# **TIPPERARY - COUNTY GEOLOGICAL SITE REPORT**

NAME OF SITE Other names used for site IGH THEME TOWNLAND(S) NEAREST TOWN/VILLAGE SIX INCH MAP NUMBER ITM CO-ORDINATES 1:50,000 O.S. SHEET NUMBER 59 Garryard (Silvermines) Mogul IGH15 Economic Geology, IGH6 Mineralogy Garryard West Silvermines 26 581850E 671520N GSI BEDROCK 1:100,000 SHEET NO. 18

# **Outline Site Description**

Site of modern underground mine containing remains of processing plant and other surface mine infrastructure.

# Geological System/Age and Primary Rock Type

The mineralization at Silvermines is hosted by basement rocks of the Silurian and Devonian Old Red Sandstone and by the overlying Lower Carboniferous succession.

# Main Geological or Geomorphological Interest

Mogul began underground mining in Silvermines in 1968 and constructed the surface plant and mine access shaft at Garryard. The site is on both sides of the Silvermines – Shallee road, 1.5 km west of Silvermines village. South of the road is the old ore stockpile area where ore was stockpiled prior to processing at Garryard. This site contains a substantial amount of ore material, including mineralized blocks that could provide mineralogical specimens. North of the road the site is split by a rail siding from which concentrate was transported to Foynes. On the south side of the rail siding are the remains of the old mine offices, the Knight Shaft (main mine access, capped), several large thickeners, the concentrator loader bay and two settlement ponds. A significant amount of metal-rich process waste is distributed around the site, particularly near the remains of the processing plant. North of the rail siding is a tailings lagoon, which receives run-off from the concentrator area and overflow from the shaft. Both the water and the tailings in this lagoon contain high concentrations of mine-related metals such as Pb, Zn, As and Cd. A metal works currently operates out of a workshop on the site.

### Site Importance – County Geological Site

This is a significant site in Silvermines as it was the locus of the surface mine in modern times and should be considered as a County Geological Site albeit within the context of the Silvermines district that should be considered for NHA status.

### Management/promotion issues

This site is notable for the high concentrations of metals recorded in waste distributed about the site. It is also the proposed site of a hazardous waste dump designed to accommodate metal-rich mine waste from the district, to be developed as part of the Silvermines mine rehabilitation plan. Any heritage-related visits to the site would have to be by arrangement with the current users of the site. It is not suitable for promotion. Any plans for future works on the site, including mine rehabilitation, should take account of the heritage value of the remaining mine infrastructure.



Large thickener, part of original processing plant.



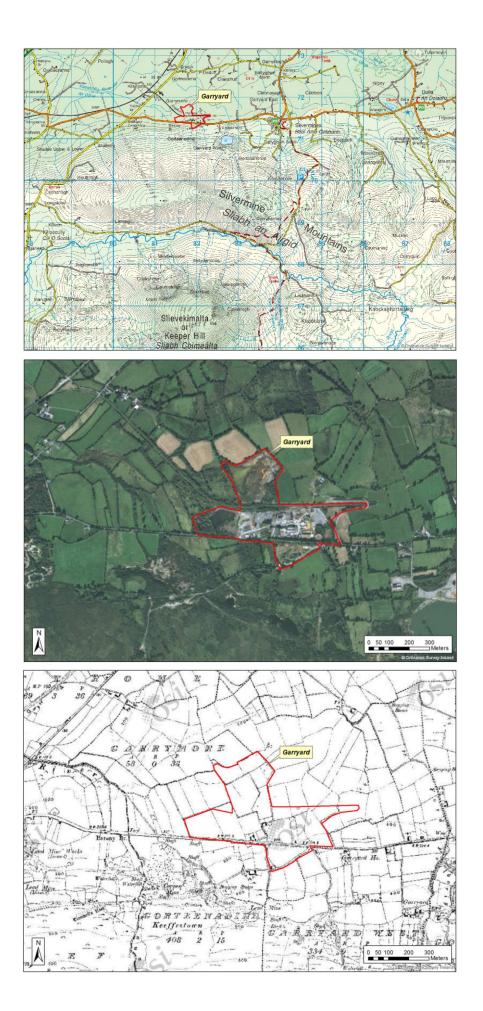
Metal-rich waste below thickener



Mineralized boulder in stockpile area on south side of Silvermines-Shallee road.



Railway siding with concentrate loading structure.



Gallagher et al. 2019. Geological Survey Ireland.