

NASA Jet Propulsion Laboratory Green Feasibility Evaluation

Steven Slaten, National Aeronautics and Space Administration, Pasadena, California

Keith A. Fields, Battelle, Columbus, Ohio

This presentation summarizes the evaluation of sustainable practices associated with construction and operation of the City of Pasadena Monk Hill Treatment System (MHTS). The MHTS is a 7,000 gallon per minute (gpm) drinking water treatment system designed to remove volatile organic compounds (VOCs) and perchlorate from groundwater extracted from four production wells. This system is being implemented as a remedial action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) program at the National Aeronautics and Space Administration's (NASA's) Jet Propulsion Laboratory (JPL). During the 1940s and 1950s, various chemicals, including VOCs and perchlorate, were used at the JPL facility and disposed of in subsurface seepage pits. This disposal practice led to chemicals in groundwater at levels requiring cleanup under CERCLA. NASA is funding removal of perchlorate and VOCs from the aquifer, working closely with the City of Pasadena to design and construct this new facility.

Sustainable practices include those supporting the achievement of the goals identified in Executive Order 13423. Specific areas that were evaluated by NASA and that will be discussed in this presentation include energy efficiency, renewable energy, water efficiency, and green construction.