

## THE SAVINGS

### SAVINGS SUMMARY

- QUANTITY OF HAZARDOUS WASTE PER ANNUM: 1200Tonnes
- COST OF HAZARDOUS WASTE DISPOSAL IN 2007/2008: \$420/Tonne
- COST OF HAZARDOUS WASTE DISPOSAL IN 2008/2009: \$670/Tonne
- DIRECT SAVINGS 2008/09: Conservatively \$900,000

### STEP 4: REALISE THE SAVINGS

With the impending export of the loaded containers, and the ongoing blending operation, BlueScope Steel was able to realise the savings associated with the iron value of the filtercake and its subsequent diversion from landfill in early 2008. Ongoing direct savings will be as a minimum \$900,000 per annum.



Shipping containers for export



Closing the loop – steel production



Australian Sustainable Industry Research Centre Ltd

**ASIRC ASSISTS BLUESCOPE STEEL & BIS INDUSTRIAL LOGISTICS TO REDUCE 1200T HAZARDOUS WASTE & SAVE \$900,000 PER ANNUM**

**ASIRC JOINED FORCES WITH BIS INDUSTRIAL LOGISTICS AND BLUESCOPE STEEL TO DIVERT WASTE FROM LANDFILL THROUGH AN INNOVATIVE PARTNERSHIP PROJECT**

**ASIRC SUPPORTS ITS INDUSTRY MEMBER COMPANIES BY IDENTIFYING OPPORTUNITIES FOR INDUSTRY TO REDUCE HAZARDOUS WASTE TO LANDFILL.**



Building 4W  
Monash University, Gippsland Campus  
Churchill Victoria 3842

Phone: 03 5122 6663

Fax: 03 5122 7168

E-mail: [info@asirc.org.au](mailto:info@asirc.org.au)

# ASIRC ASSISTS BLUESCOPE STEEL AND BIS INDUSTRIAL LOGISTICS TO REDUCE 1200TONNES HAZARDOUS WASTE AND SAVE \$900,000 PER ANNUM

## STEP 1: IDENTIFY THE RESOURCE

A significant project was undertaken with ASIRC in 2007 to implement large scale diversions of Hazardous waste from landfill, in line with the existing Victorian Government waste minimisation targets of zero hazardous waste to landfill by 2020.

The project is aimed at identifying any key waste streams that have known avoidance or reuse opportunities at source. Close work between ASIRC and BIS Industrial Logistics resulted in the launch of an upstream avoidance investigation into a major resource stream onsite at BlueScope Steel, Western Port for which BlueScope Steel had been seeking a sustainable solution for some time. The resource was iron bearing filtercake, produced as a result of onsite waste water treatment and BlueScope Steel had been aiming for landfill avoidance for a significant length of time. The filtercake was currently being disposed to landfill as hazardous waste at the rate of \$420/Tonne for approximately 1200Tonnes/annum.

Increasing landfill levies added to the commercial drivers for this initiative. Accompanied by the timely allocation of dedicated resources through the HazWaste funded project, this opportunity has been realised.



Iron bearing filtercake in bulk bins

## STEP 2: EXPLORE THE OPPORTUNITIES

The preliminary investigation showed the filtercake was high in iron and low in contaminants, and consequently a number of opportunities for reuse were identified. The most promising of these lay in steel manufacturing, specifically as an adjunct to an existing reuse stream and market developed by BlueScope Steel for mill scale export from the Western Port site. Trials began, in order to determine the technical and commercial feasibility of the option.



Blending trials of filtercake & mill scale



The blended filtercake & mill scale

## STEP 3: IMPLEMENT THE OPPORTUNITY

The trials showed the reuse of filtercake blended with mill scale as an iron rich additive was technically and commercially feasible. Regulatory approvals were sought and granted, and a blending and materials handling process was subsequently developed using shipping containers as the storage unit for overseas transport.

The first batch of blended product was loaded into containers in April 2008.



The blended product in containers



A shipping container ready for export