

ABN 77 084 358 814

# Intec Zeehan Residues Pty Ltd

*Superior and Sustainable Metals Production*

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29 April 2009

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**Intec Zeehan Residues Pty Ltd**  
**Retention Licence No. 3/1996**  
**2008 Annual Report.**

Intec Zeehan Residues Pty Ltd (Intec) retained Retention Licence 3/1996 for the complete 2008 reporting period.

No developmental or operational activities were conducted by Intec during the reporting period on the stockpile.

Previous plans for the stockpile have not been realised owing to the general world market for the metals and the resultant effect of those markets on Intec.

The site of the Zeehan Residues was inspected by Intec management during 2008 to confirm the condition of the stockpile. The stockpile remained essentially in its pre-existing condition throughout 2008.

During 2009 Intec will review its plans for the stockpile, taking into consideration the developments within Intec and the market for the Zinc and Lead products potentially extractable from the stockpile.

It is the intention of Intec to continue to retain Retention Licence No. 3/1996 during 2009.

Yours faithfully

Brian Banister  
Managing Director  
Intec Zeehan Residues Pty Ltd.



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## SUMMARY OF PAST AND PROPOSED PROCESSING ACTIVITIES

### BACKGROUND

Intec Zeehan Residues Pty Ltd (a wholly-owned subsidiary of Intec Ltd) in late 2006 acquired ownership of Retention Licence 3/1996 on which resides a significant stockpile of lead smelter residues (Zeehan Slag Dump) located near the township of Zeehan, Tasmania. The Zeehan Slag Dump contains 450,750 tonnes grading 13.3% Zinc, 1.7% Lead, 54 g/t Silver and 50 g/t Indium. The material has been in its existing form for nearly a century awaiting an appropriate technology to economically recover the contained zinc, lead and minor metals. The Zeehan Slag Dump has been assessed as a secondary feedstock for the Intec Hellyer Residues Project (IHRP) and this has now advanced through a series of preliminary stages to the point where it will shortly be subject to a feasibility study.

### PAST PROCESSING ACTIVITIES

During late 2006, the Intec Hellyer Metals Demonstration Plant (located in Burnie, Tasmania) successfully treated approximately 6 tonnes of ground slag bearing 13% Zinc, 2% Lead, 51g/t Silver and 37g/t Indium. Two test campaigns were performed using 4-day continuous 24 hour operations, with the key objectives of determining leach extractions for contained metals and the production of an environmentally acceptable leach residue. The key results of the demonstration plant campaigns were:

- Leach behaviour was insensitive to pH (0.9-1.6) and residence times (minimum of 2h required) for both zinc and lead extractions.
- Average metal extractions across the entire trial were:
  - 79% Zinc;
  - 89% Lead;
  - 28% Silver; and
  - 72% Indium.
- The best operable pH was determined to be 1.3, while a lower pH resulted in high silica extraction that adversely affects the behaviour of solid-liquid separation.
- Good settling rates were evident irrespective of pH, whereas only high filtration rates were apparent at elevated pH (1,500kg/m<sup>2</sup>/h at pH 1.3).
- The leach residue was determined to be environmentally acceptable for disposal according to the results of industry standard testwork.

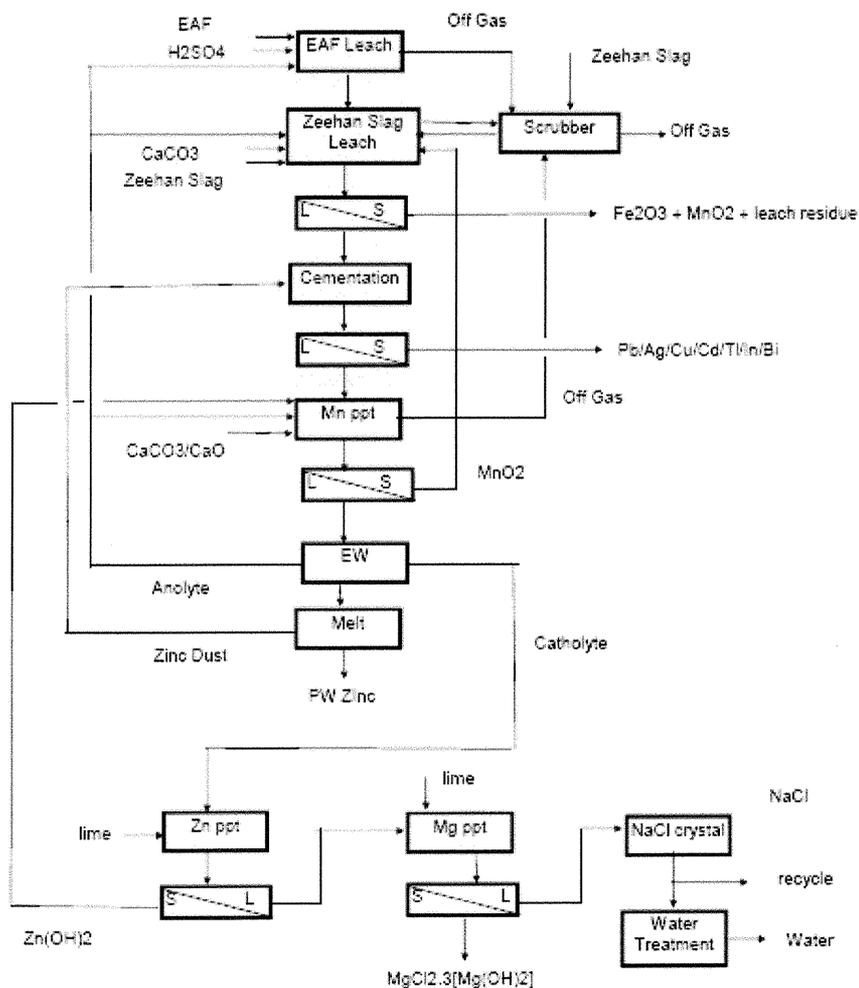
The above information has been adapted into the process flow sheet for the IHRP.

## PROPOSED PROCESS & PROJECT DEVELOPMENT ACTIVITIES

The next phase of process development for the commercial treatment of the Zeehan Slag Dump will evaluate the viability of this material as supplemental feedstock for the IHRP. This is envisaged to progress through two stages, as outlined below;

### Stage 1 – Unit Operation Assessment at Demonstration Plant Scale

Live liquor advancing from the leaching of electric arc furnace dust (EAF dust) will be treated with Zeehan slag in order to neutralise the residual acid in the leach liquor. The proposed flow sheet is shown below in Figure 1. The key factors that need to be evaluated include: slag consumption, metals extraction, solid-liquid separation and environmental assessment of the leach residue. In addition, the flow sheet layout and design criteria will be finalised, mass and energy balances developed and equipment lists compiled. This information will be used as inputs into the Feasibility Study (stage 2).



**Figure 1: Intec Hellyer Residue Project conceptual flowsheet incorporating treatment of the Zeehan Slag Dump**

### Stage 2 - Feasibility Study for Treatment of the Zeehan Slag Dump in the IHRP

Treatment of the Zeehan Slag Dump in the IHRP will be subject to a feasibility study by an external engineering firm during 2008/2009. The current focus of the Intec Group is the development of the IHRP

based on the treatment of EAF dust as the primary feedstock. The status of the development of the IHRP as at the end of January 2008 is as follows:

- Development Approval has been received from Waratah-Wynyard Council after receiving a positive assessment and required approval conditions from the Tasmanian Department of Tourism, Arts and the Environment. This approval permits the full IHRP Development, including the stockpiling of EAF dust at Hellyer, construction and operation of the Intec Process plant, and disposal of the environmentally-stable residues from the plant.
- Building Permit has been received from Waratah-Wynyard Council, which allows the retrofitting of an existing shed adjacent to the EAF dust bunker storage site.
- The Consignment Authorisation has been received from the Tasmanian Department of Tourism, Arts and the Environment, permitting the importation of EAF dust from Victoria and NSW.

Following receipt of these approvals, site works were initiated for storage of EAF dust as the primary feedstock for the IHRP. An open area nearby the proposed plant site has been modified to accommodate the storage of up to 25,000 tonnes of EAF dust in a temporary storage bunker.

Immediately adjacent to the bunker storage pad, an existing shed is being retrofitted to act as a receiving station for the bulk EAF dust, which will be brought to the IHRP site in sealed containers. The EAF dust will be unloaded under controlled conditions into the shed, and then conditioned with 5-10% moisture to improve the materials handling properties prior to transfer to the storage bunkers. The moisture is added after transport to avoid needless expense of transporting contained water.

Intec continued to receive EAF dust arisings from OneSteel's Laverton and Waratah steel mini-mills throughout the December 2007 Quarter, with the stockpile now having grown to over 26,000 tonnes via the receipt of 3,500 tonnes of very high-grade (averaging almost 40% Zn) EAF dust during the quarter.

Overall, the progress of Intec's wholly-owned IHRP remains on-track for financing and construction in 2008, and commissioning and operation in 2009. Every major milestone for the Project in 2007 was achieved on schedule, keeping the Project to the planned timeline.

During the first quarter of 2008, Intec will finalise and review the engineering data from the campaign operations at the Burnie Demonstration Plant, and will narrow the economics published in November 2007 to generate an investment proposal for the IHRP, which will be available at the end of the March 2008 Quarter. Intec will then seek to finalise the project finance and/or project partners during the June 2008 Quarter.