Water System Operator Responsibilities

March 31, 2008

Operator Responsibilities OAR 333-061-0025

- Water suppliers are responsible for taking all reasonable precautions to assure that the water delivered to water users does not exceed maximum contaminant levels, to assure that water system facilities are free of public health hazards, and to assure that water system operation and maintenance are performed as required…


CATFISH
117
SEMI-SAFE
DRINKING
WATER

Operator Responsibilities OAR 333-061-0025

- Routinely collect and submit water samples for laboratory analysis at the frequencies prescribed by rule.

Operator Responsibilities

Community & Non-Transient Water Systems
Routine Chemical Monitoring*

2005 -2007 Compliance Period

Department of Human Services
State Public Health
Office of Public Health Systems
Drinking Water Program
Phone: (971) 673-0405
Fax: (971) 673-0457
www.oregon.gov/DHS/ph/dwp

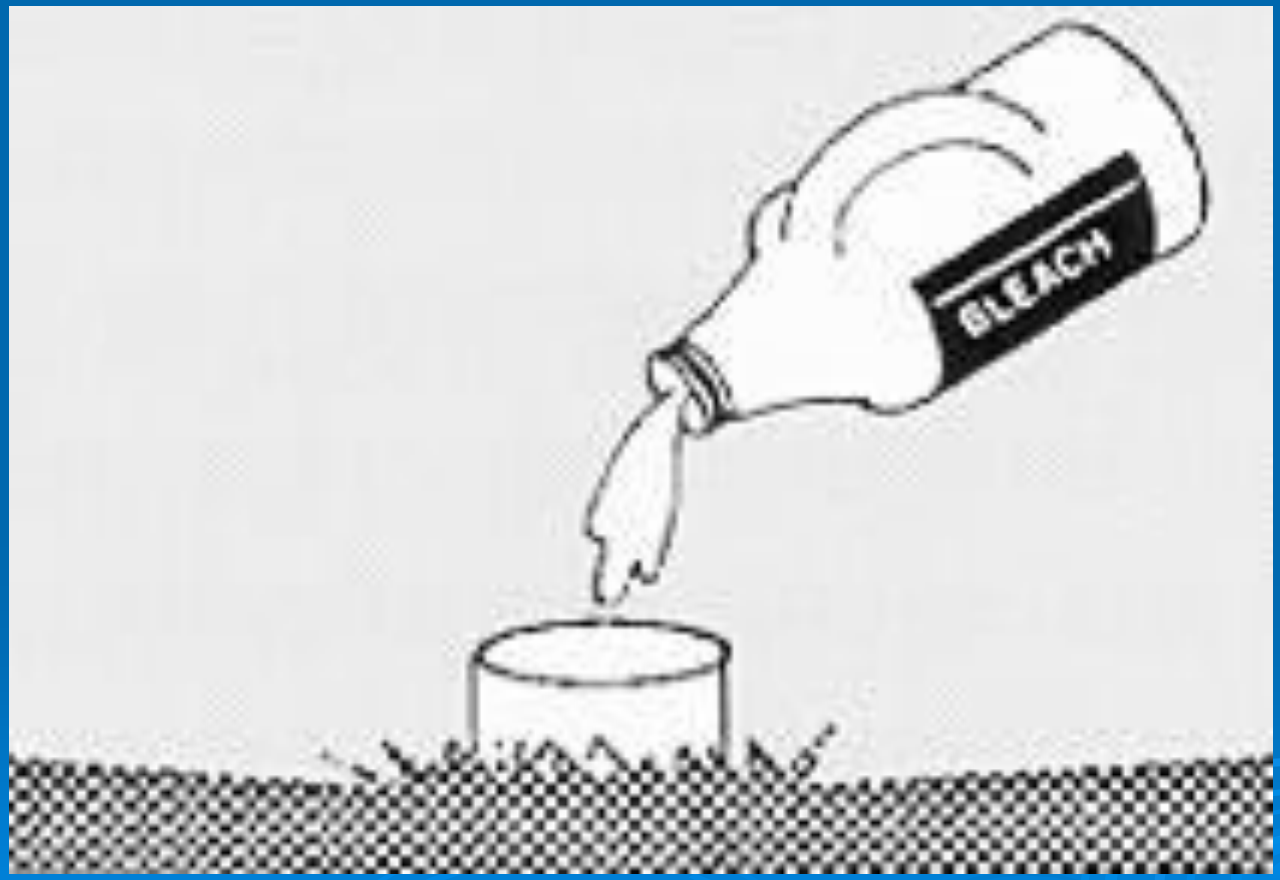
Chemicals	Surface Water	Ground Water
Inorganics [1]	Yearly	One
Nitrate	Quarterly [2]	Yearly
Volatile Organics [3]	Yearly	One
Disinfection Byproducts [4]	Quarterly [5]	Yearly [6]
Synthetic Organics [7]	One	
Nitrite	One	
Asbestos	One [8]	
Radionuclides (Community PWS only)	4 consecutive quarters [9]	
Lead and Copper	One round [10]	


MOTHER GOOSE & GRIMM
GRIMM..I WANT YOU TO STOP CLIMBING UP AND DRINKING OUT OF THE TOILET...
FROM NOW ON I WANT YOU TO USE THIS WATER BOWL.
GRI
5-20
OKAY, SURE, THANKS.
GR
GLUG GLUG GLUG
GRIM

Operator Responsibilities OAR 333-061-0025

- Take immediate corrective action when the results of analyses or measurements indicate that maximum contaminant levels have been exceeded and report the results as prescribed.

Operator Responsibilities OAR 333-061-0025



Operator Responsibilities OAR 333-061-0025

- Continue to report as prescribed, the results of analyses or measurements which indicate that maximum contaminant levels have not been exceeded.

Operator Responsibilities OAR 333-061-0025

- Notify all customers of the system, as well as the general public in the service area, when the maximum contaminant levels have been exceeded.

Operator Responsibilities

DRINKING WATER WARNING

[System] water is contaminated with [fecal coliform] or [E. coli]

BOIL YOUR WATER BEFORE USING

Fecal coliform [or E. coli] bacteria were found in the water supply on [date]. These bacteria can make you sick, and are a particular concern for people with weakened immune systems.

What should I do?

- **DO NOT DRINK THE WATER WITHOUT BOILING IT FIRST.** Bring all water to a boil, let it boil for one minute, and let it cool before using, or use bottled water. Boiled or bottled water should be used for drinking, making ice, brushing teeth, washing dishes, and food preparation **until further notice**. Boiling kills bacteria and other organisms in the water.
- Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
- The symptoms above are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

What happened? What is being done?

Operator Responsibilities OAR 333-061-0025

- Notify all customers served by the system when the reporting requirements are not being met, or when public health hazards are found to exist in the system, or when the operation of the system is subject to a permit or a variance.

Operator Responsibilities

Monitoring Violations Annual Notice – Template 3-1A

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for [System]

Our water system violated drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During [compliance period] we ['did not monitor or test' or 'did not complete all monitoring or testing'] for [contaminant(s)] and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?

There is nothing you need to do at this time.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for [this contaminant/these contaminants] and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When samples should have been taken	When samples were taken
VOCs[1] (example)	1 sample every three years	0	2000-2002	February 2003

What is being done?


Do not drop cigarette ends on the floor, as they burn the hands and knees of customers as they leave.
NOTICE-PUBLIC BAR
OUR PUBLIC BAR IS PRESENTLY NOT OPEN BECAUSE IT IS CLOSED. MANAGER


NO
TRESPASSING
VIOLATORS
WILL BE SHOT
SURVIVORS
WILL BE SHOT
AGAIN

Operator Responsibilities OAR 333-061-0025

- Maintain monitoring and operating records and make these records available for review when the system is inspected.

Operator Responsibilities OAR 333-061-0025

- Maintain a pressure of at least 20 pounds per square inch (psi) at all service connections at all times.


NO
PISAR
CESPED

Operator Responsibilities OAR 333-061-0025

- Follow-up on complaints relating to water quality from users and maintain records and reports on actions undertaken.

Operator Responsibilities

*Customer Complaint Log Card**

Date	Questions, Concerns, or Potential Problems	Customer Name and Information	Person Assigned/ Action Taken	Compliant Resolved/ Researched
	1. Time Complaint Made _____			Time resolved_____
	2. Time Complaint Made _____			Time resolved_____

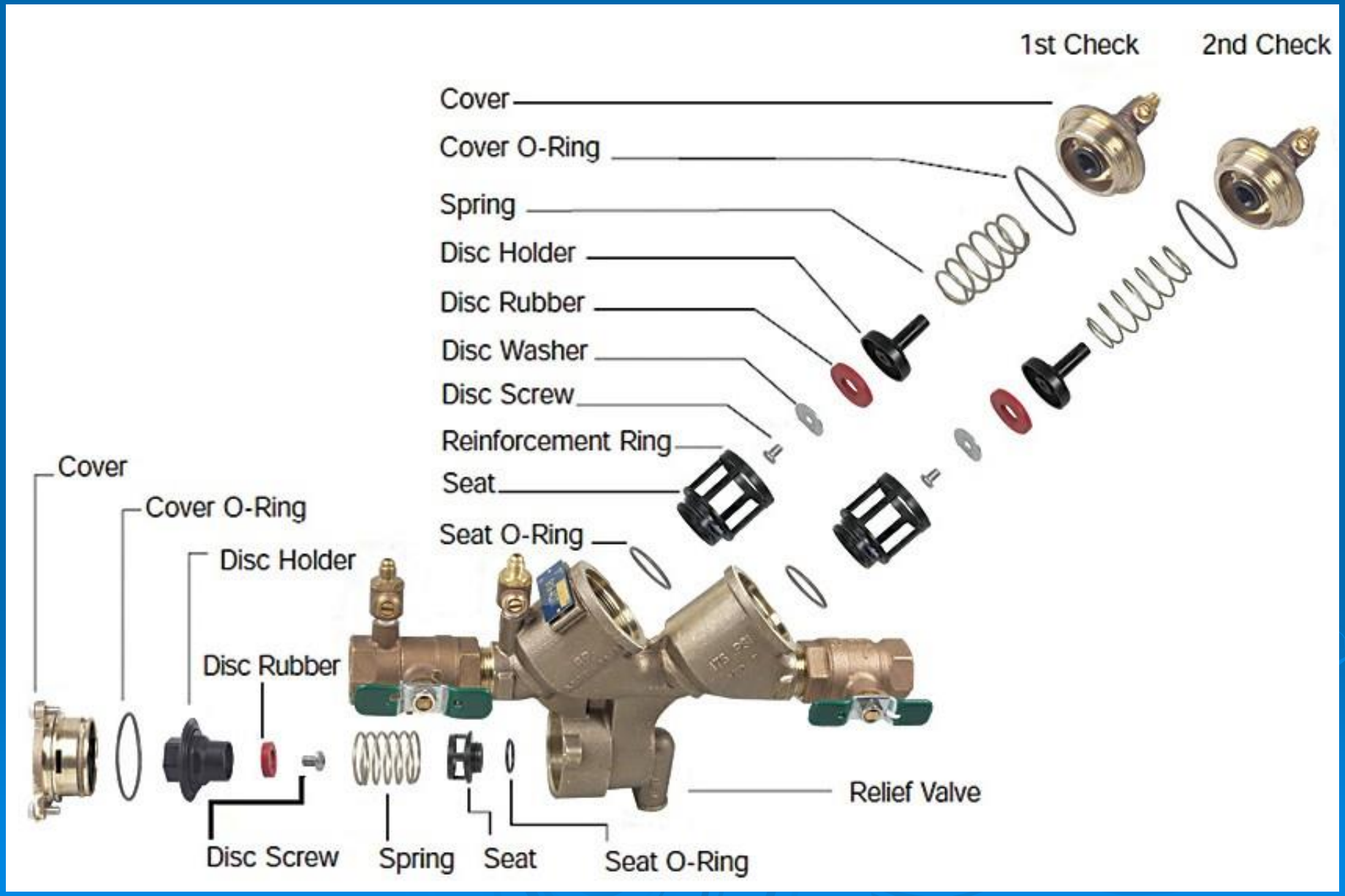
Operator Responsibilities OAR 333-061-0025

- Conduct an active program for systematically identifying and controlling cross connections.

Operator Responsibilities

Operator Responsibilities

Operator Responsibilities



Operator Responsibilities OAR 333-061-0025

- Submit to the Department, plans prepared by a professional engineer registered in Oregon for review and approval before undertaking the construction of new water systems or major modifications to existing water systems, unless exempted from this requirement.

Operator Responsibilities OAR 333-061-0025

- Assure that the water system is in compliance with the rules relating to certification of water system operators.

Operator Responsibilities OAR 333-061-0025

- Assure that personnel in responsible charge of Transient Non-Community water systems utilizing surface water sources or sources under the influence of surface water attend the Department's Small Water System Training Course.

Operation & Maintenance OAR 333-061-0065

- Water systems shall be operated and maintained such that continuous production and delivery of potable water is assured.
  - Operate the system effectively as it was designed.
  - Repair all leaks and broken equipment promptly.
  - Have necessary equipment, parts and tools on hand to make repairs.
  - Assure safe drinking water during emergencies.

Operation & Maintenance OAR 333-061-0065

- Personnel shall be competent & knowledgeable of the facility's functions, and have adequate training and experience
- Personnel in charge shall be certified at the appropriate level
- Transient Non-Community systems that use a surface water source shall have personnel attend the Department's Small Water System Training Course

Operation & Maintenance

Recommended Daily Operational Duties

- Check water meter readings and record water production.
- Check chemical solution tanks and record amounts used.
- Check and record water levels in storage tanks.
- Inspect chemical feed pumps.
- Check and record chlorine residual at the point of application.
- Check and record chlorine residual in the distribution system.
- Inspect booster pump stations.
- Check and record fluoride concentration in the distribution system.
- Record well pump running times and pump cycle starts.

(Continued on other side of card.)

Operation & Maintenance

Recommended Weekly Operational Duties

- Inspect chlorine and fluoride testing equipment.
- Clean pump house and grounds. Make sure fire hydrants are accessible.
- Record pumping rate for each well or source water pump.
- Conduct weekly security check.
  - *Inspect all pump house plumbing for leaks.*
  - *Check all sump pumps for proper operation.*
  - *Check all station alarms.*
  - *Check backup power source to ensure it will operate when needed.*
  - *Inspect fencing and gates.*

Operation & Maintenance

Recommended Monthly Operational Duties

- Read electric meter at pump house and record.
- Take appropriate monthly water quality samples.
- Check and record static and pumping levels of each well.
- *Read all customer meters and compare against total water produced for the month.*
- *Inspect well heads.*
- *Lubricate locks.*
- *Check on-site readings against lab results.*
- *Confirm submittal of monthly reports.*

Operation & Maintenance OAR 333-061-0065

- The name and contact information of the current owner of all water systems shall be on file with the Department

Operation & Maintenance OAR 333-061-0065

- Documents and records must be maintained and shall be made available to the Department
  - Operating manuals and plans
  - Water quality test results
  - Backflow device test results
  - Dosage rates for all chemicals used
  - Other records as detailed in the rule

Operation & Maintenance OAR 333-061-0065

- Chlorinators and other equipment used to apply chemicals must be operated according to the manufacturer's specifications
- Chlorine must be applied proportional to flow
- For disinfection of groundwater sources, 30 minutes of contact time are required with a chlorine residual of at least 0.2 mg/L

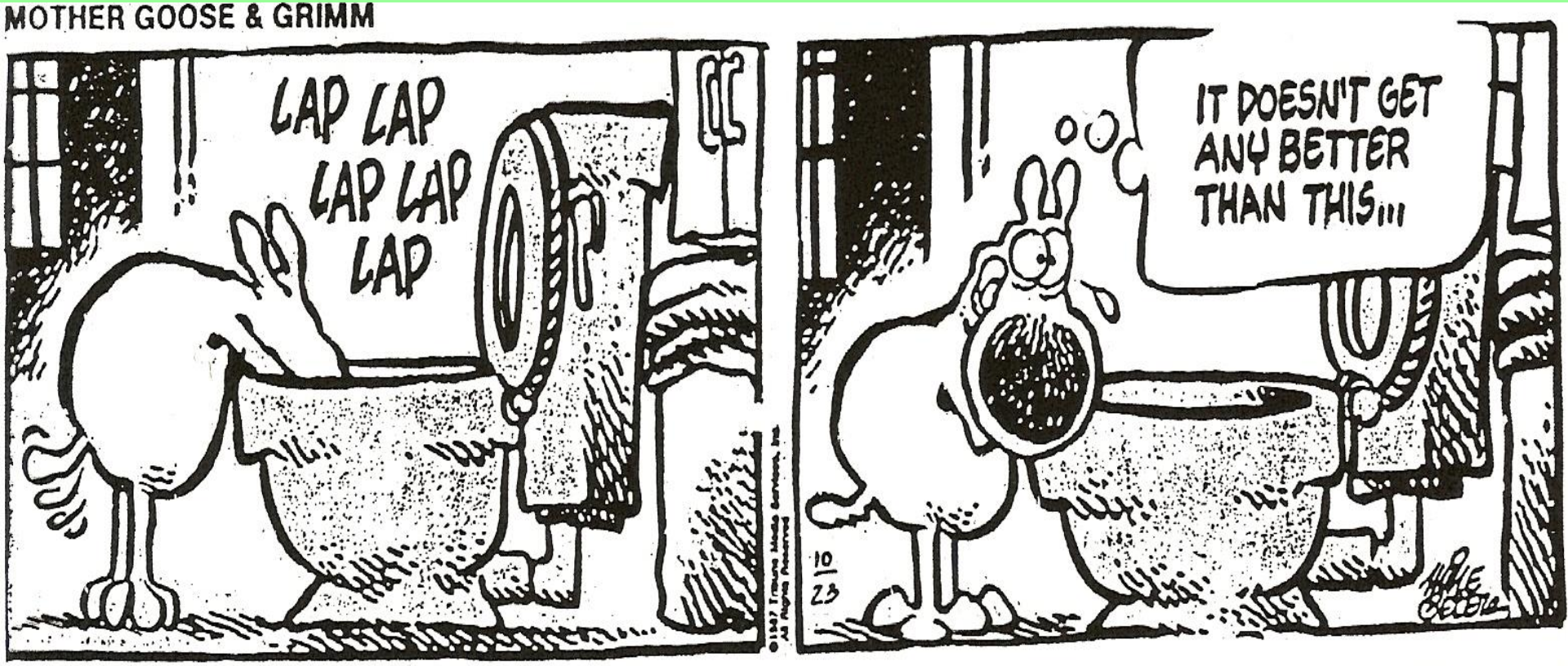
Operation & Maintenance OAR 333-061-0065

- Other chemicals
  - For disinfection of groundwater using ammonia and chlorine, 3 hours of contact time are required with a combined chlorine residual of at least 2.0 mg/L
  - Corrosion control chemicals shall be applied after all other treatment processes

Operation & Maintenance OAR 333-061-0065

- When an emergency arises within a water system which affects the quality of water produced by the system, the water supplier shall notify the Department immediately


AGUA NO POTABLE
NONPOTABLE WATER
EAU NON POTABLE


MOTHER GOOSE & GRIMM
LAP LAP
LAP LAP
LAP
IT DOESN'T GET
ANY BETTER
THAN THIS!!!
10
23


WEB 387


AQUA-TAINER