

Quarter 4:2015

Strathalbyn Community Consultative Committee



TERRAMIN AUSTRALIA LIMITED



General Update

Joe Ranford *General Manager*

- ▶ Terramin general update
 - ▶ Angas Zinc
 - ▶ Tala Hamza
 - ▶ Bird in Hand
- ▶ AZM upcoming activities
- ▶ Quarterly Environment Report
- ▶ Closure planning progress update

The logo consists of a stylized orange and blue shape resembling a mountain or a letter 'A' with a blue swoosh above it.

Angas Zinc Mine Update

- ▶ Ongoing work with DSD about closure designs
- ▶ Surprise visit from Alexandrina Council regarding post-closure land use of Angas site
- ▶ Secured material required for closure earthworks, preventing additional land disturbance
- ▶ Lime storage for Hillgrove Resources
- ▶ Mine void recharge as modelled

Terramin General Update

- ▶ Algerian Exploration License re-issued
- ▶ Tala Hamza progress after successful visit of Algerian delegation to China
- ▶ Tala Hamza revised feasibility study is positive and meets the objectives and expectations of the partners
- ▶ Planning for geotechnical and hydrogeological drilling



Figure 1: Visit of Jinchuan Underground Mine No 3



Bird in Hand update

- ▶ Approved drilling programme for collecting metallurgical and geotechnical engineering data to feed into mine design
 - ▶ geotechnical characterisation and groundwater modelling to support mine design and metallurgical testing to provide recoveries, Angas plant modification and tailings classification
- ▶ Next stage is Retention Lease
- ▶ Landscape design underway to inform revegetation planning for Winter 2016
- ▶ Terramin's intention is to develop the Bird in Hand Gold Project and process ore at Angas site
- ▶ Provides 60 jobs at Woodside and 40 at Strathalbyn
- ▶ Current scope is for 12 loads of ore delivered daily to Angas site



Upcoming AZM Activities

- ▶ TSF annual audit and inspection - 23rd February
- ▶ Annual compliance report - 31st March
- ▶ To determine the gold tailings characterisation, metallurgical and geochemical properties for carbonate tail potential neutralising effect on current tailings



Quarterly Environment Report

Matt Daniel *Environment and Community Superintendent*



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AZM Environment General Update

- ▶ Ecosystem Function Analysis field work completed in November, report due early 2016
 - ▶ Early results indicate rapid growth of natives in Eastern SEB areas
- ▶ Rabbits and hares baited onsite with Pindone
- ▶ Annual Compliance Report due 31 March 2016



Flinders university students learning EFA techniques in the SEB areas in October 2015

Spigot 6 Reduced

- ▶ TSF tailings reduced with excavator at Spigot 6 as recommended by ATC Williams in 2015 report
- ▶ ATC Williams will return for annual inspection on 23rd February 2016





QER Correction

- ▶ Regional bore raw data contained a typing error - graphs were correct
- ▶ This has been corrected and updated - the pdf is on our website
- ▶ No instances above leading indicators or PEPR criteria limits

Parameter	Units	PEPR Criteria	Leading Indicator	Oct-15		
				RG1	RG4	RG8
pH	pH	8.70	8.15	7.4	7.46	7.5
EC-L	uS/cm	68500	53670	12400	11000	30800
TDS	mg/L	25000	24843	6660	6070	21000
As-T	mg/L	0.090	0.038	0.002	0.001	0.003
Cd-T	mg/L	0.0100	0.004	0.0004	0.0002	0.0004
Pb-T	mg/L	0.820	0.262	0.008	<0.001	0.071
Zn-T	mg/L	4.400	1.704	0.019	0.002	0.791
Se-T	mg/L	0.130	0.088	0.04	0.02	0.01
Fe-T	mg/L	232.00	69.02	0.018	0.006	0.182



Terramin Website - AZM

- ▶ Terramin now has Angas Zinc Mine Community and Environment Sections
- ▶ Community
 - ▶ Next SCCC meeting information
 - ▶ Terms of Reference
 - ▶ SCCC minutes, agendas and presentations
 - ▶ Newsletters
- ▶ Environment
 - ▶ PEPR (current version)
 - ▶ Quarterly Environment Reports
 - ▶ Annual Compliance Reports

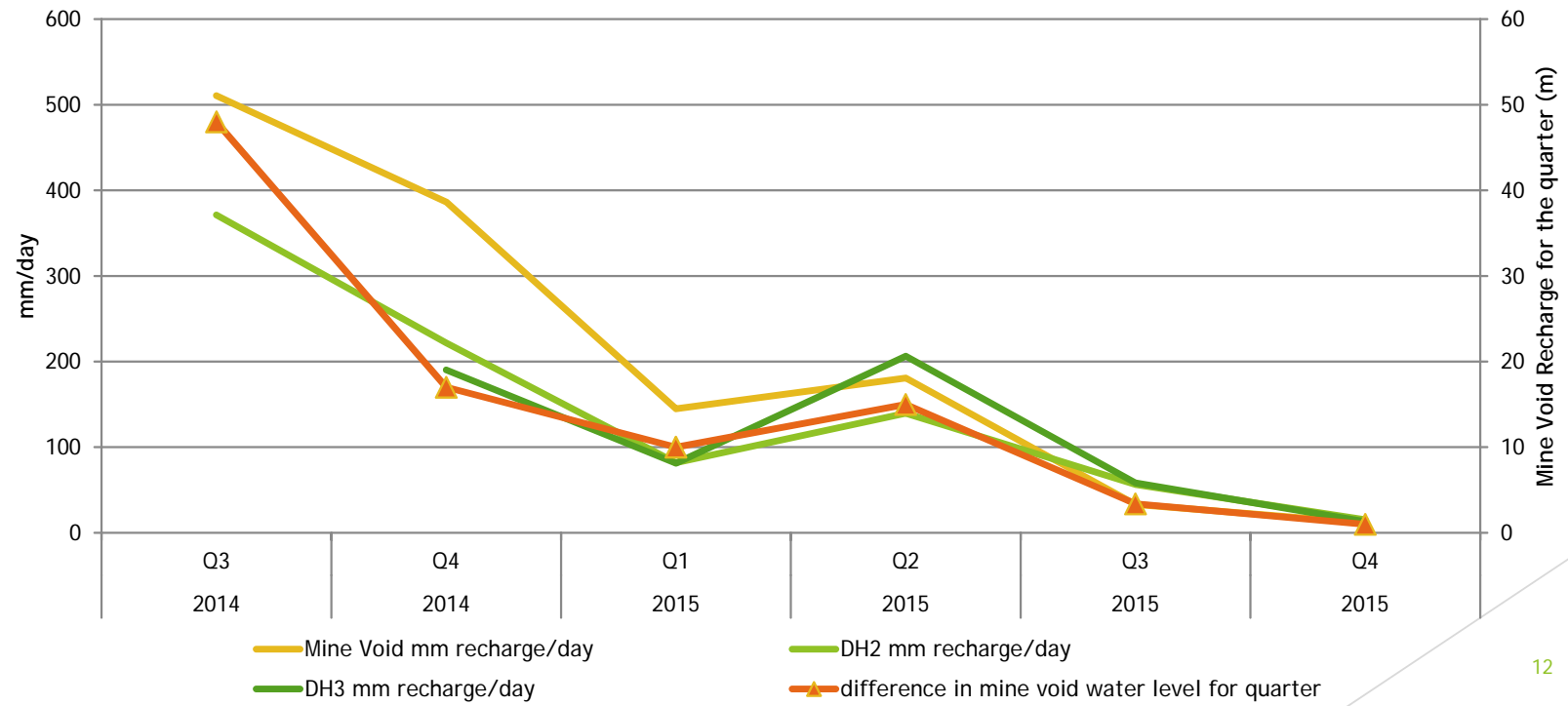
<http://www.terramin.com.au/>



Mine Void Recharge - mm/day

- ▶ Recharge in the mine void, DH2 and DH3 over the recharge phase of the mine void
- ▶ Trends slowing dramatically as modelled

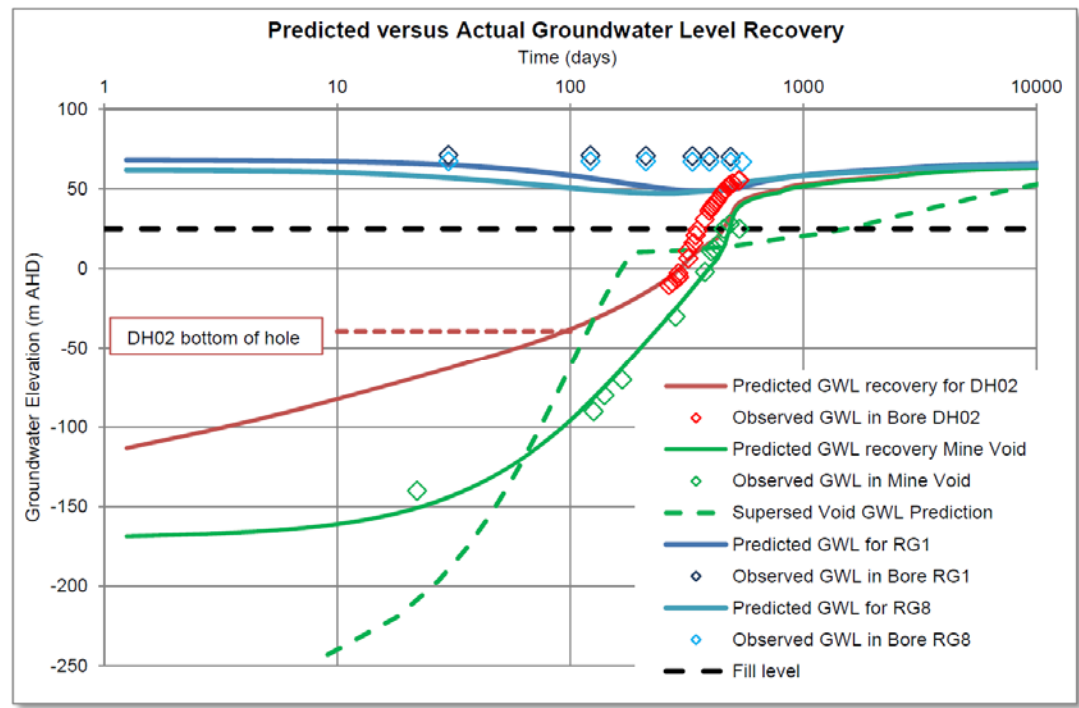
Estimated recharge rates (mm/day)





Mine Void Recharge - model recalibration

- ▶ Model recalibrated in 2015 with real data collected over past 18 months
- ▶ Matches real time trend demonstrated in recharge figures per day for mine void, DH2 and DH3 and per quarter for the mine void



Recap - Rain Event 5th November 2015

- ▶ Burnside Road Burnside Creek bridge - 6.40pm
- ▶ 34mm at Strathalbyn Post Office (BOM, 2015)
- ▶ 17mm at AZM onsite meteorological station
- ▶ 0mm at Summerhill Road, south of AZM



Closure Plan Update

Matt Daniel - Environment and Community Superintendent



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Closure Plan Progress Update

- ▶ Failure Modes Effects Analysis workshop held in October and risks updated in line with works undertaken by Terramin thus far to reduce risks associated with AZM during Closure
- ▶ Fortnightly operational closure meetings began in January
- ▶ Closure planning schedule - submission in April 2016
- ▶ TSF capping modelling updates
 - ▶ Model has been provided to O'Kane for review
 - ▶ Feedback received on 18th February 2016



Questions?