A PETITION TO DESIGNATE THE HISTORIC DISTRICTS WITHIN THE CITIES OF BENHAM AND LYNCH AND THE VIEWSHED FROM THOSE DISTRICTS, AND THE WATERSHEDS THAT PROVIDE THE WATER SUPPLY FOR THE TOWNS OF BENHAM AND LYNCH, AS AREAS UNSUITABLE FOR MINING

This petition seeks to designate the historic districts within the cities of Benham and Lynch, Kentucky and the viewshed from those historic districts, as well as the watersheds that supply the water supply sources for those cities, as unsuitable for all types of surface coal mining operations.

**Petitioners**

The Petitioners are:

The City of Lynch, Kentucky, an incorporated entity located in Harlan County, Kentucky. The City of Lynch operates a water treatment and distribution system which is supplied from Gap Branch and Looney Creek watersheds, and which could be directly and adversely affected by increases in sedimentation and mineralization of runoff into those watersheds associated with surface coal mining operations. Additionally, the City of Lynch has invested significant time and effort in developing an educational and tourism economy grounded in the rich cultural and historical traditions associated with underground coal mining during the first half of the 20th century, and those investments will be jeopardized by allowing surface coal mining operations to be conducted within the viewshed of the historic districts of Benham and Lynch.

Roy Silver, who resides at 170 Main Street in Benham, Kentucky with a mailing address at P.O. Box G, Benham, Kentucky 40807, ph. 606-848-1812. Mr. Silver is a resident of Benham, and uses water for beneficial purposes,
including drinking water, from both Benham and Lynch. Mr. Silver enjoys both the historic districts of Benham and Lynch, and the viewshed from those districts. His use and enjoyment of the water supplies and of the historic districts and the viewshed from those districts would be adversely affected by surface coal mining operations occurring in the viewshed, and within the watersheds that recharge the Benham and Lynch reservoirs.

Carl Shoupe, a former City Councilman for the City of Benham, is a resident of Benham, with a street address of 434 Main Street and a mailing address of P.O. Box 185, Benham, Kentucky 40807, ph. 606-848-0555. Mr. Shoupe lives on the bank of Looney Creek, and uses water for beneficial purposes, including drinking water, from the Benham water system. Mr. Shoupe enjoys both the historic districts of Benham and Lynch, and the viewshed from those districts. His use and enjoyment of the Benham water supply and of the historic districts and the viewshed from those districts would be adversely affected by surface coal mining operations occurring in the viewshed, and within the watersheds that recharge the Benham reservoir.

Stanley Sturgill is a resident of Lynch, residing at 353 East Main Street with a mailing address of P.O. Box 776 Lynch, Kentucky 40855, ph. 606-848-0997. Mr. Sturgill uses the water supply of the community of Lynch for beneficial purposes, including drinking water. Mr. Sturgill enjoys both the historic districts of Benham and Lynch, and the viewshed from those districts. His use and enjoyment of the Lynch water supply and of the historic districts and the viewshed from those
districts would be adversely affected by surface coal mining operations occurring in the viewshed, and within the watersheds that recharge the Lynch reservoir.

Bennie Massey, a member of the City Council of Lynch for 16 terms, has been a resident of Lynch for 60 years. He currently resides at 432 First Street, Lynch Kentucky, with a mailing address at P.O. Box 117, Lynch, Kentucky 40855 ph. 606-848-5624. Mr. Massey uses water for beneficial purposes, including drinking water, supplied by the Lynch water system. Mr. Massey enjoys both the historic districts of Benham and Lynch, and the viewshed from those districts. His use and enjoyment of the Lynch water supply and of the historic districts and the viewshed from those districts would be adversely affected by surface coal mining operations occurring in the viewshed, and within the watersheds that recharge the Lynch reservoir.

**Introduction and Scope of Petition**

This petition to designate an area as unsuitable for surface coal mining operations (hereinafter “petition”) seeks the designation of the lands comprising the historic districts of the cities of Benham and Lynch, in Harlan County, Kentucky, and the viewshed from the historic districts of those cities, as well as the watersheds that supply the water sources for those cities, as areas unsuitable for surface coal mining operations, pursuant to KRS 350.465(2)(b), KRS 350.610 and 405 KAR Chapter 24.

405 KAR 24:001 Section 1(5) demands that where an area is petitioned as unsuitable for surface coal mining operations, the area for which the designation is sought must be defined as a “geographic unit in which the criteria alleged in
the petition . . . occur throughout and form a significant feature.” This petition for designating lands unsuitable for mining seeks the designation of unsuitability for mining for several defined geographic units identified on the map included as Appendix A and described as follows:

Area A is intended to include the boundary of the historic district listed on the National Register of Historic Places, within the cities of Benham and Lynch and the viewshed from those historic districts, in order to provide a visual buffer to prevent adverse effects on the use and enjoyment of the historic districts and historical and cultural values of the cities, and to prevent physical damage to such resources. Area A is outlined in black on the map that accompanies this petition.

Area B is intended to include the watershed and drainage area that comprise the water supply source for the city of Benham. The city of Benham draws its water supply from the Kellioka coal seam to the south of Looney Creek, where it is collected, piped to, and treated by the city of Benham for use by the residents of that community.

Area C is intended to encompass the Gap Branch watershed, which provides some 30% of the recharge for the Darby seam reservoir that supplies raw water to the city of Lynch. The recharge occurs through an intake borehole in the streambed of Gap Branch, which is connected with the underground reservoir in the Darby coal seam.

Area D is intended to encompass that area within the Looney Creek watershed, including the watersheds of Barnett Branch and Trace Branch that
flow into Looney Creek, which is located above the borehole in the streambed of Looney Creek that is the primary water source for the Lynch Reservoir.

The total area covered under this petition is believed to be approximately 10,442 acres.

The boundaries of the petitioned areas are identified on the attached map.

**Statement of Applicable Law**

Pursuant to 405 Kentucky Administrative Regulation (KAR) Chapter 24, and specifically, 405 KAR 24:030(8), the criteria for designating lands as unsuitable for mining are as follows:

(1) The cabinet shall designate an area as unsuitable for all or certain types of surface coal mining operations, if upon petition, it determines that reclamation is not technologically and economically feasible under the performance standards of Title 405, Chapters 7 through 24 at the time of designation.

(2) The cabinet may designate an area as unsuitable for all or certain types of surface coal mining operations, if, upon petition, it is determined that the surface coal mining operations will --

(a) Be incompatible with existing land use policies, plans or programs adopted by state, area-wide, or local agencies with management responsibilities for the areas which would be affected by such surface coal mining operations;

(b) Affect fragile or historic lands in which the surface coal mining and reclamation operations could result in significant damage to important historic, cultural, scientific, and aesthetic values and natural systems;

(c) Affect renewable resource lands in which the surface coal mining operations could result in a substantial loss or reduction of long-range productivity of water supplies;

(d) Affect renewable resource lands in which the surface coal mining operations could result in substantial loss or reduction of the long-range productivity of food and fiber products; or
(e) Affect natural hazard lands in which the surface coal mining operations could substantially endanger life and property

405 KAR 24:030 Section 8.

The key phrases for discretionary designations of areas as unsuitable for mining are "fragile lands," "historic lands," "natural hazard lands," and "renewable resource lands." For purposes of designation petitions, these terms are defined at 405 KAR 24:001, as follows:

(19) **Fragile lands** means areas containing natural, ecologic, scientific, or aesthetic resources that could be significantly damaged by surface coal mining operations. Examples of fragile lands include uncommon geologic formations, palentological sites, national natural landmarks, valuable habitats for fish or wildlife, areas where mining may result in flooding, critical habitats for endangered or threatened species of animals or plants, wetlands, environmental corridors containing a concentration of ecologic and aesthetic features, state-designated nature preserves and wild rivers, and areas of recreational value due to high environmental quality.

(23) **Historic lands** means areas containing historic, cultural, or scientific resources. Examples of historic lands include properties listed on or eligible for listing on a state or national register of historic places, national historic landmarks, archaeological sites, properties having religious or cultural significance to native Americans or religious groups, and properties for which historic designation is pending.

(28) **Natural hazard lands** means geographic areas in which natural conditions exist that pose or, as a result of surface coal mining operations, may pose a threat to the health, safety, or welfare of people, property, or the environment, including areas subject to landslides, cave-ins, subsidence, substantial erosion, unstable geology, or frequent flooding.

(43) **Renewable resource lands** means geographic areas which contribute significantly to the long-range productivity of water supplies or of food or fiber products, such lands to include aquifers and aquifer recharge areas.

405 KAR 24:001.
The designation of an area as unsuitable for mining may be made by the regulatory authority based on whether surface coal mining operations "will . . . affect" fragile, historic, renewable resource or natural hazard lands resulting in substantial or significant damage to the protected values or resources. 405 KAR 24:030 Section 8.

At the onset, it is important to proper agency consideration of an unsuitability petition that the intent behind the designation process be understood. The designation process is premised on "the notion that successful management of surface mining depends, in large part, on the application of rational planning principles." House of Representatives Report No. 95-218, 95th Congress, 1st Session 94 (1977). Congress expressed the intent of the designation process in this manner:

While coal surface mining may be an important and productive use of land, it also involves certain hazards and is but one of many alternative land uses. In some circumstances, therefore, coal surface mining should give away (sic) to competing uses of higher benefit.

Id.

As the objective evidence presented in the pages that follow reflects, this petition presents a situation in which the "higher benefit" to the public-at-large from the protection of the cultural, historic, and biological integrity of the lands and watersheds comprising the historic districts of the cities of Benham and Lynch, the viewshed from the historic districts of those cities, and the drainage areas feeding the water supplies for those cities, should be accorded primacy over the competing land use of surface coal mining. This case is clearly one in which application of the unsuitability process is appropriate: one in which surface coal mining "is inconsistent with rational planning" for the long-term viability of these cities as cultural and historic communities, and in which the degradation of
the quality or supply or water to these historic communities would indelibly
debase the historic, cultural and water resources of these communities, and
destroy visual values that are an integral part of the cultural and historic values of
the historic districts within these communities.

The cities and the families of Benham and Lynch have given much to this
Commonwealth through over a century of extraction, processing and
transportation of coal from underground mines. The historic districts and values
of these cities, and their historic and cultural traditions that have been linked to
underground coal mining, should not be compromised by allowing surface mining
within the viewshed; nor should the underground reservoir developed to support
the Lynch community or the recharge area supplying Benham’s water through
the Kellioka seam, be allowed to be compromised by pollution and by changes in
recharge patterns, due to surface coal mining.

The petitioner in a designation petition is obligated to provide the following
information, paraphrased from 405 KAR 24:020 Section 3:

1. The petitioner's name, address, telephone number and
   notarized signature;

2. Identification of the petitioned area, including its location
   and size, and a 7 1/2 minute U.S. Geological Survey topographic
   map outlining the perimeter of the petitioned area;

3. An identification of petitioner's standing interest;

4. A description of how mining in the area has or may affect
   people, land, air, water, or other resources, including the
   petitioner's interests; and

5. Allegations of fact and supporting evidence, covering all lands
   in the petition area, which tend to establish that the area is un-
   suitable for all or certain types of surface coal mining operations,
   assuming that contemporary mining practices required under the Kentucky
   regulatory program would be followed if the area were to be mined.
With respect to the level of "supporting evidence" required in an unsuitability petition, the Cabinet's regulations do not require that the supporting evidence establish by a preponderance of the evidence, or beyond a reasonable doubt, that the allegations are correct; it is sufficient that the evidence merely "tend to establish" the validity of the allegations. The petitioner is requested to provide evidence which speaks to each of the criteria for which designation is sought, and to cast the allegations in a manner that each pertains to the "area" for which the allegation is made.

Once that information has been provided and the threshold for acceptance of the petition has been met, the agency is required to develop the record in order to determine whether the evidence, both that gathered by the agency and evidence provided during the public comment period, is sufficient to warrant designation of the petitioned areas as unsuitable for mining.

This petition contains information concerning the petitioned area that is clearly sufficient to meet the threshold for acceptance of the petition as being "complete", and for the processing and approval of such a petition.

Petitioners are aware of at least one permit application that is pending within the petitioned area. With respect to any areas currently under permit within the petitioned area, Petitioners ask that those areas be included within the petition with respect to future mining under new or amended permits, understanding that the designation of an area as unsuitable for mining does not affect mining within areas for which coal extraction has been authorized under existing permit.

Summary Of Petition Allegations
This petition seeks the designation of the petitioned area as unsuitable for all types of surface coal mining operations, including without limitation strip, area, auger, mountaintop removal and other forms of surface coal mining.

Allegation #1 presents the evidence to support the designation of the petitioned area A as a “historic land,” for which surface coal mining operations could affect historic districts listed on the National Register of Historic Places, and which contain important historic and cultural resources that could be significantly damaged by the effects of surface coal mining operations.

Allegation #2 seeks designation of the area as unsuitable for mining as a “fragile land,” in which the surface coal mining operations could result in significant damage to important natural, ecologic, scientific and aesthetic resources.

Allegation #3 seeks designation of the area as unsuitable for surface coal mining operations because such operations will affect renewable resource lands in which the surface coal mining operations could result in a substantial loss or reduction in the long-range availability of water supplies.

Petitioners’ Interests

The interests of the individual Petitioners which may be adversely affected include interests as residents of the Cities of Lynch and Benham, in protection of the integrity of the historic districts, and of their use and enjoyment of those historic districts and the viewshed from the districts. The noise, visual impacts, and other adverse effects of mining on the cities would adversely affect the historical and cultural values of the historic districts and would diminish the use enjoyment of the districts and the viewshed of the districts for Petitioners.

Additionally, each individual Petitioner purchases and uses water from either the Lynch or Benham water system, and the Petitioners will be adversely affected to the extent that those water sources are contaminated, or otherwise
adversely affected by mine-related sedimentation, changes in water chemistry and quality (including but not limited to elevated chlorides, sulfates, aluminum and other metals). Any loss or diminution of water supply due to blasting, or due to changes in the recharge capacity of the watersheds supplying water to the Lynch and Benham water systems, would likewise harm the use and enjoyment of the water supplies by the individual Petitioners and could result in additional costs associated with development of new water sources. Any incremental cost increases associated with additional treatment necessitated due to introduction of pollution into the water sources for the Lynch and Benham systems would be borne by Petitioners and other water system customers, and would also constitute an adverse effect within the meaning of applicable statutes.

The individual Petitioners also have protected property and health interests in availability of safe and dependable supplies of water for drinking and sanitary purposes. Loss or damage to the quality or yield of these water sources could adversely affect the value, use and enjoyment of Petitioners’ properties, and could adversely affect public health due to lack of access to safe and dependable water supplies.

Petitioners also use and enjoy the numerous cultural and historic properties, including but not limited to Portal 31, and that use and enjoyment will be diminished by allowing surface coal mining to occur within the viewshed of the two districts.

The City of Lynch has legally protected interests in the physical and economic health of its citizens and community – interests that will be jeopardized if surface coal mining operations are permitted to be conducted within the National Register-listed historic district or the viewshed from that district. Lynch has invested significant time and effort in the maintenance and repair of the water treatment and distribution system that serves the community, and which may
serve Cumberland and Benham as well if ongoing discussions concerning system consolidation are successfully concluded. The City Council and Mayor of Lynch have protected interests in assuring that the water supply sources for the municipal system are not jeopardized, and in maintaining low treatment costs through protection of the quality of the source water. Further, the City has invested significant time and effort in the development of a tourism-based economy grounded in exploration of the traditions and culture associated with underground coal mining during the first half of the 20th century, and those investments will be placed at risk by noise, dust, vibrations and loss of esthetic values associated with surface coal mining within the historic district viewshed.

Finally, as noted above, the communities of Benham, Lynch and Cumberland are in discussion regarding the city of Lynch supplying water for all three communities from the Darby Seam reservoir that is the raw water source for the Lynch water system. Surface coal mining within the Looney Creek or Gap Branch watersheds would elevate levels of sedimentation and other pollutants in the streams and could result in additional treatment costs that would be borne by customers in Benham and Lynch, as well as Cumberland.

The interests sought to be advanced by the Petitioners are clearly within the zone of interests sought to be protected by Congress in enacting 30 U.S.C. 1271; see: 30 U.S.C. 1202(a); and by the Kentucky General Assembly in enacting KRS 350.610, and there is a direct causal link between the threatened harm to the Petitioners interests, and the remedy sought through this petition.


Petitioners satisfy the requisite standing tests under 405 KAR 24:020.
A description of how mining of the area has affected or may adversely affect people, land, air, water, or other resources, including the petitioner's interests.

Surface coal mining operations conducted within the petitioned areas will adversely affect the values sought to be protected in the petitioned areas as well as the interests of Petitioners by adversely impacting and significantly damaging the cultural and historic values for which the historic districts were nominated and listed on the National Register, and by degrading the water sources that supply raw water for those cities.

Many activities associated with surface coal mining operations, including but not limited to road construction and use, and the impacts of increased flow from runoff diverted around the disturbed area, are not controlled as point source activities for purposes of meeting effluent limitations. These activities contribute to the total loading of suspended and settleable solids and other contaminants, including sulfates and chlorides, into receiving streams.

Active surface coal mines have the potential to contribute as much as 48,000 tons of sediment annually per square mile of active mine, as compared with 24 tons of annual sediment yield from forested lands. Compliance with effluent limitations controls to some extent, but does not eliminate these additional contributions of sedimentation to receiving waters. (Skelly and Loy, 1979). The U.S. Environmental Protection Agency has estimated that soil loss from a watershed can be increased by surface mining by as much as 2,000 times during active mining and up to 10-100 times over baseline after mining, depending on the quality of reclamation. Assuming, as must be assumed in a designation petition, that the mining operation will be in complete compliance with provisions intended to minimize off-site hydrologic impacts, there will yet be a significant increase in sediment yields compared to baseline, since the mining activities
control sediment transport only above a certain particle size and below a certain storm event size. Surface mining controls, even within the confines of existing regulations, do not significantly reduce sediment yield and pollutant transport, especially for storm runoff events with a return frequency of greater than 10% in any given year.

An increase in sedimentation, as well as additional contributions of metals and an alteration of pH from both point and non-point activities has the potential to impact the quality of the streams that provide the raw water supply for the city of Lynch. Increased sedimentation will adversely affect the quality of the water, requiring additional treatment of the raw water supply. Additionally, the new water tower for the city of Lynch is on Looney Ridge, and the effects of blasting on the integrity of that structure and of associated piping, is of public health and safety concern.

As noted above, for the purposes of this petition, it is assumed that any surface coal mining operation that would be conducted within the watershed would do so in full compliance with the Cabinet’s regulations. In a situation such as this, because of the sensitivity of the resources, the environmental consequences associated with mining even assuming full compliance with the Act are yet too great to allow within the petitioned area. This is quintessentially the type of situation for which Congress crafted the unsuitability process, for Congress understood that, notwithstanding compliance with the environmental protection standards of Sections 515 and 516 of the Act, there were certain areas where mining was fundamentally incompatible with other values, (i.e. the Section 522 areas). Congress authorized states and the Secretary, when acting
as regulatory authority, to declare areas off-limits to mining, based on competition between mining and other values that would be adversely impacted by environmental consequences associated with even lawful mining.

It is to be remembered that the permitting standards of the Act do not demand "no impact" concerning land, aesthetic, and hydrologic effects off-site, rather, only minimization of those impacts. Despite application of the best available technology, and the standards of the Act governing site preparation, blasting, backfilling, grading and revegetation, there are off-site consequences that are not prevented entirely. It is the sensitivity of the resource that is the viewshed of Benham and Lynch and the source of their water supply that makes the mere application of the permitting and performance standards insufficient to protect these values.

The analysis conducted by the Commonwealth of Kentucky in granting Lands Unsuitable Petition 87-2 and setting aside as unsuitable for mining the entire Cannon Creek Lake watershed, provides important evidence that despite compliance with all environmental performance standards of Sections 515 and 516 of the Act, and the Cabinet’s regulations, impacts "could result from the surface disturbances associated with coal mining activities and discharges of water [which] have been demonstrated to be significant in terms of both the water supply systems and the natural systems[.]

Among the conclusions of that analysis, equally applicable to and compelling a conclusion that designation is appropriate in this case, were these points:

Typical water quality impacts which are commonly associated with surface coal mining and reclamation operations include but are not limited to sedimentation, acid mine drainage and release of heavy metals.
All of these impacts can be associated with both surface and underground mining methods. 

The differences in surface and underground mining methods must be acknowledged before drawing any conclusions. Both mining methods in terms of actual surface disturbance, start out essentially the same. Both require roads to be built for mine access, construction of ponds prior to surface disturbance, overburden removal to develop a working bench or to remove the coal and the creation of fills to either temporarily or permanently store excess spoil which is generated.

The Commonwealth of Kentucky modeled the impact of increased sedimentation associated with mining disturbances, assuming that all disturbed areas including roads were controlled by sediment ponds, that all ponds would meet all effluent limitations all the time, and that no sediment would be generated from a forested area or reclaimed areas after 12 months.

The result of the analysis indicated that the average sediment yield from a 500 acre mine would be 38,200 tons per year. Sediment ponds would trap 79% of the sediment, with the remaining 8,020 tons entering the receiving waterway. Total suspended solids levels would rise to between 90 and 120 milligrams per liter (mg/l) above natural background levels. "These concentration predictions are directly proportional to the sediment load and amount of disturbance."

Other adverse effects of surface coal mining operations include impacts on the aesthetic and recreational interests due to the deforestation and destruction of natural vegetation that attends surface coal mining operations; noise associated with the mining and blasting operations; vibrational, airblast and flyrock impacts associated with mining, and other adverse effects on land, air and water resources. The proud history of these communities is grounded in the extraction of coal in a manner that did not destroy the natural resources above ground. Surface mining within the watersheds serving the communities as their
sole source of drinking water, and within the viewshed of these historic towns, threatens irreversible and significant damage to the communities that, even at full compliance with applicable laws and regulations, cannot be tolerated and should not be permitted.

**Allegation #1: Surface coal mining operations will affect historic lands in which the surface coal mining operations could result in significant damage to important historic, cultural, scientific, or aesthetic values or natural systems**

Petitioned Area A constitutes “historic lands” within the meaning of the applicable regulations and statute, because the cities of Benham and Lynch each contain an historic district that represents a nationally-recognized historic and cultural resource.

The Benham Historic District was added to the National Register of Historic Places in 1983, and was given an identifier Number of 83002785. The Benham Historic District is comprised of thirty (30) acres with 10 buildings, and is bounded by KY 160, Central Avenue, and McKnight and Cypress Streets. The area of historical significance of the District is identified as “Community Planning and Development, Industry” and the period of significance is identified as 1900 – 1924.

The Lynch Historic District was added to the National Register of Historic Places in 2003, and was given the Identifier Number 03000086. The Lynch Historic District is “roughly bounded” by the city limits, L&N railroad bed, Big Looney Creek, Second, Mountain, Highland Terrace, Liberty and Church Streets, and includes 1250 acres, 297 buildings and 4 structures. The period of significance is identified as 1900-1924 and 1925- 1949.

Author and lawyer Harry Caudill described the founding of the cities of Benham and Lynch in this manner:
On August 4, 1917, U.S. Steel committed itself to an immense enterprise where, until recently, only a few isolated farmers had lived. (By the early 1930’s the company owned 30,000 acres, holdings that have since grown by an additional 11,000 acres.) The land secured, the corporation pushed the project with all possible speed, employing its own men and talents. The greatest industrial organization then in existence anywhere on earth needed no contractors and subcontractors.

Men were set to work grading a road from Benham .... Trainloads of supplies arrived and were hauled on wagons and feeble trucks to the construction site. Everything had to be imported.... And all the necessary items had to be manufactured or bought in an exploding wartime economy.

The town conceived by the Morgan-Rockefeller architects and sociologists was an example of advanced corporate paternalism. Because there was enough coal to last more than a century, everything had to be durable.

The plans called for sound houses on lots large enough to assure a reasonable degree of privacy. The plastered interior walls asbestos slate roofs were palatial extravagances by Appalachian standards. The plans included a water system that could deliver 50 gallons daily per person inside each household. The wives of these miners would not have to carry pails from wells to kitchens and bathtubs. For that matter, Lynch miners would not have to go wearily homeward covered with pit grime to take a bath in a tub of water heated on a kitchen stove. Instead, a huge bath house with hundreds of showers would send them to their wives clean, shampooed, and refreshed.

Visitors who came to Lynch on business (and simply to see the fantastic success of the place) would stay at a hotel containing 133 spacious carpeted, steam-heated-rooms.

Paved streets would extend throughout the community so that miners could acquire and use automobiles. The store would be the largest coal company commissary ever built—a forbidding three story mercantile fortress, divided into departments like comparable establishments in big cities. Only goods of high quality would be stocked, and prices would allow a modest profit.

The mines would be the most modern in the world, adequately ventilated and eclectically lighted throughout. The coal would pass through a gigantic tipple of steel and cement, the largest and most efficient in the world.

On the hill overlooking the town would rise a refuge for healing the sick
and broken. With thick stone walls constructed by Italian and Hungarian masons would stand a sixty-room hospital, the best in the American coal fields.¹

The website of the Portal 31 Project provides additional detail concerning the development of the Lynch community:

The town was named in honor of Thomas Lynch, the first president of the United States Coal and Coke Company and various subsidiary mining companies of the United States Steel Corporation from 1897 to 1914.

The construction was directed by Edward O'Toole, general superintendent, and Howard N. Eavenson, chief engineer, of Gary, W. Va. The Lynch staff included John T. Franklin, assistant to the general superintendent, J. D. Jennings, superintendent of construction, L. A. Billips, division engineer, Frank S. Follensbee, construction engineer, Frank J. Dooley, chief clerk, and Grover C. Sledge, manager of stores.

The plant location was in a wooded wilderness, with absolutely nothing at the site. Everything had to be brought in to start the job. The first supplies were shipped by express to Benham, Kentucky, a neighboring plant owned by the International Harvester Company, at the end of the railroad. The shipment consisted of one carload of mules and one carload of miscellaneous supplies, wagons, harness tools, etc.

The supplies were unloaded and moved to the Lynch camp site about one mile upstream.

When construction began, labor conditions were probably worse than they had ever been in this country. Huge defense plants at Muscle Shoals, Alabama, and Nashville, Tennessee, and the Army camp at Louisville, Kentucky—all within a few hundred miles of Lynch—were under construction and it was almost impossible to make contracts at any fixed price. It was decided, therefore, to do all the work with company forces.

Labor recruiting was no mean problem. The surrounding mountains were first recruited for labor. The natives would accept jobs on general outside work but would have no part of mine work. Adventurers of all kinds came to Lynch to see first hand what the pickings were. Some stayed; many left. The labor force during the first year was truly a colorful group of all types, creeds and colors.

By the middle of September 1917, there were 300 cars of material on the Louisville and Nashville Railroad system consigned to the Lynch operation. The consignment, consisting of mining machinery, building materials and camp supplies of all kinds, was unloaded at Benham and hauled to Lynch by mule train.

The railroad company refused to extend their tracks to the Lynch operation because they considered the project to be a mushroom operation that would die with the end of the war. The coal company then built its own railroad, first extending the track to the No. 1 tipple site, about one-half mile upstream from the International Harvester property line, then on to the upper end of the town site, with necessary spurs to facilitate the movement of supplies.

When enough men had been employed to start construction, access roads were graded and temporary shanties, bunk houses, kitchens, stables and other necessary structures were built as rapidly as possible. The first erected was a large wooden administration building at the lower end of town, to accommodate the mining department, store, bank, post office, and hospital.

As the railroad construction progressed and enough shanties had been built to house the work force of about 1000 men, construction began, with steam shovels, men, mules and dump carts, grading roads and tramways and excavating for dwelling and plant buildings. Deep wells were drilled. The creek channel was straightened and walled to provide room for plant buildings. Drifts were opened in the coal seam along the hillsides, and four temporary tipples were built. Timber cutting crews were organized and three sawmills were put into operation. The first permanent dwelling was completed and occupied on November 10, 1917. A temporary power plant, equipped with four 150 K.W. engine driven generators, was placed in service on December 1, 1917. The railroad was completed on January 1, 1918.

By that time there were 1500 men on the payrolls, the majority of whom were housed in bunk houses and fed at the 25 company kitchens. The wholesome food, served in ample quantities in these kitchens, was probably responsible for the hiring and holding of the much-needed labor force.

Due to the severe winter of 1917-1918 and the influenza epidemic, which took its toll of employees, including Frank Kearns, the recently appointed plant superintendent, progress was slow. However, by the early spring of 1918, 75 dwellings had been completed and occupied. With the coming of favorable weather, permanent construction continued until the major portion was completed in late 1920.
Isolated, as it was, from any large city, everything for comfortable living and efficient operation had to be furnished by the company.

Streets were laid out so that grades would not exceed 10% on secondary streets and 5% on the main street. Masonry or concrete ditches, retaining walls and culverts were provided to insure proper surface drainage.

Two hundred single and four hundred double houses were built under twelve different plans. In addition, five boarding houses, each containing twenty-two bedrooms, were built for unmarried miners. The Lynch hotel, containing one hundred and eight bedrooms, was erected for clerks, engineers, store employees, school teachers and mine officials.

The houses were painted and trimmed in various colors to break the monotony in appearance. With the exception of five official dwellings, which were of concrete block, stuccoed, all houses were of wooden construction, with asphalt shingles.

The interior of the rooms was plastered. Running water was piped into every house. An electric light was provided in each room and one on each front porch. About thirty of the dwellings had hot water central heating, the remaining being heated by a grate in each room. Those with central heating were also equipped with toilet and bathing facilities. Those without such facilities had outside closets equipped with concrete septic tanks. The overflow from these tanks escaped through sewer pipes, to which also the kitchen sinks drained, into the main sewer.

The entire town was sewered and the sewage flowed to a sump at the lower end of town, from which it was lifted by centrifugal pumps to a treating plant on the hillside.

The houses were built on lots of sufficient size to allow space for lawns and gardens for an ordinary family. Concrete sidewalks extended to the front and rear porch of each house.

On account of the isolated location of the plant, ample repair facilities for all types of machinery used were imperative. The machine shop was the first such building designed and erected. The shop was equipped with the necessary tools to repair and overhaul any of the equipment used at the plant.

The only public utility company within reach of the plant had two small stations located about eight miles from Lynch. A substation at this plant would have to depend on a single transmission over the top of Big Black Mountain, which it would cross at one of the highest points in the State. Such a line would be liable to considerable trouble and would be almost inaccessible for repairs, and as the power company required the coal company to finance the extensions, the latter company decided to build its own power plant in order to have a reliable source of power at all times.

The power requirements greatly exceeded the capacity of the temporary plant, so the temporary plant was laid out for two 1875 K.V.A. three-phase, 60 cycle, turbo-generators, with the necessary switchgear, boilers, pumps, condensers and spray pond. The building was constructed as rapidly as possible, the equipment installed and the plant put into service in August 1919.

In the early construction days, water was procured from deep wells with manually operated pumps. By the time the power plant was completed, the entire town had been piped for delivery from a central point. The wells were blown with compressed air and the water flowed to the power plant sump, from which it was pumped to a 300,000 gallon steel tank, on the mountainside, located at an elevation sufficient to supply two standard fire streams at the highest fire hydrant in town. Fire plugs were placed at intervals so that no house would be more than 200 feet from at least one plug.

The well supply was not sufficient, so lines were laid up Looney Creek and Gap Branch, well above town, from which the creek water flowed to the sump, where it was chlorinated before being pumped to the tank.

Surface coal mining within the viewshed of these “intentional” communities constructed in a “wooded wilderness” would adversely affect the context in which these planned cities were located and developed.

Additionally, since the designation of the Lynch, Portal 31 has been opened. It represents a substantial investment of time and human and financial capital into the development of the first underground coal mine tour available to the public. Strip mining and related blasting could adversely affect visitation to and safety of visitors to the Portal 31 Project.
The consequences of mining within the petitioned Area A include these possible effects:

1. Adverse effects on the structures from vibrational impacts associated with blasting. The standards for controlling off-site structural impacts of blasting were developed for modern structures, and are neither based on nor sufficiently protective of historic structures built of traditional materials, particularly mortar ingredients. The impact of vibrations from mine blasting and mine-related equipment, including transportation and excavation equipment, may damage the structural integrity of the historic buildings.

2. Additionally, it is not the individual structure or structures within the cities of Lynch and Benham that have been included on the National Register of Historic Places, but rather a district containing numerous structures that are historic both individually but more so, because of their relationship and orientation. The inclusion of districts incorporates a sense of place and of the relationship of those buildings to each other and to the natural environment.

   Numerous important historic and cultural resources would be adversely affected by surface coal mining on in the viewshed above the historic districts, including the Tri-Cities Little League Field, the Kentucky Coal Mining Museum, the Benham School House Inn, the Benham Coal Miners Memorial park, the Rising Star Church, the Greater Mount Sinai Baptist Church, Portal 31, the Lynch Bath House, the Lynch Depot, Lynch High School, Lynch Country Club, the Old Lynch Cemetery, the Meridoza Center (former U.S. Steel Office). The cities of Lynch and Benham have invested much time and effort in an attempt to diversify their economy and to attract visitors to the area to enjoy the rich and proud history of underground coal mining that was so central to the development of these communities, and surface coal mining above the cities will harm those efforts and conflict with the protection and enhancement of the historic and
cultural values reflected in these districts. The historic setting of the surrounding lands for these two historic districts would be adversely impacted by the visual intrusion of mining operations along the upper reaches and ridgelines of the viewshed in which the districts are located.

Designation of an area as unsuitable is also appropriate here because the Benham and Lynch Historic Districts are “historic lands” whose cultural and aesthetic values could be significantly damaged by mining. The culture of these communities was defined by underground mining, which attracted immigrants from across the nation and the world, into a planned community devoted to mineral extraction. The introduction of the noise, dust, vibration, and visual scarring of the viewsheds will diminish the cultural integrity of these communities in a significant manner.

Additionally, Portal 31 represents a substantial investment of financial and human capital in the development of an education asset that would be placed at risk by blasting at higher elevations on the mountain.

The history of Portal 31 is provided on the website, www.Portal31.org:

In 1917 the U.S. Coal & Coke Company, a subsidiary of U.S. Steel, built the community of Lynch, Kentucky, then the world's largest coal camp. The coal camp was built on part of the 19,000 acres the company had purchased in the southeastern tip of Harlan County, near the Virginia border. The camp's population peaked at about 10,000 persons but the reported figures vary because of the transient nature of the miners and their families at that time. One thousand company owned structures provided housing for people of 38 nationalities, the most prominent of which were Italian, Spanish, Czech, Polish, English, Welsh, Irish and Scottish. By the 1940s this mining complex employed more than 4000 persons above and below ground.
The public buildings were constructed of cut sandstone, and included a company commissary, post office, theater, hotel, hospital, churches, and schools. Many company buildings were built of stone as well, such as the offices, bath house, power plant and lamp house. In the 1920s U.S. Coal & Coke owned the world's largest coal tipple with a capacity of 15,000 tons. On February 12, 1923 the world's record for coal production in a single 9 hour shift was achieved when miners operating 40 shortwall cutting machines produced 12,820 tons of coal, filling 256 railcars.

While considered one of Appalachia's model coal camps due to its' company provided health care, education, churches, housing, social services, wages and benefits and recreation, it was still a closed community where the company carefully controlled all aspects of the political and economic process. The company had their own police force and it was used to keep union organizers out of the coal camp and to intimidate miners who tried to join the union. Throughout the 1920s and well into the 1930s the company along with many Kentucky coal producers did everything in their power to prevent unionization. This action by the coal companies and the actions of the miners earned Harlan County the name of "Bloody Harlan".

All the coal produced at Lynch by U.S. Coal & Coke Co. was "captive coal", meaning it was all produced by U.S. Coal & Coke Co. for U.S. Steel consumption, and was produced from drift mines. All coal was shipped from Lynch to U.S. Steel plants via the L&N (Louisville & Nashville) Railroad. Coal was mined from the 56" Elkhorn C Seam, 56" Keokee Seam, 50" Kelioka Seam at the company's No. 30 and No.31 Mines at Lynch. U.S. Coal & Coke also mined coal at Gary, Thorpe, Elbert, and Filbert, West Virginia. Today many of the company's buildings, including a tipple, and a mine portal are part of a coal mining museum complex at Lynch.

In the 1950s the company began selling homes to individuals and the town was incorporated, thus allowing for an elected mayor and town council, although still heavily influenced by the company. Incorporated as a fifth class city, it had a population of 1,517 in 1970, 1,614 in 1980 and 1,166 in 1990.
The transmission of blast-induced vibration through the strata between the strippable seams and Portal 31, could significantly increase risks of injury to visitors, and may affect the degree to which the public chooses to visit the mine.

In addition to the listing of historic districts within Benham and Lynch on the National Register of Historic Places, both Benham and Lynch are “Preserve America” Communities. **Preserve America** is a national initiative in cooperation with the Advisory Council on Historic Preservation; the U.S. Departments of Defense, Interior, Agriculture, Commerce, Housing and Urban Development, Transportation, and Education; the National Endowment for the Humanities; the President's Committee on the Arts and Humanities; and the President's Council on Environmental Quality. The listings for Benham and Lynch read as follows, and provides some additional context to the historical origins of the city, and to the rich cultural and historic values that the communities are seeking to protect and enhance (and which will be adversely affected by allowing strip mining above the districts in the viewsheds of the two cities):

**Preserve America Community: Benham, Kentucky**

**Benham** (population 599) was founded in 1911 as a coal mining company town by Wisconsin Steel, a subsidiary of International Harvester. The last mine closed in the 1970s, and Benham has been forging a new identity that capitalizes on its history and its well-preserved historic assets.

Several of the city’s public buildings are already listed in the National Register of Historic Places, and efforts are underway to nominate the entire community for listing.
The Kentucky Coal Mining Museum, housed in the former commissary building (1923), is a major regional tourist attraction. Three stories of exhibits feature the history of coal mining in Kentucky and the life of coal miners and their families. Miners are further celebrated in the nearby Coal Miner's Memorial Park, located on the former site of the coal company's processing, shipping, and rail yard.

Visitors to Benham can stay at the Schoolhouse Inn (1926), which was built by the company as a school for coal camp children. Benham encourages heritage tourism through its participation in the Southern and Eastern Kentucky Tourism Development Association and the Kingdom Come Scenic Parkway.

The Coal Miners Memorial Theatre is a new community amenity and tourist draw that is under development. The original company-built theatre (1921) is being rehabilitated as a multi-function facility. It will be used for community meetings, concerts, movies, and performances, including a play depicting the history of Benham that will be presented regularly during tourist season.

For more information Benham, Kentucky: www.benhamky.org

Tri-Cities of Southeast Kentucky/Kingdom Come Scenic Parkway: www.kingdomcome.org

Southern and Eastern Kentucky Tourism Development: Association: www.tourseky.com

Preserve America Community: Lynch, Kentucky

Located at the foot of Black Mountain in the heart of the state’s coal-mining country, Lynch, Kentucky (population 900) was founded in 1917 to house the workers of the U.S. Coal & Coke Co., later a subsidiary of U.S. Steel. The town was named for Thomas Lynch, the first president of the company, and at its peak, had a population of close to 10,000. In the 1950s the town was sold to the residents and incorporated in 1963.

Lynch's showplace is Portal 31, where an outside walking tour features the mine portal, a black granite monument to former United Mine Workers President John L. Lewis, a memorial to workers who died in mining accidents, and the 1920s L&N Depot. Nearly
completed, an underground rail-car tour through the mine will include animated exhibits along the route. The Lamphouse Museum, built in the 1920s to provide headlamps and other lighting for miners, showcases historic and contemporary coal mining tools.

Every summer, Lynch, along with neighboring towns Benham and Cumberland, hosts the Tri-City Grand Reunion, a festival that offers music and a range of activities celebrating the area’s Appalachian heritage. The First Frontier History Audio Driving Tour, which starts in Cumberland Gap, takes visitors on a 220-mile self-guided journey through the mountains, including a stop in Lynch and the Tri-City area.

For more information:

City of Lynch: www.lynchkentucky.org
Mine Portal 31: www.portal31.org

In recognition of the threat to the integrity of the cultural and historic values sought to be advanced and protected by these communities, the National Trust for Historic Preservation has identified the Lynch and Benham communities as one of “11 Most Endangered Historic Places” for 2010. The listing identifies the historic places as “endangered” from “mining”, and includes this discussion:

Nestled at the base of Eastern Kentucky's rugged Black Mountain, the highest peak in the Bluegrass State, two historic mining towns are working hard to define a future beyond coal.

The town of Benham, population 500, was founded by International Harvester in 1911; nearby Lynch, population 900, was created by U.S. Coal and Coke Company in 1917. During the coal industry's heyday in the 1940's, Benham and Lynch were booming company towns whose prosperity was fueled by thousands of immigrant laborers.

When coal mining began to decline here decades ago, residents worked hard to reinvent their communities, renovating a historic schoolhouse, theater and jail and creating a well-respected mining museum and exhibition coal mine with underground rail tours. Both Benham and Lynch have made significant progress in developing heritage tourism sites,
revitalizing their main streets and welcoming visitors eager for an authentic coal country experience.

The recognition by the National Trust of the “endangered” status of the Benham and Lynch historic districts, and the recognition by Preserve America of these towns and the efforts of the local communities to develop an economy that protects the historic and cultural heritage and attracts visitors to explore that heritage, further underscores that surface coal mining within the viewshed is incompatible with the protection of the cultural and historic values associated with these districts, and also supports designation on the basis that surface coal mining within the viewshed of these historic districts would be incompatible with “land use policies, plans or programs adopted by state, area-wide, or local agencies with management responsibilities for the areas which would be affected by such surface coal mining operations.” Listing on the National Register brings with it a degree of national significance and protection against activities that would adversely affect the designated district, and likewise, the Preserve America initiative represents a federal policy that is incompatible with surface coal mining in the viewshed of these historic districts.

For each and all of these reasons, the petitioned Area A should be deemed as unsuitable for mining in order to protect “historic lands” in which surface coal mining operations could result in significant damage to important historic, cultural and aesthetic values and natural systems.
Allegation #2: Surface coal mining operations will affect “fragile lands” in which the surface coal mining operations could result in significant damage to important historic, cultural, scientific or aesthetic values or natural systems

"Fragile lands" as used in this context includes areas containing natural, ecologic, scientific or esthetic resources that could be significantly damaged by surface coal mining operations. The Looney Creek and Gap Branch watersheds that drain into the Darby seam reservoir of the city of Lynch, are valuable habitats for fish and wildlife due to the high water quality and relative lack of disturbance of the streams by human activity. Representing high quality headwater streams, these watersheds contain a significant assemblage of species that are important not only in a local context but which are increasingly important given the substantial impairment of streams due to sedimentation, changes in stream gradient and flow, and elevated levels of conductivity associated with mining-related disturbances. Attached to this Petition is a listing of terrestrial and aquatic species associated with the Black Mountain area, reflecting the diversity of species that are both indicative of high quality, relatively undisturbed habitat, and dependent on that lack of disturbance and attendant pollution.

In order to protect the high quality habitat and these species, the petitioned watershed areas B, C and D should be determined to be fragile lands containing natural, ecologic, scientific and esthetic resources that could be significantly damaged by surface coal mining operations and should be declared to be off-limits to surface mining activities for this reason.

Allegation #3 Surface Coal Mining Operations Will Affect Renewable Resource Lands in Which the Surface Coal Mining Operations Could Result In A Substantial Loss Or Reduction In The Long-Range Availability Of Water Supplies

“Renewable resource lands” are defined to include “geographic areas which
contribute significantly to the long-range productivity of water supplies or of food or fiber products, such lands to include aquifers and aquifer recharge areas.

The petitioned Areas B, C and D, representing the aquifers and recharge areas serving as the water sources for Benham and Lynch, are clearly renewable resource lands which contribute significantly to the long-range productivity of water supplies. As headwater communities, alternative water supplies are not readily available, and the loss of or damage to the quality and yield of the reservoirs will dramatically and adversely affect the viability of these communities for industry, commerce, and residential habitation.

The high quality of the water sources for both communities is matched only by their vulnerability to damage due to mining activities. Because the Lynch water supply is fed directly by streamflow from Gap Branch and Looney Creek, there is no attenuation of any pollution that would be discharged into the surface waters of the Looney Creek or Gap Branch watershed above the intakes. Similarly, the high quality of the water discharged from the Kellioka seam has been acknowledged in a study that indicated, and changes in the quality and amount of infiltration of precipitation into the stress-relief fracture flow system that feeds the aquifer, induced by mining at high elevations, could significantly damage the water resource and adversely affect the long-range productivity of the Kellioka seam as a water supply source.

Any surface coal mining operations within the petitioned area could damage the long-range productivity of Area B, which includes the watershed and drainage area that comprise the water supply source for the city of Benham.
The city of Benham draws its water supply from the Kellioka coal seam to the south of Looney Creek, where it is collected, piped to, and treated by the city of Benham for use by the residents of that community. In 2009, Benham’s water system had 339 connections and supplied over 41 million gallons of treated water. The exceptional quality of Benham’s raw water source was recognized in a report prepared by the Van Arden Group in 2006 which presented a business and marketing plan for a Bottled Water business grounded in bottling the water for sale as drinking water. That report is attached.

Surface mining within Area C would increase sedimentation and mineralization of runoff into the Gap Branch watershed, which provides some 30% of the recharge for the Darby seam reservoir through an intake borehole in the streambed of Gap Branch, which is connected with the underground reservoir in the Darby coal seam.

Similarly, surface mining would significantly increase sediment loading and change the chemistry of water in Area D, which is that area within the Looney Creek watershed, including the watersheds of Barnett Branch and Trace Branch that flow into Looney Creek, located above and recharging the borehole in the streambed of Looney Creek that is the primary water source for the Lynch Reservoir. The Lynch water system serves 379 connections, and from January until July, 2010 sold over twenty million gallons of water, pumping 36 million gallons to customers, for fire hydrants, and for use by the city sewer plant.

While it has been suggested that alternative water supply sources could be developed, the reality is that there are currently no other identified and available
sources of supply comparable in volume, in reliability and in quality that could predictably and reliably yield that volume of high quality raw water required to serve these communities. Any development of alternative sources if the Lynch or Benham water sources are contaminated or disrupted, would come only after a period of economic and community disruption and at greater cost to the customers of the water systems.

CONCLUSION

For the reasons stated above, Petitioners respectfully urge that this petition be accepted as complete, and that the petitioned areas be designated as unsuitable for surface coal mining operations.²

The notarized signatures of the Petitioners are attached to the Petition form, as is the required 7.5 USGS Map delineating the boundary of the petitioned areas.

²Prepared by Tom FitzGerald, Esq., Director, Kentucky Resources Council, Inc.