

## ENVIRONMENTAL COMMITMENT FOR TODAY AND THE FUTURE

Daybreak has been carefully planned to incorporate key social and environmental features in its design. These important choices demonstrate Kennecott Land's commitment to sustainable development and environmental quality.

- All Kennecott Land homes are Energy Star-certified, making it the largest single Energy Star community in Utah and one of the largest in the country.
- More than 1000 acres or 30% of Daybreak has been planned as "open space." This open space will be irrigated with secondary water and landscaped with water-wise native plants.
- Three-quarters of all home construction waste is being recycled in a unique program with on-site builders.
- Our storm water management system has been designed to retain 100 percent of storm water on site in an effort to preserve precious groundwater resources.
- Kennecott Land has a rigorous dust control program for construction activities far exceeding standard industry practice.

Combined, these efforts will help ensure our natural resources will be available to future generations, and that Utah will remain a healthy and desirable place to live.

Kennecott Land is the only land developer in the USA with an environmental management system certified by the International Organization for Standardization (ISO 14001 certification).

Envision Utah awarded Kennecott Land with two Governor's Awards for Quality Growth for sustainable development achievements at Daybreak. In 2002 Kennecott Land received the Grand Achievement Award for Design and Planning and in 2003 an Award of Merit for ecosystem approach to planting design, plant procurement and landscape maintenance.

## Kennecott Land

5295 South 300 West, Suite 475  
Murray, Utah 84107  
801.743.4624

Rio Tinto  
www.riointo.com  
ISO Environmental Certification  
www.iso.org

Additional information can be found online at:

Kennecott Land  
www.kennecotland.com  
Kennecott Utah Copper  
www.kennecott.com  
U.S. Environmental  
Protection Agency  
www.epa.gov

Jordan Valley Water  
Conservancy District  
www.jvwcd.org  
Utah Department of  
Environmental Quality  
www.eq.state.ut.us

## DAYBREAK'S ENVIRONMENTAL HISTORY



## INTRODUCTION

Kennecott Land is dedicated to building enduring communities on the Salt Lake Valley's West Bench. We manage our land holdings and build our communities in ways that ensure future generations will have the opportunity to enjoy great neighborhoods, beautiful land, abundant water, and clean air.

As part of Rio Tinto, a world-wide mining company, Kennecott Land is well-versed in the reclamation needs of mining operations and is sensitive to the public's questions and concerns about past mining activities. We hope the information contained in this report will help you understand our significant work and commitment to ensure clean and safe soil and water in our first community of Daybreak.



Peter McMahon,  
President of  
Kennecott Land

## SOIL CONDITIONS AT DAYBREAK

Kennecott Land has met the U.S. Environmental Protection Agency's standards for soil conditions for residential development at Daybreak. A small part (around 13%) of the community sits on the former site of evaporation ponds used in conjunction with mining operations in Bingham Canyon. The following chronicles the development and removal of soil beneath those holding ponds.

- In 1936, the Bingham mine constructed evaporation ponds to store and evaporate mine water originating from the Bingham Canyon water shed.
- Over time additional ponds were constructed to increase capacity and the area became known as the South Jordan Evaporation Ponds (SIEP).
- The ponds were used until 1965 and after that for periodic storage of rainwater until 1987. The entire area was discontinued for holding pond use in 1987.
- Studies in the early 1990s concluded that there were elevated levels of heavy metals in the soil where the holding ponds had been located. Kennecott Utah Copper took responsibility for the impacts and agreed to reclaim and remediate the SIEP area. This was undertaken in agreement with the U.S. Environmental Protection Agency (EPA).
- A massive clean-up operation began in 1994 and involved the removal of pond sediment and six additional inches of underlying native soil to an off-site location. Some sediment was deemed appropriate to consolidate on-site. In 2001 the EPA issued a Record of Decision that stated that the clean-up remedy was complete, that 'no further action' was needed and the site was suitable for residential development. Despite the EPA's sign-off, Kennecott Land went beyond standard industry practice by removing the remaining consolidated pond sediment from the site.

## HISTORY

Utah's first mining district was born in the early 1860s when reports of significant mineral deposits in the Ogurth Mountains were confirmed. Over the next 140 years the industry went through enormous changes in both prosperity and modernization. In 1989, one of the world's largest mining companies, Rio Tinto, purchased Kennecott Utah Copper. In 2001, Kennecott Land was created to manage and develop the non-mining land and water assets acquired over the past century by the copper company.

## WATER AT DAYBREAK

Residents at Daybreak get their drinking and household water from the Jordan Valley Water Conservancy District as do other residents of the southwest Salt Lake Valley. Parks and open spaces at Daybreak will be irrigated through the use of an innovative secondary water collection and distribution system. Secondary water (originating from Utah Lake) will be piped in through existing canals, treated at a holding pond on the western edge of the property, and then stored in a recreational lake on Daybreak property. The water will then be distributed for irrigation to the parks and open spaces adjacent to the lake.

## SOUTHWEST VALLEY GROUNDWATER

More than 300 feet beneath the surface of the southwest valley (including South Jordan, West Jordan, Riverton and Herriman) is a plume of groundwater that has been impacted by early mining operations in the Ogurth Mountains. This water was found to contain higher than normal levels of sulfate. The presence of the groundwater plume does not constitute a health or safety risk or concern to individuals who live, work, or recreate at Daybreak. However, Kennecott Utah Copper is working with the Utah Department of Environmental Quality and the Jordan Valley Water Conservancy District to implement a clean-up plan that will have long-term environmental benefits. Here are the facts:

- The groundwater plume is approximately 300 feet beneath the surface of Daybreak and is not used at Daybreak or any other community in the southwest valley.
- In August of 2004, Kennecott Utah Copper signed an agreement to perform a groundwater clean-up in conjunction with the Utah Department of Environmental Quality and the Jordan Valley Water Conservancy District.
- The project has a 40-year timeline and involves the construction of reverse-osmosis filtration plants that Kennecott Utah Copper will be financing. At the end of this period the size of the plumes will have decreased by up to 90 percent.
- This cleanup will provide an extra 7000 acre feet of clean water per year to the Jordan Valley Water Conservancy District.