

Coal Tip Name	Godre'r-Graig Higher / Pentwyn No. 3 Levels	Tip Ref Number	L044C
		Ownership Status	Unknown
Located in	Godregraig, NPT	Tip Category	D
Inspection led by		Undertaken on behalf of	Welsh Government
Date of inspection	15/02/2022	Date of last inspection	Unknown
Weather	Drizzle	Wet	Gentle Breeze
Comments on access and any limitations	Access to the tip was gained along an access track that begins on Graig Road and leads to Pentwyn Farm. A limited visual inspection of the tip was conducted due to dense vegetation growth and a steep sided flank. Therefore, instability features may exist on the body of the tip but could not be inspected at the time of inspection.		
	Description		Status
RAG Status: Capital & Maintenance Works	Consider constructing formalised drainage along the length of the unnamed issue.		2
	Consider constructing a retaining wall along the length of the toe adjacent to the access track.		2
	Consider liaising with the local planning officer to investigate whether planning permission was given for the quarry rock tip to be deposited on the tip plateau. Also potentially consider undertaking a more detailed geotechnical assessment of the stability of the tip due to loading of the tip plateau.		2
General Remarks	The small tip consists of a steep sided elongated lobe of end tipped colliery orientated northeast – southwest on the steep lower slopes of Mynydd Allt-y-grug. According to BGS sheet 230 the underlying bedrock geology comprises of the Llynfi mudstone, siltstone and sandstone member from the Upper Coal Measures and the superficial geology is recorded as diamicton till. There are several recorded adits across the hillside that are likely related to the Tareni Colliery works that was operational from 1903 to 1952. Later minor works in the area occurred during the late 1990s and early 2000s. The tip is generally densely vegetated with brambles, bracken and mature trees. A section of the tip plateau has been loaded with a quarry waste rock tip which was sourced from the nearby Cwar Pentwyn quarry. An unnamed issue flows through sections of the tip along the eastern boundary down to the access track at the toe of the tip. Flows are then conveyed along a scoured access track into highway drainage at the beginning of the access track. There are several minor slips and seepages present on the toe along the access track. Several residential properties are located downslope of the tip.		
	Name	Signature	Date
Author			17/02/2022
Approver			21-02-2022

OBSERVATIONS			
GEOTECHNICAL			
ID	Feature	Location	Comment
22/G/01	Seepages	E-274839 N-206817	Several seepages observed on the eastern section of the tip plateau adjacent to an unnamed issue.
22/G/02	Creep	E-274855 N-206823	Several distorted trunks on mature trees indicated that historical or ongoing creep was present within sections of the tip.
22/G/03	Erosion	E-274862 N-206815	Sections of the flank along the eastern boundary were scoured due to the strong flows from an unnamed issue flowing down the hillside.
22/G/04	Erosion	E-274885 N-206778	Where the unnamed issue cascaded onto the access track, sections of the toe had been scoured and undercut.
22/G/05	Minor slip	E-274838 N-206764	Several minor slips were present along the toe adjacent to the access track.
22/G/06	Seepages	E-274819 N-206758	Several seepages were observed emanating from natural ground and colliery spoil along the toe of the tip adjacent to the access track.
22/G/07	Erosion	E-274807 N-206751	Sections of the access track adjacent to the toe of tip were heavily scoured from surface water run-off. At the time of inspection a strong flow was conveyed along the access track.
Recommendations			Consider constructing formalised drainage along the length of the unnamed issue to prevent water seeping into the body of the tip and further erosion of the toe. Consider constructing a retaining wall along the length of the toe adjacent to the access track to prevent minor slips from forming.
ENGINEERING CRITICAL INFRASTRUCTURE			
ID	Feature	Location	Comment
N/A			
Recommendations			N/A
INSTRUMENTATION & MONITORING			
ID	Feature	Location	Comment
N/A			
Recommendations			N/A
LAND USE			
ID	Feature	Location	Comment
22/L/01	Deposition	E-274831 N-206809	A quarry waste rock tip likely sourced from the nearby Cwar Pentwyn quarry was observed on the tip plateau. The loading of the tip plateau may potentially cause instability features to form.
Recommendations			Consider liaising with the local planning officer to investigate whether planning permission was given for the quarry waste rock to be deposited on the tip plateau. Also potentially consider undertaking a more detailed geotechnical assessment of the stability of the tip due to loading of the tip plateau. The assessment will highlight whether the tip requires any further remediation work to ensure its stable in the future.
CONTAMINATION / GEO-ENVIRONMENTAL			
ID	Feature	Location	Comment
N/A			

Recommendations			N/A
OTHER			
ID	Feature	Location	Comment
N/A			
Recommendations			N/A
Any other remarks			N/A

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Photo No.	01	Comment	One of several seepages on the tip plateau.
Feature ID	22/G/01		

Photo No.	02	Comment	Bent / distorted mature tree trunks indicates potential historical creep of the tip.
Feature ID	22/G/02		

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Photo No.	03	Comment	The strong flows of an unnamed issue eroding sections of the flank on the eastern boundary.
Feature ID	22/G/03		

Photo No.	04	Comment	Sections of the toe are undercut and scoured where the unnamed issue cascades onto the access track.
Feature ID	22/G/04		

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Photo No.	05	Comment	Minor slip of the toe adjacent to the scoured access track. The photo shows that there is only a thin veneer of colliery spoil along the toe.
Feature ID	22/G/05		

Photo No.	06	Comment	A scoured access track with several seepages along the toe which were emanating from the natural ground and colliery spoil.
Feature ID	22/G/06 & 22/G/07		

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Photo No.	07	Comment	A quarry waste rock tip loading the tip plateau.
Feature ID	22/L/01		