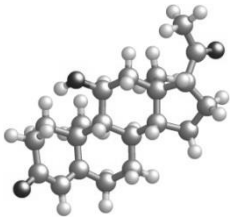

Chem!stry

Name: …… **( )**

Class: ……

Date: …… **/** …… **/** ……

Case #8: Waste Disposal

Late one afternoon, you are clearing up after a successful day in the laboratory. Things have gone well, and you are looking forward to a dinner engagement with your boyfriend. Suddenly, you notice a small flask of contaminated benzene (a carcinogenic compound) that you forgot to put into the organic solvent waste container. Carrying the flask to the fume-cupboard, you notice that all of the organic solvent waste bottles are full. You look around the lab, but find no empty waste bottles. Of course, there are plenty of empty bottles in the storeroom, but that is located on the ground floor; it would take fifteen minutes to get there and back. You promised to pick-up your boyfriend at 6.30. If you leave immediately, you will have just enough time to go home, shower, change and get to your boyfriend's apartment. You think to yourself, "It's just a few cubic centimetres of benzene. I'll just pour it down the sink. It won't do any harm." Is this assumption acceptable? Do you have any other options?

Taken from Kovac, J. (2004). *The Ethical Chemist: Professionalism and Ethics in Science*.
New Jersey: Pearson Prentice Hall. ISBN: 0-13-141132-2

Commentary: Waste Disposal

In research laboratories, the individual has the primary burden of responsibility for following safety procedures. Deciding which regulation to follow is, in part, an ethical question. When you are in a hurry, it is easy to wash a small amount of seemingly innocuous waste down the sink. It seems a small transgression of the strict legal regulations on the disposal of hazardous waste materials. Small amounts of waste, however, can eventually add up to large problems.

Beginning scientists need to learn that safety and environmental rules are important. Pouring the wrong substance down the sink, not wearing safety glasses, and not knowing proper emergency procedures can all lead to major disasters. The one time that you fail to wear your safety glasses may be the time the reaction explodes. Following safety rules makes good practical sense, but it is also part of the personal responsibility expected of a professional. Not only might your disregard of proper procedures endanger your own health, it can also threaten the safety of others. For example, if you do not learn the proper procedures to follow in the event of a laboratory fire, other people might be the victims of your bungled attempts to extinguish the flames.