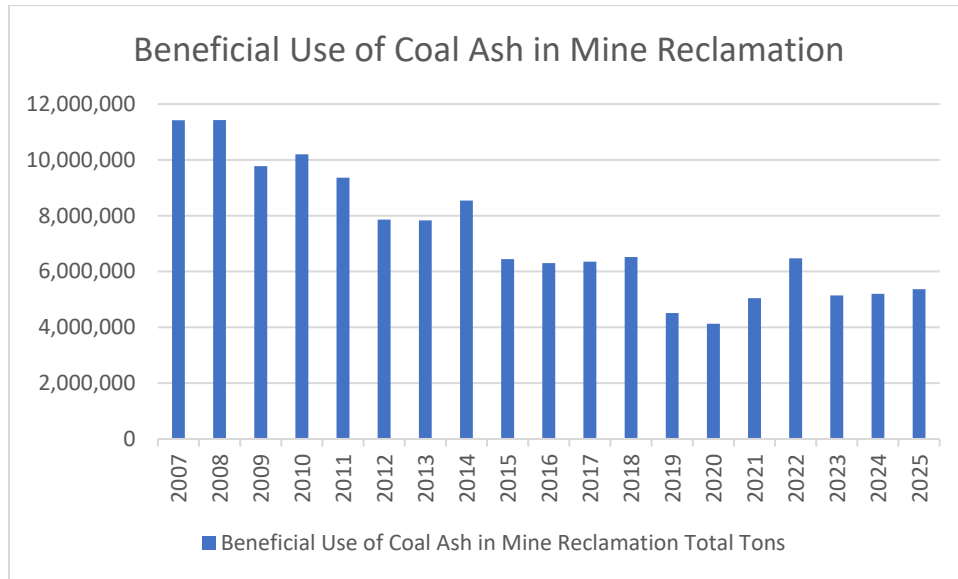




COAL ASH USE FOR MINE RECLAMATION

Coal ash is beneficially used for coal mine reclamation under 25 Pa. Code Chapter 290 to fill abandoned pits, stabilize coal refuse material, create soil, serve as low-permeability material and as alkaline addition. The following graph represents the tons of certified coal ash¹ and coal ash material authorized under a waste General Permit² used under the Chapter 290 program for coal mine reclamation in Pennsylvania.



¹ Certified coal ash meets the sampling and quality criteria and leachate limits provided in Chapter 290, Subchapter C. These sources can be beneficially used statewide in active and abandoned mine reclamation as part of approved reclamation plans.

² Coal ash material authorized under a waste general permit consists of ash derived from or mixed with ash from other fuels (such as wood or petroleum products) beyond the allowance in the Chapter 290 definition of coal ash; or, coal ash is mixed with other coproducts such as flue gas desulfurization (FGD) residue. This material forms a stable product and is also subject to Chapter 290 sampling, quality, and leachate limits when used at a permitted coal mine site.

Each year, the generator of the certified coal ash or general permit ash material reports the volumes they produce, and the end users (mine operators) report the volumes received. The Bureau of Mining Programs reconciles these volumes to account for all the ash used for coal mining sites. Since 1988, the Department calculates that about 236,237,000 tons of coal ash have been beneficially used in Pennsylvania without adverse groundwater or surface water effects.

Most of the volume comes directly from power plants that use waste coal from historical piles left from past mining blended with limestone crushed and combusted at high temperatures. This process produces an alkaline ash that is compacted on-site resulting in a hard, stable, relatively impermeable fill material that does not exhibit leaching of metals. The result is elimination of mining hazards and effective restoration of land to a useable state.