Changes to the DZP process flow sheet

Three key process changes will introduce environmental, value chain and employment benefits to the project:

- Forced evaporation replaces the use of liquid residue storage facilities, meaning more water can be recycled into the process and overall water consumption is halved.

- The metal hafnium will now be produced, after market research revealed significant interest in its use for high-temperature superalloys, specialty ceramics and computer microchips. Alkane worked with ANSTO to develop a process for recovering hafnium, which is now in the pilot testing phase. The DZP stands to become a major world supplier of this critical element.

- Processing of rare earth elements will occur onsite to a greater extent, increasing the volume of high quality products produced by the site.

Construction of site infrastructure

Commencing around March 2016, and dependent on the financing being in place, the first phase of construction will involve the development of site infrastructure: a 27km length of Obley Road will be upgraded to B-Double standard; electricity, gas and water pipelines will also be installed.

Some earthworks are likely to commence onsite during 2016 to prepare for construction of the processing plant, which is expected to start towards end-2016 or early 2017.
Employment opportunities
Alkane estimates the DZP will provide permanent employment for approximately 250 people. Recruitment is expected to occur in 2017-2018. Jobs will span:

- engineers, metallurgists, chemists, scientists
- administration, accounting, logistics
- transport, mining, operators, security, cleaning
- tradespeople – mechanical, boiler making, electrical (including apprentices)

Approval milestones
- State project approval: 28 May 2015
- Federal Environmental Protection & Biodiversity Conservation Act approval: 24 August 2015
- Mining Lease and Environment Protection Licence anticipated by end-December 2015

Timetable

Benefits to the region
- +$20M in road and bridge upgrades
- +$10M p.a. in local utilities
- +$10M p.a. in state royalties
- +$5M p.a. in local goods and services
- +$1M in annual rates, $600k in road maintenance
- +$30M p.a. in salaries in operation

Continued reduction in impact
In addition to the 50% reduction in water consumption, several other improvements are being implemented as the result of earlier feedback from the community:

Taronga Western Plains Zoo – Noise impact has been addressed by using a special surface treatment for Obley Road, plus barriers to reduce noise levels at breeding enclosures.

Traffic and Transport – Transport operations and shift change-over schedules will be designed to reduce noise overnight and avoid school bus timetables and peak traffic periods as much as possible.

Reduced site footprint – Due to the use of forced evaporation, liquid residue storage will be reduced by 90% and total site disturbance will be reduced by 300ha.

For Frequently Asked Questions (FAQ) including the questions asked at the recent community meetings please go to http://www.alkane.com.au/index.php/faq

Changes to DZP site footprint

Original Plan (EIS)

Modified Plan

Taronga Western Plains Zoo

Traffic and Transport

Reduced site footprint

Benefits to the region

Changes to DZP site footprint
Meet the Dubbo Zirconia Project Community Consultative Committee

The DZP Community Consultative Committee (CCC) has been established to facilitate communication about mine operations and environmental performance, providing a forum for open discussion between mining companies and the community. It comprises an independent chairperson, along with representatives of the local community, local council and Australian Zirconia Limited (AZL).

Peter Stanford – Independent Chair
Peter Stanford served in Australia’s diplomatic corps for three decades, including as Ambassador. With vast experience in mediation and public policy, Peter is extremely well positioned to balance resource, environmental and community interests as the Chairperson of the DZP CCC. Photo by: The Dubbo Weekender

Councillor Allan Smith – Dubbo City Council
Representing the Dubbo City Council on the DZP CCC, Allan has been a council member since 1991, including seven and half years as Mayor between 2000-2011. A former fire fighter, Allan has served on several community councils and committees over the past 20 years.

Helen Whiteley
Helen and her husband Ross run a dynamic mixed farming enterprise at “Cockleshell Corner”, Toongi, directly neighbouring the DZP. A local since 1983, Helen aims to represent the interests of fellow farming families on the DZP CCC.

Manny Portelli
A local for over two decades, Manny and his wife Sharon operate a mixed farming property on Obley Road and the ESP Accounting practice in Dubbo. Manny’s own vested interest as a close neighbour and a desire to provide a liaison point between the community and Alkane motivated him to join the DZP CCC.

Janice Hosking
Janice has been an active member of the Dubbo Field Naturalist & Conservation Society for 25 years and a resident of the Dubbo area since 1979. Her long-term interest in natural history motivated her to join the DZP CCC to represent the environmental needs of the community.

Darren Toomey
Darren is the CEO of the Dubbo Local Aboriginal Land Council (DLALC). Passionate about Aboriginal culture and heritage, Darren joined the DZP CCC to represent the interests of DLALC members and all Australian Aboriginals in the community.

Mark Gardner
Mark is a Dubbo-based agricultural consultant with Vanguard Business Services, and has had a number of community representative roles in the past 20 years. He joined the CCC to ensure the DZP is informed of any community concerns related to the mine’s operation and environmental performance.

Continued overleaf...
Nic Earner – Alkane and Australian Zirconia Limited
Since joining Alkane Resources as Chief Operations Officer in September 2013, Nic has played a key role in finalising development of the DZP and driving the front end engineering design in preparation for construction. This makes him a key voice for Alkane on the CCC, as well as an ear for community concerns.

Mike Sutherland – Alkane and Australian Zirconia Limited
Mike is a former geologist and farmer who works mainly in the areas of environmental management, community relations and risk management. As Alkane General Manager NSW and a long-time Dubbo district resident, Mike is passionate about the role mining can play in building resilience in regional communities.

Mike’s presentation and video supported two curricular units: “Where do your electronic devices come from?” (elements and technology) and “The Land Down Under” (minerals, rock cycle and mining). In addition to the educational content, the visit informed students about local mining enterprises and potential future employment opportunities.

Clontarf representatives visit DZP and TGO
A group of nine boys representing the Clontarf Foundation visited the DZP site and Tomingley Gold Operations on 20 October. The visit was designed to give the boys information about career mining opportunities in the region and improve their understanding of modern mining. In addition to a tour of the TGO site, the boys were entertained by stories from some of the employees. The Clontarf Foundation exists to improve the education, discipline, life skills, self-esteem and employment prospects of young Aboriginal men (Years 7 to 12).

Community

Presentation at St John’s College
Year 7 students at St John’s College in Dubbo heard first-hand about both the DZP and Tomingley Gold Operations when Alkane General Manager NSW, Mike Sutherland, gave a presentation on 3 November. Mike also handed around samples of the ore and final products from both projects, as well as a half-ounce minted gold coin manufactured with product from Alkane’s Peak Hill Gold Mine.