



# Prevention Better than Cure

**Action has been taken at Blenkinsopp in Northumberland following predictions that minewater will appear there in late 2004.**

**Construction of the first phase of a minewater treatment scheme is nearing completion at the former Blenkinsopp Colliery near Haltwhistle in Northumberland.**

The preventative scheme is designed to deal with minewater discharges which are expected to emerge from a former air shaft, known as the Smallburn shaft, at the disused colliery site.

A decision to build the treatment scheme in two phases was taken following predictions that minewater will appear there between September 2004 and March 2005.

Phase one saw construction of the minewater treatment site infrastructure completed in September 2004. The second phase will involve a pumping test and pump operation period once the minewater emerges.

Two existing settlement ponds associated with the former mine are located approximately 50m to the north west of the Smallburn shaft. These ponds were in a poor state of repair and have been refurbished as part of the scheme to allow initial settlement of the minewater and removal of a large quantity of the iron.

Two new wetlands have been constructed and contain reeds to allow the minewater to receive its final polishing before being discharged into the Tipault Burn.

To enable the minewater to be passed from the shaft to the ponds, the top 20m of the shaft has been treated with a grout curtain to ensure the rising minewater

does not escape through any voids and pollute the Tipault Burn.

A channel will run from the shaft to the ponds via an aerator that will ensure that the water is oxygenated and so commence the treatment of the minewater.

As part of the access works, an old bridge has been demolished and upgraded to allow a 40 ton weight limit, enabling chemicals to be delivered if the initial results prove that they are needed.

"Predictions indicate that initially the water will have a low pH and dosing with chemicals will be needed for a period of up to seven years. After this period, it is believed that they will no longer be required. It is also hoped that the pump may be removed to allow the minewater to flow through the scheme naturally by gravity, delivering reduced costs," says Alistair Byfield, Project Manager with the Authority.



## Minewater Schemes Completed to September 2004

Scheme Name	Location	Date Completed	Cost (£m)	Length of Water Course Improved	Scheme Type
<b>Scotland</b>					
Monktonhall	East Lothian	1997	0.5	Preventative Scheme	Pumped / Active
Polkemmet	Midlothian	1998	0.5	Preventative Scheme	Pumped / Active
Minto	Fife	1998	0.3	3km	Passive
Kames	Ayrshire	2001	0.5	3km	Passive
Mains of Blairingone	Clackmannanshire	2003	0.1	1km	Passive
Frances	Fife	2003	0.8	Preventative Scheme	Pumped / Active
Cuthill	West Lothian	2003	0.9	2km	Pumped / Passive
Lathallan Mill	Fife	2004	0.5	2km	Passive
Pool Farm	Lanarkshire	2004	0.5	1km	Passive
Mouse Water	Lanarkshire	2004	0.8		Passive
<b>England</b>					
Woolley	Yorkshire	1995	0.1	7km	Pumped / Passive
Bullhouse	Yorkshire	1998	1.0	4km	Pumped / Passive
Old Meadows	Lancashire	1998	1.0	10km	Pumped / Active
Edmondsley	Durham	1999	0.4	2km	Pumped / Passive
Fender	Derbyshire	2001	0.4	2km	Pumped / Passive
Deerplay	Lancashire	2002	0.6	5km	Pumped / Passive
Silkstone	Yorkshire	2002	0.2	2km	Passive
Whittle	Northumberland	2002	0.5	Preventative Scheme	Pumped / Passive
Acomb	Northumberland	2002	0.3	1km	Pumped / Active
Bates	Northumberland	2003	1.0	Preventative Scheme	Pumped / Passive
Caphouse	Yorkshire	2003	1.2	Preventative Scheme	Pumped / Passive
Bridgewater	Lancashire	2004	2.5	16km	Pumped / Passive
Aspull Sough	Lancashire	2004	0.8	1km	Pumped / Passive
Horden	Durham	2004	1.75	Preventative Scheme	Pumped / Active
Blenkinsopp	Northumberland	2004	0.8	Preventative Scheme	Pumped / Active
<b>Wales</b>					
Gwynfi	Neath Port Talbot	1998	0.2	1km	Passive
Ynysarwed	Neath Port Talbot	1999	1.2	12km	Pumped / Active
Taff Merthyr	Maerthyr Tydfil	2001	1.3	4km	Pumped / Passive
Six Bells	Blaenau Gwent	2002	1.0	5km	Pumped / Active
Blaenavon	Torfaen	2002	0.3	2km	Passive
Lindsey	Carmarthenshire	2003	1.0	4km	Pumped / Passive
Morlais	Carmarthenshire	2003	1.4	2km	Passive
Corrwg	Neath Port Talbot	2004	0.5		Passive