acid** in it as a preservative*****. It will cause fumes when you add water, **DO NOT PANIC**, continue filling, then place **the bottles** back in the **zip lock** bag along with the **paperwork**.
15. Return the **bag** to the **refrigerator**.
16. Remove **protective tip from pH probe** refill plastic tip cover with **pH 7 solution** and snuggly fit it back onto the probe shaft, making sure the **probe tip is covered with liquid**, then place in blue box.
17. Empty the beaker in the sink. Put the **beaker and pH meter box** back onto the shelf behind the carbon/multimedia filters.
18. When finished retrieving water samples, call **Jeff Christensen, 621-5861**, Risk management and let him or someone know **water sample ready to be picked up**.