## An application for an Environmental Permit to authorise the deposition of waste on land as a recovery activity for the restoration of Phases 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 6C and 7 at Alrewas Quarry, Alrewas, Staffordshire

## Non-technical Summary

- 1.1 MJCA is commissioned by Tarmac Trading Limited (Tarmac) to prepare an application for a bespoke Environmental Permit for the deposition of waste on land as a recovery activity in order to restore Phases 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 6C and 7 of Alrewas Quarry, Croxall Road, Alrewas, Staffordshire to agriculture, amenity and nature conservation. Throughout the application Phases 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B, 6C, 6B, 6C and 7 of Alrewas Quarry are referred to as the site. The site is centred approximately on National Grid Reference (NGR) SK 171 133.
- **1.2** A Waste Recovery Plan (WRP) presenting justification that the activity comprises recovery was submitted to the Environment Agency (EA) on 27 August 2021. Further information in respect of the recovery status of the activity was submitted to the EA on 26 November 2021 and in a letter dated 20 December 2021 the EA confirmed that the activity comprises recovery. The email from the EA confirming that the activity comprises recovery is presented at Appendix D of the application report.
- **1.3** Planning permission for the site reference L.19/09/817 MW was granted on 21 June 2021 by the Staffordshire County Council (SCC) for '...the winning and working of sand and gravel including a southern extension and the re-phasing of permitted working and restoration schemes; the restoration of the quarry by the importation of inert waste material...'.
- **1.4** The site forms part of the wider Alrewas Quarry complex and is located approximately 70m south east of the village of Alrewas and approximately 530m east of the village of Fradley at its closest point as shown on Figure NTS 2. Phases 1 and 2 of the Alrewas Quarry complex are located to the north east of Phases 3 to 6 and to the south east of Phase 7 and are currently being restored by the importation of inert waste materials. The main access to Phases 3 to 7 will be via Croxall Road and



Barley Green Lane. Mineral extraction operations are ongoing in Phases 3 and 6. Mineral extraction operations have yet to commence in Phases 4, 5 and 7.

- **1.5** The site is in a predominantly rural area comprising open fields delineated by drainage ditches and a series of roads. In addition to the properties in Alrewas and Fradley there are several residential properties and agricultural and commercial premises in the area of Phases 3 to 7. Whitemoor Lakes and the associated conference and activity centre is located to the east and north east of Phases 3 to 6 and east-south east of Phase 7. The National Memorial Arboretum (NMA) is located to the east of Phase 7 beyond Croxall Road.
- 1.6 Based on information from the Defra MAGIC website there are no Ramsar Sites, Special Protection Areas (SPA), Local Nature Reserves (LNR) or National Nature Reserves (NNRs) located within 2km of the site. The River Mease is located approximately 1.4km east of the site at its closest point, as shown on Figure NTS 1, and is designated as both a Special Area of Conservation (SAC) and a Site of Special Scientific Interest (SSSI). The River Mease is the only SAC and SSSI within 2km of the site.
- **1.7** The site will be restored to agriculture, amenity and nature conservation interest by the importation of inert restoration materials. Approximately 3.22M tonnes of sand and gravel remain to be extracted from Phases 3 to 7 over a period of approximately 5 years. It is anticipated that the mineral extraction operations in Phases 3 to 7 will be completed by Spring 2027. The restoration of Phases 3 to 7 will necessitate importation of approximately 3.6Mm<sup>3</sup> of inert materials to restore the site to agriculture, amenity and nature conservation.
- **1.8** Based on the BGS geological mapping the site is generally underlain by superficial deposits comprising sand and gravel deposits predominantly. The superficial deposits at the site are classified as a Secondary A aquifer and the sand and gravel in the superficial deposits has a moderate to high permeability. The Mercia Mudstone Group bedrock underlying the superficial deposits generally has a low permeability which will limit the vertical movement of groundwater.



- **1.9** The site is located in the River Tame catchment. The River Tame flows generally from south to north approximately 400m east of the site at the closest point. As explained above, the River Mease is located approximately 1.4km east of the site at the closest point and flows generally from south to north. Mare Brook is a tributary of the River Tame and is located approximately 160m south of the site at the closest point. The Coventry Canal is located approximately 290m to the south west of Phase 3B at the closest point.
- **1.10** Based on the information provided on the GOV.UK Flood map for planning website (https://flood-map-for-planning.service.gov.uk/) the site is located within Flood Zone 1 which is which is defined as having a less than 1 in 1000 year annual probability of flooding from rivers. Areas of the site which are located in Flood Zone 2 include the east of Phase 5B, the south east of Phase 4A, central and southern parts of Phase 3 and the eastern parts of Phase 7. Flood Zone 2 is defined as having between a 1 in 100 year and 1 in 1000 year annual probability of flooding from rivers. Parts of the east of Phases 3 and 6 are located in Flood Zone 3 which is defined as having a greater than a 1 in 100 year annual probability of flooding from rivers.
- **1.11** Based on information provided by the Environment Agency there are twelve surface water abstractions within 2km of the site. The closest surface water abstraction is located approximately 500m west of the site on the Coventry Canal. The closest surface water abstraction along the River Tame is located 550m from the site.
- **1.12** Based on information provided by the Environment Agency there are fourteen Environmental Permits for discharge to surface water within 2km of the site. The discharges are to the River Tame or River Trent or their tributaries.
- **1.13** Based on information provided by the Environment Agency there are five licensed groundwater abstractions within 2km of the site. Three points of abstraction associated with the same licence number are located between approximately 200m and 400m south west of the site. The licence for the abstractions is held by South Staffordshire Water PLC for the purpose of public water supply. One of the licensed groundwater abstractions is associated with the mineral processing plant at Alrewas Quarry and the water is used for mineral washing, dust suppression and as process



water. Another licensed groundwater abstraction is held by Tarmac for dewatering Phases 4 and 5. The site is not located within a groundwater Source Protection Zone (SPZ).

- **1.14** In the Environmental Risk Assessment (ERA) included with this application consideration is given to the potential for accidents, odour, noise and fugitive emissions having regard to the proposed site operations the subject of the application for the Environmental Permit and the presence and location of sensitive receptors in the vicinity of the site. Operations at the site will be undertaken in accordance with the control measures described in the ERA. It is concluded in the ERA that the operation of the facility has a low or very low risk of adverse impact on the surrounding environment including sites of heritage or nature conservation interest. A programme of environmental monitoring will be carried out to confirm the results of the ERA. The results of the monitoring will be reported to the EA on a regular basis.
- **1.15** Based on the results of the Hydrogeological Risk Assessment (HRA) included with the application it is considered that there is no significant risk from the proposed deposition of inert waste to groundwater quality in the vicinity of the site. Based on the environmental setting and the inert nature of the materials that will be deposited at the site active long-term site management will not be necessary in order to prevent long term groundwater pollution. A programme of environmental monitoring will be carried out to confirm the results of the HRA. The results of the monitoring will be reported to the EA on a regular basis.
- **1.16** The inert waste types that will be accepted at the site the subject of the Environmental Permit are presented in the Environmental Permit application. Waste acceptance procedures will be in place to minimise the risk that unacceptable waste materials will be accepted at the site including procedures for the rejection of non-conforming loads. A summary of the EMS is included with the Environmental Permit application at Appendix K.
- 1.17 Tarmac is committed to ensuring that members of its staff are technically competent to undertake waste operations and uses the Chartered Institution of Wastes Management/Waste Management Industry Training and Advisory Board



(CIWM/WAMITAB) scheme for these purposes. The training standards set out in the CIWM/WAMITAB scheme, as relevant to the operation of a facility for the deposit of waste on land and waste operations in general, are adopted for training purposes.



FIGURES



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