

## **Managing water quality**

*Rialto, California*

The landfill for a southern California community was performing well. But in its role as a ponding basin for stormwater runoff, not so much, to paraphrase the Environmental Protection Agency (EPA). The landfill receives a fair amount of rain water runoff, and new EPA regulations now restrict overflow from collecting in landfill basins. So, engineers needed an immediate solution.

Choosing corrugated high-density polyethylene (HDPE) pipe provided the community with significant savings over the \$285 per foot (plus labor) that reinforced concrete pipe would have cost. That meant the project came in under the target cost. Installation began in August 2003. The completion date was scheduled for early 2004.

The project called for the stormwater to be diverted from the landfill to a creek via collection pipes that ranged from 24-in to 48-in diameters. That water then would be funnelled to 60-in pipe before outletting into a rip rap filter that settles the sediment and some pollutants before it reaches the stream.

"Quantity of stormwater is no longer the only consideration for drainage projects," said Camille Rubeiz, director of engineering for the Plastics Pipe Institute (PPI). "Managing the quality of the water is now a way of life for civil engineers and community leaders. Our manufacturing members offer solutions to their challenges."