



Figure 9. Hemispherical cavity at chimney top.

Development and storage of petroleum resources

Deep underground nuclear explosions could enable the production of liquid or gaseous hydrocarbons from nonproductive deposits of petroleum, natural gas, and oil shale. Also, oil or natural gas could be stored in void spaces within the nuclear chimney formed by such explosions. These two types of potential applications of deep underground nuclear explosions are now being considered.

Stimulation of natural gas formations

Nitroglycerin detonated in certain natural gas wells, a practice today, stimulates their production. We expect the increased rock shattering effect of contained nuclear explosions to be much more effective, when the thickness, depth, and nature of the formations permit their use. Unless this technique or similar significant technological progress in production points the way, much of the world's natural gas may never be recovered.

In Project Gasbuggy an underground nuclear explosive was detonated to stimulate production and increase ultimate recovery of natural gas