

INFORMATION ON DRY CLIMATE LANDFILLS

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Civil & Environmental Consultants is providing this summary on dry climate landfills. It has been CEC's experience working with many dry climate landfills, like the ones located in eastern Oregon, that produce the same amount of landfill gas provided they are taking similar tonnage amounts for disposal. For example, if a landfill located in a dry climate takes 1.1M tons, like Coffin Butte, they would produce almost the same amount of landfill gas. The difference being, is that Coffin Butte Landfill, located in wetter climate, will produce the landfill gas faster because of the rainfall, then a landfill in a drier climate.

Furthermore, again based on CEC's experience, dry climate landfills will accept free liquids as part of the US EPA Research, Development and Demonstration (RDD) Permit, which falls under 40 CFR Section 270.65. There is also a guidance manual that is EPA/530-SW-86-008, published in July 1986. This RDD permit allows the landfills in drier climates to accept free liquids and place the liquids into the working face. This allows the waste to be compacted better and allows for faster waste degradation allowing for the increased landfill gas generation.

Once the landfill has been accepted into the RDD program, the amount of liquid waste accepted can be significant. The acceptance of liquid waste also creates more leachate, which has to be stored in evaporation ponds. Most dry climate landfills do not recirculate leachate, again based on CEC's experience, because recirculating is not a disposal method for leachate. The waste will become saturated and then there are issues with slope stability. The leachate is typically stored in evaporation ponds where the liquid is evaporated but a solid residue is left behind, which is typically removed from the pond and disposed of in the landfill.

