## CITY OF PHOENIX LANDFILL SOLAR SYSTEM LANDFILL GAS FLARE APS has installed a 10 MW RECYCLED photovoltaic system to generate Decomposing waste in landfills electricity on the unused land. ASPHALT ROADWAY naturally produces methane gas. The LEACHATE gas is collected through pipes and sent to the flare station. These flares Leachate is liquid that burn the methane at about 1650°F results from decomposing releasing acceptable levels of CO2, waste. The leachate at NOX, and water vapors. SR85 is pumped from the bottom of the liner and then reintroduced to the landfill to aid in decomposition. BURYING WASTE Each day trash is deposited and compacted. At the end of the day, the trash is covered with a layer of soil or tarps. CONDENSATE COLLECTION SUMP Condensate is collected and may be reintroduced to the landfill via the condensate recirculation pipe, or it may be pumped to the flare station and then evaporated. **Fabric Liner** HDPE "Waffle" Drainage Layer Gas Monitoring Probe 60 mil. HDPE Plastic Liner **Geosynthetic Clay Liner** Ground **ENVIRONMENTAL PROTECTION** Water Monitoring Well Groundwater wells are Portable litter screens are used to monitor for any used to trap and collect any impacts from the landfill stray waste. These can be to the groundwater moved based on wind beneath the landfill. directions. 2 To control dust, trucks **Probes monitor subsurface** spray soil areas with gas at various elevations to CONDENSATE LEACHATE COLLECTION PIPE LANDFILL GAS PIPE detect if any gases escape water, as needed. RECIRCULATION PIPE the landfill.