

# Elimination/Avoid/Substitute Case Study



Wind River Casino



## Sanitizer Dilution Rate (engineering control; change equipment)



Problem: Cleaning staff at a hotel kitchen mixed sanitizing solution randomly, often at a much **higher concentration** than necessary.

**Solution:** Purchased automatic dilution equipment and dispensing system and trained staff to a standard operating procedure (SOP) for mixing.

**Results:** Reduced consumption of over 500 gallons of sanitizer per year.

## Cleaning Methods (refine definition of “clean”; change the process)

Problem: Sprayed air freshener for a “clean” smell; adding to floor residue.

**Solution:** Reset what “clean” smells like; stopped spraying air freshener. New mantra: Absence of Smell is the Sign of a Truly Clean Restroom.

Problem: Excessive cleaning of matte tile flooring, to achieve a shiny clean look.

**Solution:** Switched to steam cleaning. Reset expectations - A matte finish is beautiful!

## Leech Lake Band of Ojibwe (MN)

### Cleaning Methods (change the process)



VS

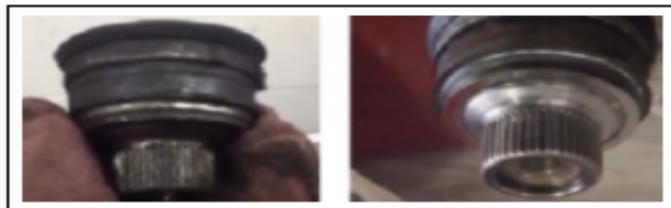


Maintenance shops need to be able to clean parts to fix equipment. Aerosol brake cleaners are often used, but these contain chemicals that are harmful to human health and the environment. MnTAP worked with the shops to find an affordable, low VOC brake cleaner, but they also purchased a CRC SmartWasher that uses Ozzyjuice formulation SW7. The technicians increased their use of the parts washer and decreased their use of aerosols.

13 Auto Repair Shops prevented:

- 1,200 pounds / year VOC emissions
- 51 pounds /year solid waste generated
- Greenhouse gas emissions (from reduced propellants in aerosols).

This ultrasonic cleaner uses Simple Green aqueous cleaner, which is an EPA Safer Choice product. The picture on the right shows a before and after cleaning of a small part. It would be time-intensive to clean this part without an ultrasonic cleaner.



See the full case study at [www.mntap.umn.edu/resources/publications/source/june-2021/](http://www.mntap.umn.edu/resources/publications/source/june-2021/)