ISO 14001 EXAMPLE EMS

A day in the lab



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ENVIRONMENTAL IMPACTS

 Consumption of non-renewable resources



Use of toxic and polluting substances



OBJECTIVES



- Reduce the consumption of water
- Reduce the use of lab material
- Reduce the consumption of electricity

1. REDUCE THE CONSUMTION OF WATER

- Target: reduce it by 5% in 2014
- Environmental program:
 - Use the minimum power of water in vacuum pumps, when possible
 - Maintenance of every equipment
 - Use recycled water to wash lab stuff
 - Avoid excess of water in refrigeration systems
 - Check the pressure of every equipment daily
 - Use recycled water to cool solutions
 - Work carefully



2. REDUCE THE USE OF LAB MATERIAL

 Target: reduce lab material by 2% for 2015 and increase recycling

- Environmental program:
 - Recycle gloves and paper towels
 - Use only the amount of product needed
 - Send lab reports by email instead of printing them, when possible
 - Recycle broken stuff (beakers, pipettes, test tubes...)
 - Take advantage of solutions prepared in previous days

3. REDUCE THE CONSUMPTION OF ELECTRICITY

- Target: reduce it by 8% for 2014
- Environmental program:
 - Turn extraction hoods off as soon as possible
 - Take advantage of solar light as much as possible
 - Share data (calibration data)
 - Use the minimum power in equipments when possible
 - Work carefully (slow starts/stops of pumps, engines...)
 - Read the instructions of every equipment and be sure of what you have to do before turning on equipments
 - Use the waiting time to do other tasks

PEOPLE RESPONSIBLE

- Professors
- Students
- Laboratory technicians



OPERATIONAL CONTROL

- Stickers on the taps and switches
- Motion sensors
- Encouraging posters for recycling

