An Innovative Low-Energy Technology Application at Marine Corps Base Camp Pendleton

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This presentation describes the Navy's efforts to implement low-energy alternatives for managing the Site 7 Landfill at Marine Corps Base Camp Pendleton, California. A basic evapo-transpiration cap covers 28-acre landfill. To better control methane generation and migration from the landfill, the Navy is replacing the existing flare with a micro-turbine capable of generating 30 kW of electricity. In-addition, the Navy is installing 220 photo-voltaic cells (solar panels) to generate another 1.5 MW of electricity. The solar panels will be placed on non-penetrating foundations on top of the landfill cover. No impact is expected to the current landfill cover and drainage collection system. The Record of Decision (ROD) for the Site was not amended, as this was considered a land-use change, not a remedy change. An Explanation of Significant Differences (ESD) was added to the current ROD to incorporate the change. This project is being implemented with funds from the American Recovery and Reinvestment Act.