



- EXPLANATION**
Additional information is contained in a booklet accompanying this map.
- MINERAL INDUSTRY MODIFICATIONS**
- SM**
SURFACE (STRIP) MINE, NOT RECLAIMED
Primarily coal but includes some developed for sandstone and limestone; highwall indicated by hachured line.
 - SMR**
SURFACE MINE, RECLAIMED BY GRADING
 - SMs**
MINE SUBSIDENCE
Areas in which surface patterns are indicative of mine subsidence (based in part on 1939 aerial photographs).
 - MF**
MINE AND COAL BED FIRES
Includes areas of active, controlled, and extinguished fires; lines generally confined to vicinity of outcrop of coal seam (crop fires). (Based on data from U.S. Bureau of Mines).
 - RB**
REFUSE BANKS
Primarily coal waste; most land above banks and one row ash and clinkers (red dog).
 - SD**
SLAG DUMP
 - LAND DEVELOPMENT MODIFICATIONS**
 - H**
URBAN DEVELOPMENT
Land modified for housing, commercial, educational, and industrial uses. Modifications, primarily after 1945, include: removal of vegetation; removal and redistribution of topsoil; some excavation of bedrock at industrial and commercial developments; 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 investigation.
 - EF**
EARTH AND ROCK FILLS
Primarily in industrial, commercial, educational, and recreational sites and along transportation 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 IMPROVEMENTS
Primarily farm ponds, roads, vairs, and settling basins; dams generally too small to be shown on the map.

Base by U.S. Geological Survey, 1969.
Research sponsored by the Appalachian
Regional Commission under contract
no. 74-31.

U.S. Geological Survey
OPEN FILE MAP 74-293
This map is preliminary and has
not been edited for conformity
with Geological Survey standards
or nomenclature.

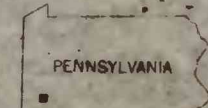
**MAP OF LAND MODIFIED BY MAN IN PART OF THE MONONGAHELA 7 1/2' QUADRANGLE,
ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA**

by
William E. Davies

Map based on 1939 aerial photographs
and field reconnaissance, 1969.
This map has not been edited or
viewed for conformity with Geological
Survey standards and nomenclature.

SCALE 1:24,000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL



QUADRANGLE LOCATION