



**EXPLANATION**  
Additional information is contained in a  
leaflet accompanying this map.

**MINERAL INDUSTRY MODIFICATIONS**

**SM**  
SURFACE (STRIP) MINE,  
NOT RECLAIMED  
Primarily coal but includes  
some developed for sand-  
stone and limestone, high-  
wall indicated by hatched  
line.

**SMh**  
SURFACE MINE, RECLAIMED  
Modified primarily for hous-  
ing, education, commercial,  
and industrial development.

**SMr**  
SURFACE MINE, RECLAIMED  
BY GRADING

**Sub**  
MINE SUBSIDENCE  
Areas in which surface pat-  
terns are indicative of mine  
subsidence (based in part on  
1939 aerial photography).

**RB**  
REFUSE BANKS  
Primarily coal waste, most  
banks have been and are  
now ash and clinkers (red  
dog).

**Q**  
QUARRIES AND PITS  
Active and abandoned rock  
quarries and gravel pits.

**E**  
OTHER EXCAVATIONS  
Primarily borrow pits.

**LAND DEVELOPMENT MODIFICATIONS**

**H**  
URBAN DEVELOPMENT  
Land modified for housing,  
commercial, educational,  
and industrial uses. Modi-  
fications, primarily after  
1969, include: removal of  
vegetation, removal and re-  
distribution of topsoil; some  
excavation of bedrock at in-  
dustrial and commercial de-  
velopments; and placement  
of impervious streets and  
parking lots. Major fills  
symbolized separately.

**M**  
PREDEVELOPMENT  
MODIFICATION  
Primarily removal of vegetation  
and removal and redistribution  
of topsoil; ultimate land use  
not identified during investi-  
gation.

**T**  
LAND MODIFIED FOR  
TRANSPORTATION  
Primarily highway construction.  
Modifications, primarily after  
1969, include extensive deep  
excavations, shallow fills, and  
redistribution of topsoil; local  
removal of structures. Major  
fills and steep cuts symbo-  
lized separately.

**F**  
EARTH AND ROCK FILLS  
Primarily at industrial, com-  
mercial, educational, and hous-  
ing sites and along transpor-  
tation routes; old fills in urban  
areas and narrow yard fills  
adjacent to houses generally  
not mapped.

**NV**  
NEARLY VERTICAL CUTS  
AND CLIFFS  
Primarily cuts along highways  
and adjacent to commercial  
and industrial sites; includes  
highwalls in surface mines  
and some natural cliffs.

**OTHER MODIFICATIONS**

**W**  
WATER IMPOUNDMENTS  
Primarily farm ponds, reser-  
voirs, and settling basins; dams  
generally too small to be shown  
on the map.

**G**  
GULLIED LAND  
Primarily on cleared slopes and  
unprotected faces of fills.

Base by U.S. Geological Survey, 1969.  
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no. 74-31.

U.S. Geological Survey  
OPEN FILE MAP 74-294  
This map is preliminary and has  
not been edited for conformity  
with Geological Survey standards  
or nomenclature.

**MAP OF LAND MODIFIED BY MAN IN PART OF THE MURRYSVILLE 7 1/2' QUADRANGLE,  
ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA**

by  
**William E. Davies**

Map based on 1973 aerial photographs  
and field reconnaissance, 1973-74.  
This map has not been edited or re-  
viewed for conformity with Geological  
Survey standards and nomenclature.

Pennsylvania (Murrysville Quad.) Modified Land. 1: 24,000 - 1  
Cop. 1.