Sample G: Monitoring Practice for Dump Tank Water

Written practice for:	Maintaining and monitoring dump tank water for apples coming out of cold storage.
Who needs to do it:	Workers responsible for task.
How often it should be done:	Initially before using the dump tank water and several times during the day.
Why you are doing it:	To ensure chlorine levels are sufficient to maintain water quality.
Tools and equipment used (if applicable):	• 12% sodium hypochlorite, • pH test strips, • Free chlorine test strips (buy ones that test for the ppm concentration you use).
Step-by-step instructions:	1. Fill dump tank with water. 2. Add 1 L sodium hypochlorite for every 1,000 L of water (to create 120 ppm solution) and mix well. 3. Test for free chlorine: • Initially (if you do not have the high ppm test strips) when you first make up the solution you will have to dilute the test sample with plain water to get a reading. Remove 1 mL of chlorinated water and dilute with 9 mL distilled water. (**Note:** a 1:100 dilution may be necessary for the initial testing). • Using dry hands, dip the chlorine test strip into the water. Compare it to the colour chart and record free chlorine level. 4. Test for pH: • Dip a new pH test strip for 1–2 seconds in the dump tank water and then compare it to the colour chart. Record the pH (It should be between 6.0 and 7.5.). If the pH is too high, add acid.

Step-by-step instructions (cont'd):	**Throughout the day:** 1. Use dump tank water that is slightly warmer than the cold storage temperature for the apples; 2. Test and record the level of free chlorine halfway through the day OR when the product is unusually dirty; 3. Add sodium hypochlorite as required to maintain a level of at least 25 ppm free chlorine.
What records need to be filled out:	1. Water Treatment Record (Form #4). 2. Staff Training Record (Form #1).

Last updated on: *January 15, 2008* **By:** *Farmer Don*