Fire Safety Part 1
Preventing Landfill Fires

There are about 8,000 landfill fires that occur each year around the world. The fires can range from minor surface fires to huge fires that can release harmful emissions. What can we do to reduce the fires? Education and training is the best way to understand how fires happen at landfills.

Surface fires can be started by:
- Being careless/vandalism (Solution: install fences and lock gates)
- Smoking (Solution: post signs around the landfill and monitor)
- Hot waste such ashes from a barbecue (Solution: isolate material or do not accept)
- Natural causes such as lighting
- Equipment (Solution: keep equipment clean of trash)
- Uncontrolled waste stream

Subsurface fires can occur through spontaneous combustion as a result of the decomposition process, or from older, smoldering or ignited items buried. Subsurface landfill fires can be complicated.
- Look for settlement
- Elevated carbon monoxide levels
- Residue on wells
- Infrared temperature gauge so you can monitor the temperature
- Look for smoke
- Be aware of odors
- Proper compaction of trash can help slow the fire

Keep in mind about offsite fires and wildfires.
- Do you have a fire break around the landfill?

For the next safety topic, we will discuss how you prepare and control fires at your landfill.