

US EPA ARCHIVE DOCUMENT

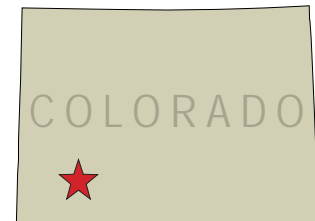


# Energy Efficient and Affordable Homes Planned for Former Mine Scarred Property

## *Sustainability Pilot Background*

EPA's Brownfields Sustainability Pilots provide technical assistance to assist communities in achieving greener, more sustainable results when redeveloping brownfields. These pilots also provide models for other communities across the country.

EPA provided San Juan County, Colorado with a green design for affordable, low income housing in the Anvil Mountain Neighborhood adjacent to the Town of Silverton in southwestern Colorado. EPA provided assistance to identify and evaluate energy savings and alternative energy options for the housing project. EPA support also included identifying additional resources and funding sources.



## *Anvil Mountain Neighborhood Project Background*

San Juan County and the Town of Silverton chose the Anvil Mountain Neighborhood as the site for an affordable, low income housing project. The property is the former location of the Rose Walsh Smelter site, a mine scarred brownfield, comprising 12 acres at 9,400 feet elevation. The project includes the development of up to 49 housing units ranging from 1,800 to 2,200 square feet. Prior to the Brownfields Sustainability Pilot, the town began site investigations using EPA regional Targeted Brownfields Assessment support. Site cleanup is being accomplished using an EPA Brownfields Cleanup grant and other matching and leveraged funds.

The town hopes to combine green design and construction with affordable housing. Given the town's location, energy costs for heating and cooling can be high. Therefore, energy savings are a priority. Another priority for redevelopment is to preserve historic aspects associated with the town's mining and railroad legacy.

## *Project Highlights*

EPA's assistance to the town and county focused on evaluating site conditions and plans, identifying and evaluating energy efficiency options, and providing recommendations regarding potential resources and funding approaches the town may pursue to implement the recommendations. Silverton received assistance from the National Renewable Energy Laboratory (NREL) through a separate Technical Assistance Project funded by the U.S. Department of Energy. Using energy modeling information provided by NREL, energy savings strategies were identified including:

- Solar Orientation
- Glazing
- Shading
- Thermal Mass
- Isolated Gain Passive Solar
- Building Envelope

NREL designed energy conservation options based on the 2006 International Energy Conservation Code that was adopted by the county as the baseline building code for the Anvil Mountain Neighborhood. In addition, EPA provided recommendations for next steps to achieve successful funding and implementation of the development effort.

San Juan County expected that site cleanup would be completed in time for housing construction to begin in 2009. Since additional soil remediation was required in spring and summer 2009, construction will now begin in 2010. The county is moving forward with implementing recommendations from the pilot project and NREL's energy modeling. Specifically, the county is adjusting building orientation, window types (glazing) and window area.

## ***Challenges and Lessons Learned***

### **Experienced Developers Help Facilitate Project Implementation**

San Juan County currently serves as the developer for the project and may find securing traditional funding a challenge since it has no prior experience building similar developments. This is especially true in the challenging lending environment that currently exists. Accordingly, the EPA technical assistance team suggested that the county hire a developer experienced in affordable housing and sustainable redevelopment as the project moves forward given that banks prefer to lend to entities with experience.

### **Diversifying Project Funding**

The county originally counted on funding from the State of Colorado to cover two thirds of project costs. That funding was no longer available after the state suffered from the national financial crisis. The project faces a funding shortage of between \$326,000 and \$764,000. EPA assisted in identifying grants and other potential funding sources to help diversify the pool of funding sources.



*A typical home in Silverton, Colorado.*

## ***Sources for Additional Information***

For more information on this project, please see the full Anvil Mountain Neighborhood technical assistance report at: [http://www.epa.gov/brownfields/sustain\\_plts/factsheets/anvil\\_mountain\\_brownfields\\_report\\_final.pdf](http://www.epa.gov/brownfields/sustain_plts/factsheets/anvil_mountain_brownfields_report_final.pdf)

Additionally, please see the San Juan Development Association Web site at: <http://www.sanjuan2000.org/housing.htm>

## ***Regional Contact Information***

For more information on the Anvil Mountain Neighborhood project, please contact:

**Sabrina Forrest**  
**EPA Region 8**  
303-312-6484  
[forrest.sabrina@epa.gov](mailto:forrest.sabrina@epa.gov)