



**Investigation Report of a serious injury at
Metropolitan Colliery on 28 May 2004**

Location:	Helensburgh Coal Pty Ltd
	Metropolitan Colliery
	Longwall11 installation roadway
Date:	28 May 2004
Classification:	Coal
	Underground
	Serious injury
	Employee
Safety Alert:	SA 04 09
	Broken chain connector results in serious injuries
Work Task:	The work task was to relocate slack AFC chain on the AFC pan line during installation of a new longwall faceline. The longwall shearer had two 20mm herc alloy chain assemblies reeved around the tailgate ranging arm used to pull the slack AFC chain.
Factors:	A 20mm herc alloy chain connector was placed in side load. Due to two chain links being connected to one side of the chain connector. The chain connector failed when over loaded. As a result a component of the failed chain assembly struck the shearer operator causing a severe head injury. Several chain equipment failures had occurred prior to the event causing the injury during activities to remove the jammed AFC chain from the AFC drive sprocket.
Key Words:	standards of mechanical engineering
	chain management system
	supervision and training
	fatigue management
	working load limit
	Grade 80 connector
	AS 2321 Short link chain for lifting purposes.
	AS 3775 Chain slings Grade T,
	AS 3776 Lifting components for Grade T chain sling
	Test Safe report No 25634
ETRS report NAM 04-0293M	
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