Appendix C

First Round of Agency Comments re: Project Study Area

July 15, 2003



Commonwealth of Kentucky **Transportation Cabinet** Frankfort, Kentucky 40622

James C. Codell, III Secretary of Transportation

Clifford C. Linkes, P.E. Deputy Secretary

July 15, 2003

(See Attached List) «Mailing_Title» «First_Name» «Last_Name» «Suffix» «Title» «Organization» «Address1» «Address2» «City», «State» «Zip»

SUBJECT: Planning Study Harlan, Leslie, and Perry Counties New or Improved Highway Between Harlan and Hazard Item No. 11-137.00

Dear «Letter Title» «Last Name»:

We are requesting your agency's input and comments on a planning study to determine the need for, and potential impacts of, a proposed highway project. The Kentucky Transportation Cabinet has assembled a study team to evaluate the proposed construction of a new, and/or relocation and reconstruction of an existing, highway between Harlan and Hazard. The study is currently in the initial data-gathering stage.

We ask that you identify specific issues or concerns of your agency that could affect the development of the project. This planning study will include a scoping process for the early identification of potential alternatives, environmental issues, and impacts related to the proposed project. We believe that early identification of issues or concerns can help us develop highway project alternatives to avoid or minimize negative impacts. We respectfully ask that you provide us with your comments by August 30, 2003 to ensure timely progress in this planning effort.

During the development of this planning study, comments will be solicited from Federal, state, and local agencies, as well as other interested persons and the general public, in accordance with principles set forth in the National Environmental Policy Act (NEPA) of 1969. Other Transportation Cabinet offices or consultants working on behalf of the Transportation Cabinet may also contact you seeking more detailed data or information to assist them in completing their environmental studies for this phase of the project.



KENTUCKY TRANSPORTATION CABINET "PROVIDE A SAFE, EFFICIENT, ENVIRONMENTALLY SOUND, AND FISCALLY RESPONSIBLE TRANSPORTATION SYSTEM WHICH PROMOTES ECONOMIC GROWTH AND ENHANCES THE QUALITY OF LIFE IN KENTUCKY." "AN EQUAL OPPORTUNITY EMPLOYER M/F/D" Paul E. Patton Governor We have enclosed the following project information for your review and comment:

- Preliminary Listing of Issues and Major Considerations
- Project Location Map
- Data on the Existing Area Highway System
- Geometric and Traffic Characteristics of Existing Highways
- Crash Analysis
- Environmental Footprint

We appreciate any input you can provide concerning this project. Please direct any comments, questions, or requests for additional information to Bruce Siria of the Division of Planning at 502/564-7183 or at <u>bruce.siria@mail.state.ky.us</u>. Please address all written correspondence to Annette Coffey, P.E., Director, Division of Planning, Kentucky Transportation Cabinet, 125 Holmes Street, Frankfort, KY 40622.

Sincerely,

Runth Coffeey

Annette Coffey, P.E. Director Division of Planning

AC:BSS:RC

Enclosures

c:

Jose Sepulveda (w/a) Glenn Jilek (w/a) David Smith – QK4 Donald Breeding Andy Buell Danl Hall Bill Madden Scottie K. Cornett Greene Keith Keith Damron David Jones George Best David Waldner Jeff Allen Dean Croft Clay McKnight Ms. LaVerne Reid District Manager Airports District Office, Federal Aviation Administration 3385 Airways Blvd., Suite 302 Memphis TN 38116

Mr. Allen D. Youngman Adjutant General Department of Military Affairs Boone Nat'l Guard Ctr.,100 Minuteman Pky. Frankfort KY 40601

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Kentuckians for The Commonwealth 105 Reams Street P.O. Box 1450 London KY 40743

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Mr. Billy Ray Smith Commissioner Kentucky Department of Agriculture Capitol Annex, Room 188 Frankfort KY 40601 Mr. Bob Logan Commissioner Kentucky Department of Environmental Protection 14 Reilly Road Frankfort KY 40601

Mr. Hugh Archer Commissioner Kentucky Department of Nat'l. Resources 663 Teton Trail Frankfort KY 40601

Mr. Pat Simpson Commissioner Kentucky Department of State Police 919 Versailles Road Frankfort KY 40601

Kentucky Development Society, Inc. 517 Ashley Way Lexington KY 40503

Mr. John Lyons Director Kentucky Division of Air Quality 803 Schenkel Lane Frankfort KY 40601

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Mr. Stephen A. Coleman Director Kentucky Department of Nat'l. Resources, Division of Conservation 663 Teton Trail Frankfort KY 40601

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Ms. Leah W. MacSwords Director Kentucky Division of Forestry 627 Comanche Trail Frankfort KY 40601

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Mr. Jim Wallace Interim Executive Director Kentucky Historical Society 100 W. Broadway Frankfort KY 40601

Ms. Sylvia L. Lovely Executive Director Kentucky League of Cities, Inc. 101 East Vine Street, Ste. 600 Lexington KY 40507

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Mr. Gary Sharpe

Director

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Mr. Wesley Glass Acting Director Kentucky Transportation Cabinet, Division of Materials Frankfort KY 40622

Mr. Chuck Knowles Director Kentucky Transportation Cabinet, Division of Operations State Office Building, 7th Floor, Mail Code 7-2 Frankfort KY 40622

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Mr. Oscar Geralds Sierra Club 259 West Short Street Lexington KY 40507 Mr. Gary Lanthrum Director, National Transportation Program U. S. Dept. of Energy, Albuquerque Operations Office P. O. Box 5400, SC-5 Albuquerque NM 87185-5400

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The Honorable Mitch McConnell United States Senator United States Senate 361-A Russell Senate Office Building Washington DC 20510

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Mr. Kenneth W. Holt U.S. Dept. of Health & Human Serv., Center for Disease Control, Emergency And Environmental Health Services Division Mail Stop F-16 4770 Buford Highway, N.E. Atlanta GA 30341-3724

The Honorable Jim Bunning United States Senator United States Senate 316 Hart Senate Office Building Washington DC 20510

Mr. Thomas M. Hunter Executive Director Appalachian Regional Commission 1666 Connecticut Ave., NW Washington DC 20235

Colonel Robert E. Slockbower District Engineer U. S. Army Corps of Engineers, Louisville District P.O. Box 59 Louisville KY 40201

The Honorable Harold Rogers United States Representative - District 5 U. S. House of Representatives 2406 Rayburn House Office Building Washington DC 20515

Mr. Kevin W. Lawrence Planning Staff Officer U.S. Dept. of Agriculture, Forest Service, Daniel Boone Nat'l Forest 1700 Bypass Rd. Winchester KY 40391 The Honorable Daniel Mongiardo Kentucky State Senator 200 Medical Ctr. Dr. Ste. 2N Hazard KY 41701

The Honorable Rick Nelson Kentucky State Representative Rt. 3, Box 686 Middlesboro KY 40965

The Honorable Danny Ray Noble Perry County Fiscal Court P.O. Box 210 Hazard KY 41702-0210

The Honorable Joseph A. Grieshop Harlan County Fiscal Court P.O. Box 956 Harlan KY 40831-0956

The Honorable Daniel E. Howard City of Harlan P.O. Box 783 Harlan KY 40831

The Honorable Eugene Stewart City of Hyden P.O. Box 972 Hyden KY 41749

Mr. Stephen C. Hanson President and CEO Appalachian Regional Healthcare 1220 Harrodsburg Road Lexington KY 40533 The Honorable Tim Couch Kentucky State Representative P.O. Box 710 Hyden KY 41749

The Honorable Brandon Smith Kentucky State Representative 350 Kentucky Blvd Hazard KY 41701

The Honorable Onzie Sizemore Leslie County Fiscal Court P.O. Box 619 Hyden KY 41749-0619

The Honorable Sara L. Augusta City of Cumberland 402 W. Main Street Cumberland KY 40823

The Honorable William D. Gorman City of Hazard P.O. Box 420 Hazard KY 41702

Mr. Jerry Haynes Interim Hospital Administrator Appalachian Regional Healthcare 100 Medical Center Drive Hazard KY 41701

Blanton Forest Kentucky Natural Lands Trust 433 Chestnut St Berea KY 40403 Mr. Shad Baker Pine Mountain Trail State Park P.O. Box 784 Whitesburg KY 41858

Ms. Nancy Adams Executive Director Pine Mountain Settlement School 36 Highway 510 Pine Mountain KY 40810-8289 Ms. Delzinna Belcher Coordinator Pine Mountain Trail State Park 1050 State Park Road Pineville KY 40977-0610



United States Department of the Interior

FISH AND WILDLIFE SERVICE 3761 GEORGETOWN ROAD DIV OF PLANNING FRANKFORT, KY 40601

2003 SEP 12 A 10: 32

September 3, 2003

Ms. Annette Coffey Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, Kentucky 40622

Subject:

FWS #03-2436; Planning Study: new or improved highway between Harlan and Hazard; Harlan, Leslie, and Perry Counties, Kentucky KTC Item No. 11-137.00

Dear Ms Coffey:

Thank you for your correspondence of July 15, 2003, regarding the Kentucky Transportation Cabinet's (KTC) planning study for a new or improved highway between Harlan and Hazard, Kentucky. Fish and Wildlife Service (Service) personnel have reviewed the information submitted and the following comments are provided in accordance with the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 *et seq.*) and the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*).

In general, we are concerned that highway projects frequently accelerate erosion and sedimentation in streams, resulting in adverse effects to the aquatic environment. The use of heavy equipment to move earth and existing vegetation disrupts natural drainage patterns and exposes large areas of disturbed soil to erosion. Excessive sedimentation can clog stream channels and contribute to increased flooding. It can also increase water temperatures and cause oxygen demands that can damage or destroy fish and invertebrate populations. Deposition of sediment on the channel bottom also degrades aquatic habitat by filling in substrate cavities, burying demersal eggs, and smothering bottom organisms. In addition, turbidity, as induced by accelerated erosion and sedimentation, results in further damage to aquatic systems. Increased particulate matter suspended in the water column may drive fish from the polluted area by irritating the gills, concealing forage, and/or destroying vegetation that may be essential for spawning and cover habitat for particular species. Turbidity also degrades water quality by reducing light penetration, pH and oxygen levels, and the buffering capacity of the water. Degraded water quality may continue far downstream from the point where the erosion occurs.

Prevention of excessive sedimentation can occur only through application of Best Management Practices during daily construction activities. Rigid application of your agency's construction erosion control standards can preclude most sedimentation problems. In some cases, however, additional measures will need to be taken by on-site inspectors and construction representatives that are trained in erosion and sediment control methods. We request that you consider having an inspector on-site during all construction activities to ensure that work areas are stabilized on a daily or regular basis.

According to our records, three federally listed species may occur within the proposed project area. They are listed below:

Common Name Indiana bat gray bat blackside dace <u>Scientific Name</u> Myotis sodalis Myotis grisescens Phoxinus cumberlandensis Federal Status endangered endangered endangered

According to our information, the federally threatened blackside dace may occur in the vicinity of the project area in Harlan County. Blackside dace inhabit small, cool, upland streams in forested areas. Dace are normally found in pools near undercut banks or other cover such as brush or large rocks. You should survey any streams that will be crossed by the proposed project that lie within the Cumberland River watershed and may serve as potential habitat for the dace. This will help us determine if this species is present within the project area and help us determine if potential impacts to this species are likely. A qualified biologist, and preferably one who holds the appropriate collection permits for this species, must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If this species is identified, we request written notification of such occurrence(s) and further coordination and consultation with you.

According to our records, summer roost habitat and/or winter hibernacula for the endangered Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*) may exist within the proposed project sites. Based on this information, we believe that: (1) forested areas in the vicinity of and on the project area may provide potentially suitable summer roosting and foraging habitat for the Indiana bat and potentially suitable foraging habitat for the gray bat (if suitable roosting sites are present); and (2) caves, rockshelters, and abandoned underground mines in the vicinity of and on the project area may provide potentially suitable winter hibernacula habitat for the Indiana bat and/or potentially suitable summer roosting and winter hibernacula habitat for the gray bat. Our belief that potentially suitable habitat may be present, and possibly occupied by one or both of these species, is based on the information provided in your correspondence, the fact that the project site and surrounding areas may contain forested habitats that are within the natural ranges of these species, and our knowledge of the life history characteristics of these species.

The Indiana bat utilizes a wide array of forested habitats, including riparian forests, bottomlands, and uplands for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH.

Prior to hibernation, Indiana bats utilize the forest habitat around the hibernacula, where they feed and roost until temperatures drop to a point that forces them into hibernation. This "swarming" period lasts, depending on weather conditions in a particular year, from about September 15 to about November 15. This is a critical time for Indiana bats, since they are acquiring additional fat reserves and mating prior to hibernation. Research has shown that bats exhibiting this "swarming" behavior will range up to five miles from chosen hibernacula during this time. For hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation.

Gray bats roost, breed, rear young, and hibernate in caves year round. They migrate between summer and winter caves and will use transient or stopover caves along the way. For hibernation, the roost site must have an average temperature of 42 to 52 degrees F. Most of the caves used by gray bats for hibernation have deep vertical passages with large rooms that function as cold air traps. Summer caves must be warm, between 57 and 77 degrees F, or have small rooms or domes that can trap the body heat of roosting bats. Summer caves are normally located close to rivers or lakes where the bats feed. Gray bats have been known to fly as far as 12 miles from their colony to feed.

Because we have concerns relating to these species on this project and due to the lack of occurrence information available on these species relative to the proposed project area, we have the following recommendations relative to Indiana bats and gray bats.

- 1. Based on the presence of numerous caves, rockshelters, and underground mines in eastern Kentucky, we believe that it is reasonable to assume that other caves, rockshelters, and/or abandoned underground mines may occur within the project area, and, if they occur, they could provide winter habitat for Indiana bats and/or summer and winter habitat for gray bats. Therefore, we recommend that you survey the project area for caves, rockshelters, and underground mines, identify any such habitats that may exist on-site, and avoid impacts to those sites pending an analysis of their suitability as Indiana bat and/or gray bat habitat by this office.
- Since known hibernacula for the Indiana bat exists less than 10 miles from the project area, we recommend you only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.

We request your written acceptance of these recommendations as project conditions. However, if these recommendations cannot be incorporated as project conditions, then you should survey the project area to determine the presence or absence of the species within the project area in an effort to determine if potential impacts to these species are likely. A qualified biologist who holds the appropriate collection permits for these species must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If any Indiana bats and/or gray bats are identified, we request written notification of such occurrence(s) and further

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coordination and consultation with you. Surveys would not be necessary if sufficient sitespecific information was available that showed: (1) that there is no potentially suitable habitat within the project area or its vicinity or (2) that the species would not be present within the project area or its vicinity due to site-specific factors. Please provide us with a written justification or explanation if either or both apply to the proposed project.

Thank you for the opportunity to comment on this proposed action. If you have any questions regarding the information which we have provided, please contact Mindi Brady at (502)/695-0468 (ext.229).

Sincerely,

Lee Undrews.

Virgil Lee Andrews, Jr. Field Supervisor

DIV OF PLANNING

2003 SEP -5 A 11: 00

Centers for Disease Control and Prevention (CDC) Atlanta GA 30333

September 3, 2003

Annette Coffey, P.E. Director, Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, Kentucky 40622

Dear Ms. Coffey:

This is in response to your letter of July 15, 2003 requesting our agency's input and comments on a planning study to determine the need for, and potential impacts of, a proposed highway project in Harlan, Leslie, and Perry Counties between Harlan and Hazard. We are responding on behalf of the Department of Health and Human Services (DHHS), U.S. Public Health Service.

While we have no project specific comments to offer at this time, we do recommend that the topics listed below be considered during the NEPA process along with other necessary topics, and addressed if appropriate. Mitigation plans which are protective of the environment and public health should be described in the DEIS wherever warranted.

AREAS OF POTENTIAL PUBLIC HEALTH CONCERN:

I. Air Quality

- dust control measures during project construction, and potential releases of air toxins potential process air emissions after project completion
- compliance with air quality standards
- II. Water Quality/Quantity
- special consideration to private and public potable water supply, including ground and surface water resources
- compliance with water quality and waste water treatment standards
- ground and surface water contamination (e.g. runoff and erosion control)
- body contact recreation

III. Wetlands and Flood Plains

- potential contamination of underlying aquifers
- construction within flood plains which may endanger human health
- contamination of the food chain

Page 2 - Annette Coffey, P.E.

IV. Hazardous Materials/Wastes

- identification and characterization of hazardous/contaminated sites
- safety plans/procedures, including use of pesticides/herbicides; worker training
- spill prevention, containment, and countermeasures plan

V. Non-Hazardous Solid Waste/Other Materials

• any unusual effects associated with solid waste disposal should be considered

VI. <u>Noise</u>

 identify projected elevated noise levels and sensitive receptors (i.e. residential, schools, hospitals) and appropriate mitigation plans during and after construction

VII. Occupational Health and Safety

• compliance with appropriate criteria and guidelines to ensure worker safety and health

VIII. Land Use and Housing

- special consideration and appropriate mitigation for necessary relocation and other potential adverse impacts to residential areas, community cohesion, community services
- demographic special considerations (e.g. hospitals, nursing homes, day care centers, schools
- consideration of beneficial and adverse long-term land use impacts, including the potential influx of people into the area as a result of a project and associated impacts
- potential impacts upon vector control should be considered

IX. Environmental Justice

- federal requirements emphasize the issue of environmental justice to ensure equitable
- environmental protection regardless of race, ethnicity, economic status or community, so that no segment of the population bears a disproportionate share of the consequences of environmental pollution attributable to a proposed project. (Executive Order 12898)

While this is not intended to be an exhaustive list of possible impact topics, it provides a guide for typical areas of potential public health concern which may be applicable to this project. Any health related topic which may be associated with the proposed project should receive consideration when developing the draft and final EISs. Please furnish us with one copy of the draft document when it becomes available for review.

Sincerely yours,

Paul Jue

Paul Joe, DO, MPH Medical Officer National Center for Environmental Health (F16) Centers for Disease Control & Prevention

United States Department of Agriculture



Natural Resources Conservation Service 771 Corporate Drive; Suite 210 Lexington, KY 40503-5479 OF PLANNING

<u>2003 (UG | I P |: I n</u>

August 6, 2003

Ms. Annette Coffey, P.E. Director, Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, KY 40622

Dear Ms. Coffey:

In regards to the *Planning Study for Harlan, Leslie, and Perry Counties-New or Improved Highway* between Harlan and Hazard, Item No. 11-137.00, the USDA-Natural Resources Conservation Service (NRCS) is concerned with potential impacts that the proposed highway project might have upon prime farmland soils and additional farmlands of statewide importance. If federal dollars are to be used to convert important farmlands from agricultural uses to non-agricultural uses, a Form AD-1006 (or Form NRCS-CPA-106 if the project is a corridor type project) must be submitted to the local NRCS office. These forms may be obtained from the local NRCS office and are also available as electronic forms on the web at http://www.nrcs.usda.gov/programs/fppa/pdf_files/AD1006.PDF and http://www.nrcs.usda.gov/programs/fppa/pdf_files/CPA106.pdf.

Contact persons and addresses for the respective offices are:

Jim Jones, acting District Conservationist USDA-Natural Resources Conservation Service 167 Belkway Drive Harlan, KY 40831-1738

phone: (606) 573-2838

Jeff Moore, Soil Conservationist USDA-Natural Resources Conservation Service 410 Wendover Rd., P.O. Box 932 Hyden, KY 41749-0721

phone: (606) 672-2357

William G. Lacy, District Conservationist USDA-Natural Resources Conservation Service 625 Memorial Drive, Suite 101 Hazard, KY 41701-1343

phone: (606) 436-3731

These staff can help in identifying important farmlands in the proposed project area.

cerely.

DAVID G. SAWYER State Conservationist

cc: Jim Jones, acting District Conservationist, Harlan, KY Jeff Moore, Soil Conservationist, Hyden, KY William G. Lacy, District Conservationist, Hazard, KY Robert Bradley, Area Conservationist, Mount Sterling, KY APPALACHIAN A Proud Past, A New Vision



OF PLANNING

2003 (116 1 4 A 10: 33

August 8, 2003

Ms. Annette Coffey, P.E. Director **Division of Planning** Kentucky Transportation Cabinet 125 Holmes Street Frankfort, KY 40622

Dear Ms. Coffey:

Thank you for your July 15, 2003 letter offering the Appalachian Regional Commission (ARC) an opportunity to comment on the proposed planning study to evaluate the need and impacts of a highway between Harlan and Hazard.

Since the proposed study begins at Harlan, which is served by Corridor F (US 119), ARC is interested in the proposed project. As you are aware Corridor F is part of the Appalachian Development Highway System (ADHS) that was funded to promote economic and social development in the Appalachian Region. Therefore, we would hope that the proposed study would place a major emphasis on enhancing economic and social development in the region.

The ARC would like to be involved in this project throughout the project development process. Should you have any questions please do not hesitate to contact me at (202) 884 7706.

Sincerely:

Edward A. Terry, Jr. Senior Transportation Ad√isor

Cc:

Mr. Jose M. Sepulveda - FHWA Mr. Ewell Balltrip - KAC Ms. Peggy Satterly - KY ARC

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DIV OF PLANNING

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P 2:52

Commonwealth of Kentucky Department of Agriculture 500 Mero Street, 7th Floor Frankfort, Kentucky 40601

September 3, 2003

Ms. Annette Coffey, P.E. Director Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, KY 40622

Dear Ms. Coffey:

SUBJECT: Planning Study Harlan, Leslie, and Perry Counties New or Improved Highway between Harlan and Hazard Item No. 11-137.00

I have reviewed the Planning Study regarding the proposed construction of a new, and/or relocation and reconstruction of an existing, highway between Harland and Hazard.

Relating to the proposal, I would like to note that agricultural land is limited in this area. This study should include the impact on agricultural land. The study should also reference the impact on forestland and forest production.

If you need further information, I may be reached at 502/564-4696.

Sincerely,

Ira Linville Executive Director Office of Environmental Services



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DIV OF PLANNING



2003 AUG 27 A 10: 49

Kentucky Geological Survey

Research and Graduate Studies 228 Mining and Mineral Resources Building Lexington, KY 40506-0107 Phone: (859) 257-5500 Fax: (859) 257-1147 www.uky.edu/kgs

August 26, 2003

Annette Coffey, P.E. Director Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, Kentucky 40622

Dear Ms. Coffey:

This letter is to summarize any geologic concerns for the planning study: Harlan, Leslie, and Perry Counties New and improved highways between Harlan and Hazard. Item No. 11-137.00

Physiographic Region

The planning study area is in the Eastern Kentucky Coal Field, which is underlain by sandstone, shale, silty shale, siltstone, coal, and underclay. The southern boundary of the planning study parallels the east-west axis of Pine Mountain, which has limestone in addition to sandstone, shale, silty shale, siltstone, coal, and underclay.

Karst Potential

The planning study might encounter karst features, such as sinkholes and caves, in a narrow zone along the south side of Pine Mountain.

Landslide Potential

The planning study would encounter pre- or post-landslide hazards, especially along the southern flank of Pine Mountain in the south-dipping beds of sandstone and shale. Where slopes have formed on relatively competent beds of sandstone, they would likely remain stable unless undercut. Any new construction should be planned to avoid disturbing the natural conditions of equilibrium. North of Pine Mountain, pre- or post landslide hazards would be likely in the large marine shale zones, especially when they become wet.

Unconsolidated Sediments

The planning study would encounter unconsolidated sediments at or near stream drainage, such as gravel, sand, and silt.



Resource Conflicts

The planning study might encounter some resource conflicts such as prior ownership of property for coal.

Materials Suitability

The planning study would probably not encounter any material suitable for construction stone because the gravel would have coal and clay intermixed.

Fault Potential

The planning study would encounter a fault north of the town of Baxter across Ky. 119.

Earthquake Zone

The planning study area has a probable peak ground acceleration (PGA) due to earthquake ground motion of 0.09g, except in Harlan County, where the PGA would be 0.15g. There would be a very low potential for liquefication or slope failure in the unconsolidated sediments at or near streams caused by earthquake bedrock ground motion, except in Harlan County, where the potential for failure would be slightly greater.

Sincerely,

Richard A Smath Geologist

cc: Richard Wilson

Smith, David

bruce.siria@mail.state.kv.us From: Thursday, August 21, 2003 7:30 AM Sent: To: Smith, David FW: DOT Planning Study-Harlan, Leslie & Perry Counties Subject: No 261 HUME harlan landfill.pdf Superfund Sites by ARLAN_PERRY_LE dot query harlan dot query harlan leslie perry.... County for ... SLIE xls leslie perry ... I am collecting comments, but I thought I'd pass this one along now since forwarding their e-mail is the most logistically efficient way to do 50. > -----Original Message-----Ballard, Kim (NREPC, DEP) > From: Wednesday, August 20, 2003 10:55 AM > Sent: > To: Siria, Bruce (KYTC) > Cc: Daniell, Robert (NREPC, DEP) > Subject: DOT Planning Study-Harlan, Leslie & Perry Counties > > Division of Waste Management's comments on: > Planning Study > Harlan, Leslie & Perry Counties > New or Improved Highway between Harland and Hazard > > Resource Conservation and Local Assistance Branch (contact Sara Evans): > The Transportation Cabinet's Materials Committee recently granted Phase IV > approval for the use of Pulverized Glass Aggregate (PGA) in roadbed > construction; which essentially means approved for use in pilot projects. > I would like to request that PGA be used in this project to the greatest > extent possible. > > Superfund Branch (contact Fazi Sherkat): <<Superfund Sites by County for August 03.PDF>> > > Underground Storage Tanks Branch (contact Lori Terry): > Attached is the report for all UST facilities in the counties listed in > DOT's study. > <<HARLAN PERRY LESLIE.xls>> > Solid Waste Branch (contact Tony Cooley): > The green dots on the attachments below indicate orphan landfills. <<dot query harlan leslie perry with roads.jpg>> <<dot query harlan > > leslie perry.jpg>> > Attachments > > Field Operations Branch (contact Bill Belcher, London Regional Office): > The only KYDWM area of concern that I see in Harlan County is that the > southern-most study area boundary that extends from the cities of Harlan > to Cumberland along US 119 appears to bisect the now inactive Harlan > Landfill. I have attached a topo map with the approximate landfill > location highlighted. Please let me know if you need further. <<harlan landfill.pdf>> > >

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| | | | | | | ; | : : : |
| Incident Id Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| 11345 KY LOCK (#14) AND DAM SITES / U. S. ARMY CORPS OF ENGINEERS | 2661/20/10 | HAZARDOUS SUBSTANCE | SOIL CONTAMINATION | ACTIVE | HEIDELBERG | 900E22.7E | -83.77187 STATE SUPERFUND |
| 61099 MARCELLA | 1002/61/80 | | ILLEGAL HAZWASTE | CLOSED | ZOE | 37.699653 | -83.72883 STATE SUPERFUND |
| 7116 FHILLP LANE COMPLAINT | 00/01/2000 | HAZARDOUS SUBSTANCE | DISPOSAL OIL SHEEN | CLOSED | LEECO | 37.71046 | -83.69453 STATE SUPERFUND |
| 12153 SCHUMAKER RIDGE | 10/19/2000 | HAZARDOUS SUBSTANCE | ABANDONED DRUMS | CLOSED | BEATTYVILLE | 37.62364 | -83.64941 STATE SUPERFUND |
| 17151 SUN OIL CO DEL LEDFORD WHITE | 02/12/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17153 SUN OIL CO E. KY SEG. OFF. & WAREHOUSE | 1002/51/20 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17154 SUN OIL CO J. B. WHITE HEIRS | 02/12/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17155 SUN OIL CO MILLER-PREWITT-GOFF CO. 2 & 3 | 02/12/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17158 SUN OIL CO MILLER-PREWITT-GOFF CO. D-1 | 02/12/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 1723 SUN OIL CO MPG HEIRS GT | 02/16/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17225 SUN OLL CO MPG HEIRS M | 02/16/2001 | | | ACTIVE | Beattyville | | STATE SUPERFUND |
| 17229 SUN OLL CO WHITE HERS | 02/16/2001 | | | ACTIVE | Beatyville | | STATE SUPERFUND |
| 16352 WISER OIL | 6661/01/20 | | OIL/BRINE | CLOSED | Pinnacle | | PETROLEUM |
| 47806 WISER OIL | 03/05/1998 | | ABANDONED DRUMS | CLOSED | BEATTYVILLE | 37.6405 | -83.636 STATE SUPERFUND |
| Count of sites in LEECounty 16 | | | | | | | |
| County Name LESLIE | | | | | | | |
| Incident Id Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| | 02/16/2001 | | | ACTIVE | Hyden | | STATE SUPERFUND |
| Count of sites in LESLIECounty 1 | | | | | | | |
| County Name LETCHER | | | | | · | | |
| Incident Id Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| 42086 BLACKIE JUNKYARD DUMP SITE | 10/02/1996 | PETROLEUM | OPEN DUMPING | CLOSED | BLACKIE | | STATE SUPERFUND |
| 52487 IMPERIAL TRANSPORT | 06/01/10/90 | PETROLEUM | TRANSPORTATION | CLOSED | WHITESBURG | 37.11833 | -82.82694 PETROLEUM |
| 1718 JENKINS COMMUNITY HOSPITAL | 01/04/2000 | PETROLEUM | AUCIDENT AST (ABOVE GROUND | ACTIVE | JENKINS | 37.18474 | -82,6123 PETROLEUM |
| 35113 JENKINS POST OFFICE | 12/01/1994 | PETROLEUM | STORAGE TANK) FACIL/I'Y SPILL | CLOSED | JENKINS | 37,17333 | -82.63111 STATE SUPERFUND |
| 17232 JOHNSON-ELKHORN COAL CO. | 02/16/2001 | | | ACTIVE | Colson | | STATE SUPERFUND |
| 37212 LETCHER-ASHLAND BRANDED | 06/28/1995 | PETROLEUM | UST (EXEMPT) | CLOSED | NEON | 37.19139 | -82.71361 PETROLEUM |
| 14311 MEASURING STATION 805574 | 10/09/2000 | HAZARDOUS SUBSTANCE | GAS PIPELINES | CLOSED | Letcher | | PETROLEUM |
| 42149 WHITESBURG, CITY OF | 10/05/1996 | | OTHER | CLOSED | WHITESBURG | | PETROLEUM |
| Count of sites in LETCHERCounty 8 | | | | | | | |
| County Name LEWIS | | | | | | | |
| Intident 1d Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Latitude Longitude Section |
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Superfund Information System Sites by County

Commonwealth of Kentucky NREPC DWM

Commonwealth of Kentucky NREPC DWM

Superfund Information System Sites by County

| 3 | County Natue HAKLAN Incident ld Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Langitude Section |
|------------|---|---------------|-----------------------|----------------------------|--------|-------------------|----------|---------------------------|
| ξ | 197991 HARLAN COUNTY FISCAL COURT | | | GROUNDWATER | ACTIVE | HARLAN | 36.84306 | -83.32194 PETROLEUM |
| 2 | 15681 HARLAN FUEL CO YANCEY | 01/12/2001 | | | ACTIVE | Yancey | | STATE SUPERFUND |
| r o | 50552 HARLAN INDEPENDENT SCHOOLS | 10/22/1998 | PETROLEUM | FACILITY SPILL | CLOSED | HARLAN | 36.84306 | -83.32194 PETROLEUM |
| | 50073 HAY WOOD TRUCKING DRUMS | 01/26/1999 | POLLUTANT/CONTAMINANT | ABANDONED DRUMS | CLOSED | HARLAN | 36.84306 | -83.32194 STATE SUPERFUND |
| | 15683 JERICHO MINING COMPANY INC. | 01/12/2001 | | | ACTIVE | Holmes Mill | | STATE SUPERFUND |
| | 63884 LAW DRUMS | 01/28/2002 | | ABANDONED DRUMS | CLOSED | HARLAN | 36.84306 | -83.32194 STATE SUPERFUND |
| | 42187 LONE MT. PROCESSING | L661/02/E0 | PETROLEUM | FACILITY SPILL | CLOSED | HOLMES MILL | 36.86833 | -83.0025 PETROLEUM |
| | 25994 MANALAPAN MINING CO., MANALAPAN COAL PREP. | 1661/60/80 | PETROLEUM | SOIL CONTAMINATION | CLOSED | EVARTS | 36.771 | -83.1713 PETROLEUM |
| | 20377 NATIONAL ELECTRIC COLL | 01/27/1995 | HAZARDOUS SUBSTANCE | ILLEGAL HAZWASTE | ACTIVE | HARLAN | 36.84 | -83.37 FEDERAL SUPERFUND |
| | 15686 NATIONAL ELECTRIC COLL CO COOPER INDUSTRIES | 007/21/10 | | ידטיט זמות | CLOSED | Loyall | | STATE SUPERFUND |
| | 61509 PERKINS PROPERTY | 1002/10/60 | | SOIL CONTAMINATION | CLOSED | EVARTS | 36,86583 | -83,19056 PETROLBUM |
| | 16618 RICHARD'S OIL | 02/01/2001 | | FACILITY SPILL | ACTIVE | Baxter | | PETROLEUM |
| | 48907 RIO VISTA, US ARMY CORPS OF ENGINEERS | 06/04/1998 | HAZARDOUS SUBSTANCE | FACILITY SPILL | CLOSED | RIO VISTA | 36.84389 | -83.35944 STATE SUPERFUND |
| | 12194 ROGER'S AUTO REPAIR | 10/20/2000 | PETROLEUM | UST (EXEMPT) | CLOSED | LINEFORK | | PETROLEUM |
| | 104933 SHERWIN LYNN RADER EXEMPT UST SYSTEM | 10/16/2002 | PETROLEUM | UST (EXEMPT) | ACTIVE | WALLINS CREEK | 36.81361 | -83,41917 PETROLEUM |
| | 55681 SIMMONS-RAND | 05/28/2001 | | OTHER | CLOSED | BAXTER | 36.85972 | -83,33083 PETROLEUM |
| | 36976 SKIDMORE BURN SITE, CLIFFORD SKIDMORE | 06/09/1995 | | WIRE BURNING | ACTIVE | HARLAN | 36.84139 | -83,32016 STATE SUPERFUND |
| | 37603 U.S. ARMY CORP OF ENGINEERS | 08/01/1995 | PETROLEUM | OTHER | CLOSED | HARLAN | 36,84306 | -83.32194 PETROLEUM |
| | 37612 U.S. ARMY CORP OF ENGINEERS | 08/03/1995 | PETROLEUM | UST (EXEMPT) | CLOSED | HARLAN | 36.84306 | -83.32194 PETROLEUM |
| | 40501 U.S. ARMY CORP OF ENGINEERS | 05/14/1996 | PETROLEUM | OTHER | CLOSED | RIO VISTA | 36.84389 | -83.35944 PETROLEUM |
| | 37234 U.S. CORPS OF ENGINEERS | 11/10/1995 | PETROLEUM | FACILITY SPILL | CLOSED | LOYALL | 36.85194 | -83.35417 PETROLEUM |
| | 39880 US ARMY CORPS OF ENGINEERS | 03/21/1996 | PETROLEUM | OTHER | CLOSED | LOYALL | 36.85194 | -83.35417 PETROLEUM |
| | 39881 US ARMY CORPS OF ENGINEERS | 03/21/1996 | PETROLEUM | UST (EXEMPT) | CLOSED | LOYALL | 36.85194 | -83,35417 PETROLEUM |
| Ū. | County Name HARRISON County Name HARRISON | | | | | | | |
| | Incident Id Name | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| | 37871 BUNDY CORPORATION / BUNDY TUBING | 08/24/1995 | HAZARDOUS SUBSTANCE | LEAD ABATEMENT | ACTIVE | CYNTHIANA | 38.39233 | -84.31556 STATE SUPERFUND |
| | 20539 BUNDY TUBING | 01/11/1994 | HAZARDOUS SUBSTANCE | FACILITY SPILL | CLOSED | CYNTHIANA | 38.39233 | -84.31556 STATE SUPERFUND |
| | 34946 CITY OF CYNTHIANA | 05/09/1995 | PETROLEUM | UST (EXEMPT) | CLOSED | CYNTHIANA | 38.39028 | -84.29417 PETROLEUM |
| | 11639 CSX-GREDE PERM CAST RAIL RELEASE | 10/04/2000 | | TRANSPORTATION ACCURENT | CLOSED | CYNTHIANA | | PETROLEUM |
| | 47773 CYNTHIANA NATIONAL GUARD ARMORY | 03/03/1998 | PETROLEUM | FACILITY SPIIL | CLOSED | CYNTHIANA | 38,39028 | -84,29417 PETROLEUM |
| | 15689 CYNTHIANA SCREW CORPORATION | 01/12/2001 | | | ACTIVE | Cynthiana | | STATE SUPERFUND |
| | 42226 ECKLAR PROFERTY | 10/14/1996 | HAZARDOUS SUBSTANCE | OPEN DUMPING | ACTIVE | CYNTHIANA | 38.4251 | -84.27346 STATE SUPERFUND |

| I.I. Status Nearest Community Latitude I.I. CLOSED EUZABETHTOWN 37,6339 ACTIVE Colosen FORT KNOX 37,6339 ACTIVE Colosen FORT KNOX 37,6339 ACTIVE ELIZABETHTOWN 37,6339 I.I. ACTIVE ELIZABETHTOWN 37,63536 I.I. ACTIVE ELIZABETHTOWN 36,63611 I.I. CLOSED LVICH 36,63611 D.NRUMS CLOSED LVICH 36,63616 D.NRUMS CLOSED LVICH 36,63616 D.NRUMS CLOSED LVICH 36,63616 D.NRUMS CLOSED LVICH 36,63616 D.NRUMS CLOSED < | Incident Id Name 51643 STATEWIDH TRANSPORT 15659 THURMAN BROTHERS - YANO ROAD SITE 40500 U.S. ARMY FORT KNOX 15660 U.A.R.O., INC. 15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | Date Received | | | | | | |
|---|--|---------------|-----------------------|--------------------|--------|-------------------|-----------|-----------------------------|
| State Strating Constration | 51643 STATEWIDE TRANSPORT 15659 THURMAN BROTHERS - YANO ROAD SITE 46560 U.S. ARMY FORT KNOX 15660 UARCO, INC. 15661 US ARMC & FORT KNOX 56691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| State Number N | 15659 THURMAN BROTHERS - YANO ROAD SITE 40500 U.S. ARMY FORT KNOX 15660 UARCO, INC. 15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 04/12/1009 | PETROLEUM | FACILITY SPILL | CLOSED | ELIZABETHTOWN | 37.69389 | -85.85917 PETROLEUM |
| 6000 LUGATON 000100 Endologial Endologia | 40500 U.S. ARMY FORT KNOX 15660 UARCO, INC. 15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 01/12/2001 | | | ACTIVE | Colesburg | | STATE SUPERFUND |
| 368 0.7000 7700 5700 7700 5800 601 5.4544-5 7.4701 5.4701 5.4701 5.4000 601 5.4544-5 7.400 5.4000 7.400 5.4000 7.400 5.4000 601 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 601 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 5.4000 7.400 | 15660 UARCO, INC. 15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 9661/+1/50 | PETROLEUM | UST (EXEMPT) | CLOSED | FORT KNOX | | PETROLEUM |
| 101 101 <td>15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION</td> <td>1002/21/10</td> <td></td> <td></td> <td>ACTIVE</td> <td>Radeliff</td> <td></td> <td>STATE SUPERFUND</td> | 15661 US ARMC & FORT KNOX 50691 VALLEY CREEK DRUM 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 1002/21/10 | | | ACTIVE | Radeliff | | STATE SUPERFUND |
| 900 VLLTP CLIER DULK 111/1000 EFER LULK ACTURE LULK ELEADMENTION 2 Control of Stati ILL LULK 7.2000 ILL ALANC ACTURE LULK A | 9869 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 01/12/2001 | | | ACTIVE | Elizabethtown | | STATE SUPERFUND |
| With Control Contro Control Control Control Control Control Control Con | 98679 VERMONT AMERICAN CORPORATION - MAGNA DIVISION | 11/04/1998 | PETROLEUM | ABANDONED DRUMS | ACTIVE | ELIZABETHTOWN | | STATE SUPERFUND |
| Count of due in HALDACentry Date of due in HALDACEN Date due in HALDACEN Date of due in HALDAC | | 03/22/2002 | SUBSTANCE | FACILITY SPILL | ACTIVE | ELIZABETHTOWN | 37,685556 | -85.88944 STATE SUPERFUND |
| County Yane 11/Li/Li Curry Yane 11/Li Curry Yane 11/Li <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<> | | | | | | | | |
| Induction Data Nation Split Class Split Class Split Class New Community | | | | | | | | |
| 304. 0.00105 1.0.4.4005 SUBTANCE 0.00105 1.0.4.4005 SUBTANCE 0.0.4005 0.4.44007 SUBTANCE 0.4.4005 0.4.400 | Incident Id Natue | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| 0012001 0012001 <t< td=""><td></td><td>09/20/1994</td><td>HAZARDOUS SUBSTANCE</td><td>ABANDONED DRUMS</td><td>CLOSED</td><td>LYNCH</td><td>36.96611</td><td></td></t<> | | 09/20/1994 | HAZARDOUS SUBSTANCE | ABANDONED DRUMS | CLOSED | LYNCH | 36.96611 | |
| URD ILULTY SHLL CALITY SHLL CALITY SHLL CALIBITY MALLITY MALI | | 10/18/2001 | | SOIL CONTAMINATION | CLOSED | LOYALL | 36.85194 | -83.35417 FEDERAL SUPERFUND |
| Bit Mather Bit Mat | - | 02/16/2003 | | FACILITY SPILL | CLOSED | EVARTS | 36,86583 | -83.19056 PETROLEUM |
| BURNOUNC DUTINA FERIDICIEN DUTINA FERIDICIEN DUTINA CLEITY PRIL CLEITY PRIL CLEITY DUTINA | 49858 BIZZACK CONSTRUCTION | 08/06/1998 | PETROLEUM | LEAKING CARGO | CLOSED | LOYALL | 36.85194 | -83.35417 PETROLEUM |
| CLICATIONS OF BIAID DETROLLIOM UST (PERMET) CLICATIVE COMMAN CLICATIVE COMMAN S45406 COLIT FILES REFLECT TANKEROMARIES 0722/199 HAAAROORS UTST XMC: EACHTVE CLICATIVE COMMAN S64506 COLIT FILES REFLECT TANKEROMARIES 0703.000 HAAAROORS UTST XMC: EACHTVE CLICATIVE COMMON S64506 CORRS OF PROJ PRILID 0711/950 FILLITATIVECOMAN CLICATIVE COLUCI CLICATIVECOMENT | C 52065 BURNED OUT CHURCH | 6661/L1/E0 | PETROLEUM | FACILITY SPILL | CLOSED | LYNCH | 36,96611 | -82.9225 PETROLEUM |
| COLIT FEELS FIRENCY TANASCORRENS 0.1/2001 HAZADOUS SUBSTANCE FCENS C.G.CNG Round COLIT FEELS FIRENCY TANASCORRENS 0.0/1200 HAZADOUS SUBSTANCE FCENS C.G.SED PNAT CORL FEELS FIRENCY TANASCORRENS 0.0/1200 HAZADOUS SUBSTANCE FCENS C.G.SED PNAT CORSO OF PRODUCEDS 0.0/1200 FCENS C.G.SED PAVALOUS SUBSTANCE FCENS C.G.SED PNAT CORSO OF PRODUCEDS 0.0/1200 FCENS C.G.SED PAVALOUS SUBSTANCE FCENS C.G.SED PAVAL CORSO OF PRODUCED FINAT 0.0/1200 FCENS C.G.SED PAVAL C.G.SED PAVAL CORSO OF PRODUCED FINAT 0.0/1200 FCENDARD C.G.SED PAVAL C.G.SED PAVAL CORSE FERENT/FAKE 0.0/1200 FCENDARD C.G.SED PAVAL C.G.SED PAVAL CORSE FERENT/FAKE 0.0/1200 FCENDARD C.G.SED PAVAL C.G.SED PAVAL CORSE FERENT/FAKE 0.0/1200 FCENDARD C.G.SED PAVAL < | 33338 CHR/CORPS OF ENG | 05/09/1994 | PETROLEUM | UST (EXEMPT) | CLOSED | HARLAN | 36.84306 | -83.32194 PETROLEUM |
| COME (FILE S PRECO TANANGO MAELS) COLUTER S PRECO TANANGO MONEL COLUTE S PLANAGO COLUS PLANAGOO COLU | | 01/12/2001 | | | ACTIVE | Cawood | | STATE SUPERFUND |
| ORNOLLIVER IALARDORIS IALARDORIS <thialardoris< th=""> IALARDORIS IALARDOR</thialardoris<> | 20475 COAL FUELS ENERGY TRANSFORMERS | 02/22/1994 | HAZARDOUS SUBSTANCE | PCBS | CLOSED | NONE | | |
| CORRO FERIOL DIJUTANTCONTAMINANT AAADONEID DRUNS CLOSED DOVALT SA5134 CORRO FERIOL 0421/95 PETMOLENAN UTANTO UTANTO UTANTO S4436 CORRO FERIOL 0412/95 PETMOLENAN UTANTO UTANTO S4436 CORRO FERIOL 0412/95 POLLITANTO UTANTO CORSE HALAN CLOSED PALAN S4436 CUMDRELAND POLICE DEPARTMENT 00117/95 PETMOLENAN UTANTO CLOSED ONAELLAND S4436 CUMDRELAND POLICE DEPARTMENT 0117/95 PETMOLENAN UTANTO UTANTO S4436 CUMDRELAND POLICE DEPARTMENT 0117/95 PETMOLENAN UTANTO UTANTO S4436 CUMDRELAND POLICE DEPARTMENT 0117/2001 UTANTO UTANTO UTANTO S4436 CUMDRELAND POLICE DEPARTMENT 0117/2001 PETMOLEND UTANTO UTANTO S4436 CUMDRELAND POLICE DEPARTMENT 0117/2001 PETMOLEND UTANTO UTANTO UTANTO EVALUAT UTANTO UTANTO P | | 1002/82/01 | HAZARDOUS SUBSTANCE | FACILITY SPILL | CLOSED | EVARTS | 36.86583 | -83.19056 STATE SUPERFUND |
| CORENG OF ENGANEERS 04/26/196 FEREOLEUM OTHR COSEJ HAT.AN 56430 CRS. SIGNATO UST (EXTAND) UST (EXTAND) COSEJ HAT.AN 56430 CRS. SIGNATO UST (EXTAND) UST (EXTAND) COSEJ HAT.AN 56430 CRMBERLAND FORT OFFICE UN1/10/95 FETROLEDM UST (EXTANDT) CLOSEJ CHMBERLAND 56430 EXESTORIAL UN1/12/05 FETROLEDM UST (EXTANDT) CLOSEJ CLMBERLAND 56430 EXESTORIAL UN1/12/05 FETROLEDM UST (EXTEMPT) CLOSEJ HAL.AN 56430 EXESTORIZE UN1/12/05 FETROLEDM UST (EXTEMPT) CLOSEJ HAL.AN 56430 EXESTORIZE UN1/12/05 FETROLEDM UST (EXTEMPT) CLOSEJ HAL.AN 56430 EVARTS UST (EXTEMPT) CLOSEJ HAL.AN 56430 EVARTS UST (EXTEMPT) CLOSEJ HAL.AN 56430 EVARTS UST (EXTEMPT) CLOSEJ HAL.AN 56430 | 37787 CORP OF ENG. DRUMS | 08/17/1995 | POLLUTANT/CONTAMINANT | ABANDONED DRUMS | CLOSED | LOYALL | 36.85194 | -83.35417 PETROLEUM |
| CGN: IONU. CANGE 0916/1991 FETROLEIM UST (EXCMPT) CLOSED IANLAN 56406 CUMURELAND POLICED EDENKTARKT 10/1793 POLUTANT/CONTARIANT UST (EXCMPT) CLOSED IANLAN 56796 CUMURELAND POLICED EDENKTARKT 0/18/1995 FETROLEIM UST (EXCMPT) CLOSED IANLAN 56796 CUMURELAND POLICED EDENKTARKT 0/18/1995 FETROLEIM UST (EXCMPT) CLOSED IANLERLAND 56796 DENVI ADAXS EXEMPTTARK 0/11/1996 FETROLEIM UST (EXCMPT) CLOSED IANLERLAND 56796 EXATOVER MINING CO. 0/11/1996 FETROLEIM UST (EXCMPT) CLOSED IANLERLAND 56406 EXATOVER MINING CO. 0/11/1996 HETROLEIM UST (EXCMPT) CLOSED IANLERLAND 56436 EXATOVER MINING CO. 0/11/1996 HETROLEIM UST (EXCMPT) CLOSED IANLERLAND 56436 EVARTY ROL 0/11/1996 HETROLEIM UST (EXCMPT) CLOSED IANLAN 56436 EVALUER ROL 0/11/1996 HETROLEIM | 40350 CORPS OF ENGINEERS | 04/26/1996 | PETROLEUM | OTHER | CLOSED | RIO VISTA | 36.84389 | -83.35944 PETROLEUM |
| MRT 01711953 POLLUTANT/CONTAMINANT GAS PRPLINES CLOSED CUMBERLAND 557865 0171093 FETROLEDIM UST (EXEMPT) CLOSED CUMBERLAND 557865 01712001 FETROLEDIM UST (EXEMPT) CLOSED HALAND 554705 017122001 FETROLEDIM ASTND CLOSED HALAND 564305 017122001 FETROLEDIM ABANDORED DRUMS CLOSED HALAND 564305 017122001 FETROLEDIM ABANDORED DRUMS CLOSED HALAN 564305 017122001 FETROLEDIM AGTIVE CLOSED HALAN 364335 01722001 FETROLEDIM UST (EXEMPT) CLOSED HALAN 364345 0172001 HAZANDOUSED DRUMS UST (EXEMPT) ACTIVE HALAN 364345 0172001 HAZANDOUSED DRUMS UST (EXEMPT) ACTIVE HALAN 368434 0172001 UST (EXEMPT) ACTIVE HALAN 368434 0172001 HAZANDOUSED DRUMS HALAN AC | 34517 CSX: SIGNAL GARAGE | 09/16/1994 | PETROLEUM | UST (EXEMPT) | CLOSED | HARLAN | 36.84306 | -83.32194 STATE SUPERFUND |
| $ \begin{array}{cccccccccccccccccccccccccccccccccccc$ | 38120 CUMBERLAND POLICE DÉPARTMENT | 10/17/1995 | POLLUTANT/CONTAMINANT | GAS PIPELINES | CLOSED | CUMBERLAND | 36,97806 | |
| 0018/196 FETROLEUM UST (EXEMPT) CLOBED HARLAN 364306 01/12/2001 | 35449 CUMBERLAND POST OFFICE | 01/10/1995 | PETROLEUM | UST (EXEMPT) | CLOSED | CUMBERLAND | 36.97806 | |
| 0/12/2001 ACTIVE Bookside 0/13/2096 FETROLEUM ABANDONED RUMS CCOSED EVARTS 36.6583 0/13/999 FETROLEUM ABANDONED RUMS CLOSED EVARTS 36.6583 0/13/2001 99/28/1956 FETROLEUM CLOSED EVARTS 36.8633 2.2/28/1956 FETROLEUM UST (ECRMPT) CCOSED RO NEAR 36.8438 2.2/28/1920 0/1/22/001 UST (ECRMPT) CCOSED RO NEAR 36.84611 2. 0/1/22/001 MC UST (ECRMPT) CCOSED RALAN 36.84611 2. 0/1/22/001 MC UST (ECRMPT) CCOSED RALAN 36.84611 3. 0/1/22/001 MC UST (ECRMPT) CCOSED RALAN 36.84611 3. 0/1/22/001 MC UST (ECRMPT) CCOSED RAN 36.84611 3. 0/1/22/001 MC MC SCOSED RAN 36.84611 3. 0/1/22/001 MC MC MC | 42001 DENNY ADAMS EXEMPT TANK | 9661/81/60 | PETROLEUM | UST (EXEMPT) | CLOSED | HARLAN | 36.84306 | |
| 04/18/1996 FERROLEUM ABANDORED DRLMS CLOSED EVARTS 368533 011 01/14/1994 HAZARDOUS SUBSTANCE OPEN DUMFING CLOSED HALAN 368346 0228/1995 FETROLEUM FACILITY SFILL CLOSED RIU VIETA 368436 02 01/12/2001 UST EACHDITY SFILL CLOSED RIU VIETA 3686346 02 01/12/2001 UST NETROLEUM UST (EXEMPT) ACTIVE ACTIVE 3686346 01/12/2001 01/12/2001 UST NELAN ACTIVE ACTIVE ACTIVE 3686346 10 01/12/2001 UST Eareod ACTIVE ACTIVE ACTIVE ACTIVE ACTIVE 3686346 10 01/12/2001 UST ACTIVE | 15670 EASTOVER MINING CO. | 01/12/2001 | | | ACTIVE | Brookside | | STATE SUPERFUND |
| OIT 0/14/1994 HAZRIDOUS SUBSTANCE OPEN DUMETING CLOSED HARLAN 3.84306 3.3.2194 0/22/81995 FETROLEUM FACILITY SPLL CLOSED R.O. VISTA 3.6.8439 3.3.3544 0/22/81996 FETROLEUM UST (EXEMPT) ACTIVE HALAN 3.6.8430 3.3.3194 0/122001 0/122001 UST (EXEMPT) ACTIVE E.MALAN 3.6.8431 3.3.3194 1 0/1122001 UST (EXEMPT) CTOSED MALAN 3.6.84511 3.3.2194 1 0/1122001 UST (EXEMPT) CTOSED MALAN 3.6.84611 3.3.2194 1 0/1122001 UST (EXEMPT) CTOSED MALAN 3.6.84611 3.3.2194 1 0/1122001 UST (EXEMPT) CTOSED MALAN 3.6.84611 8.3.3219 1 0/1122001 UST (EXEMPT) CTOSED MALAN 3.6.84611 8.3.3219 | 40193 EVARTS DRUMS | 04/18/1996 | PETROLEUM | ABANDONED DRUMS | CLOSED | EVARTS | 36.86583 | -83.19056 STATE SUPERFUND |
| 9728/1935 FETROLEUM FACILITY SPLL CLOSED RIO VIETA 36.84346 -8.33394 0.228/1936 FETROLEUM UST (EXEMPT) ACTIVE FALAN 36.86346 -8.332512 1.122001 0.1122001 UST (EXEMPT) ACTIVE ACTIVE 36.86346 -8.332512 1.1 0.1122001 UST (EXEMPT) CLOSED HALAN 36.84611 -8.33213 1.1 0.1122001 UST (EXEMPT) CLOSED HALAN 36.84611 -8.33213 1.1 0.1122001 UST (EXEMPT) CLOSED HALAN 36.84611 -8.33213 | 29429 EWING ROAD DUMP - DAYHOIT | 01/14/1994 | HAZARDOUS SUBSTANCE | OPEN DUMPING | CLOSED | HARLAN | 36,84306 | -83.32194 STATE SUPERFUND |
| IP. PLANT 02128/1996 FEROLEUM UST (EXEMPT) ACTIVE HALAN 3686346 6333512 IP. PLANT 01/12/001 ACTIVE Cavod ACTIVE Cavod 36863611 43.32512 IP. PLANT 01/12/001 UST (EXEMPT) CI.OSED HALAN 36.86311 43.32513 IP. 01/12/001 IP. CI.OSED HALAN 36.864611 43.32139 | 38174 FARLEY PROPERTY | 09/28/1995 | PETROLEUM | FACILITY SPILL | CLOSED | RIO VISTA | 36.84389 | -83,35944 PETROLEUM |
| P. PLANT 0/1/2/001 ACTVE Gwod 04/22/002 UST (EXEMPT) CLOSED HARLAN 36.46111 -43.32139 E 01/12/001 ACTVE Harlan ACTVE 1.01 | 39621 FLAV-O-RICH | 02/28/1996 | PETROLEUM | UST (EXEMPT) | ACTIVE | HARLAN | 36.86346 | -83.32512 PETROLEUM |
| 6422/002 UST (EXEMPT) CLOBED HARLAN 3636111 43.32139 01/12/001 01/12/001 ACTIVE Harlan ACTIVE Harlan | 15679 GRAY'S KNOB COAL CO. PREP. PLANT | 1002/21/10 | | | ACTIVE | Cawood | | STATE SUPERFUND |
| 01/12/2001 ACTIVE Hutm | 99931 HARLAN CO. FISCAL COURT | 04/22/2002 | | UST (EXEMPT) | CLOSED | HARLAN | 36.846111 | -83.32139 PETROLEUM |
| | 15680 HARLAN COUNTY DRUM SITE | 01/12/2001 | | | ACTIVE | Harlon | | STATE SUPERFUND |
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Superfund Information System Sites by County

Commonwealth of Kentucky NREPC DWM

| EPC | W |
|-------|-------|
| NREPC | MMQ |
| | NREPC |

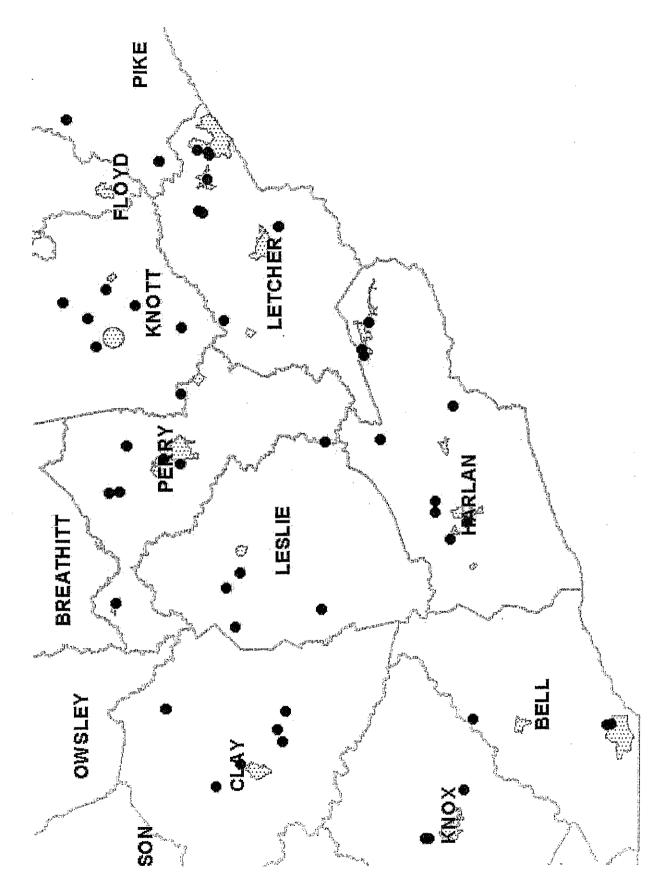
Superfund Information System Sites by County

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Page 101 of 124 08/01/2003

| County Name PERRY | | | | | | | | |
|--|--------------------------|--------------------|---------------------|----------------------|--------|-------------------|-----------|---------------------------|
| Incident [d Name | | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitude Section |
| 52473 ARH. HOMEPLACE CLINIC | | 04/26/1999 | HAZARDOUS SUBSTANCE | ILLEGAL HAZWASTE | CLOSED | HAZARD | 37,38574 | -83.16207 STATE SUPERFUND |
| (X) 26755 BLUE DIAMOND COAL COMPANY | | 03/21/2001 | | SOIL CONTAMINATION | CLOSED | LEATHERWOOD | 37.03278 | -83.1725 PETROLEUM |
| (\checkmark) 17745 BLUE DIAMOND MINING, INC. | | 02/22/2001 | | | ACTIVE | Leatherwood | | STATE SUPERFUND |
| 17746 ECCO MINING COMPANY INCORPORATED | PORATED | 02/27/2001 | | | ACTIVE | Combs | | STATE SUPERFUND |
| 42708 GLOMAWR HOLLOW DRUMS | | 12/02/1996 | | ABANDONED DRUMS | ACTIVE | GLOWMAR | | STATE SUPERFUND |
| 43692 HAZARD (ARY) | | 7691/22/20 | PETROLEUM | FACILITY SPILL | CLOSED | HAZARD (ARY) | | STATE SUPERFUND |
| 47663 HAZARD NATIONAL GUARD ARMORY | JORY | 02/25/1998 | PETROLEUM | FACILITY SPILL | CLOSED | HAZARD | 37.24944 | -83.19333 PETROLEUM |
| 17747 KODAK MINING CO. | | 02/27/2001 | | | ACTIVE | Kodak | | STATE SUPERFUND |
| 38147 LINE FORK COMPRESSOR STATION / KY WEST VIRGINIA GA | DN / KY WEST VIRGINIA GA | 11/17/1858 | | GAS PIPELINES | ACTIVE | CORNETTSVILLE | | STATE SUPERFUND |
| 17750 LINE FORK OIL SPILL | | 1002/12/20 | | | ACTIVE | Cornettsville | | STATE SUPERFUND |
| 38142 MACES CREEK COMPRESSOR STATION / KY WEST VIRGINIA | ATION / KY WEST VIRGINIA | 11/17/1858 | | GAS PIPELINES | ACTIVE | HAZARD | 37.24944 | -83.19333 STATE SUPERFUND |
| 99635 PERRY CO, COAL CO. | | 06/10/2002 | | FACILITY SPILL | CLOSED | COMBS | 37.266944 | -83.21306 PETROLEUM |
| 106734 VIPER MERCURY | | 09/26/2002 | HAZARDOUS SUBSTANCE | OTHER | CLOSED | VIPER | 37.18278 | -83.14833 STATE SUPERFUND |
| 38504 WILLIAM BAY PROPERTY | | 10/31/1995 | HAZARDOUS SUBSTANCE | FACILITY SPILL | CLOSED | RILEY BRANCH | | STATE SUPERFUND |
| Count of sites in PERRYCounty | nty 14 | | | | | | | |
| County Name PIKE | | | | | | | | |
| Incident Id Name | | Date Received | Spill Class | Incident Type | Status | Nearest Community | Latitude | Longitade Section |
| 52328 A. C. POTTER/DESKINS MOTORS | | 04/15/1999 | PETROLEUM | UST (EXEMPT) | CLOSED | PIKEVILLE | 37.47917 | -82.51889 PETROLEUM |
| 17751 APACHE COAL CO FLANNERY COAL DIVISION | COAL DIVISION | 02/27/2001 | | | ACTIVE | Fedscreek | | STATE SUPERFUND |
| 17567 APPALACHIAN REGIONAL HOSPITAL | TAL | 02/22/2001 | | | ACTIVE | South Williamson | | STATE SUPERFUND |
| 45758 ASHLAND PETROLEUM CO. | | <i>L661/91/6</i> 0 | PETROLEUM | FACILITY SPILL | CLOSED | PIKEVILLE | 37.47917 | -82.51889 FETROLEUM |
| 3143 BELL SOUTH TELECOMMUNICATIONS MAINTENANCE GARAGE | TIONS MAINTENANCE GARAGE | 02/17/2000 | PETROLEUM | UST (EXEMPT) | CLOSED | PIKEVILLE | 37.482778 | -82,48611 PETROLEUM |
| 17752 BETH-ELKHORN MINE #29 | | 02/22/2001 | | | ACTIVE | Virgie | | STATE SUPERFUND |
| 17753 CALL & RAMSEY COAL | | 1002/22/20 | | | ACTIVE | Pikeville | | STATE SUPERFUND |
| 14362 CHECK METER 804500 | | 10/09/2000 | HAZARDOUS SUBSTANCE | GAS PIPELINES | CLOSED | Pikeville | | PETROLEUM |
| 14353 CHECK METER 805153 | | 10/09/2000 | HAZARDOUS SUBSTANCE | GAS PIPELINES | CLOSED | Pikeville | | PETROLEUM |
| 17756 CLINTWOOD COAL CO. | | 1007/22/20 | | | ACTIVE | Moutheard | | STATE SUPERFUND |
| 43028 COLUMBIA GAS AND TRANSMISSION | SION | 701/10/10 | | GAS PIPELINES | CLOSED | PIKEVILLE | 37.47917 | -82.51889 PETROLEUM |
| 34848 COLUMBIA GAS AND TRANSMISSION #1600 | SION #1600 | 10/28/1994 | | GAS PIPELINES | ACTIVE | PIKEVILLE | 37,47917 | -82.51889 STATE SUPERFUND |
| 34849 COLUMBIA GAS AND TRANSMISSION #1601 | SION #1601 | 10/28/1994 | | GAS PIPELINES | ACTIVE | PIKEVILLE | 37.47917 | -82.51889 STATE SUPERFUND |
| 34870 COLUMBIA GAS AND TRANSMISSION #1676 | SION #1676 | 11/01/1994 | | GAS PIPELINES | ACTIVE | PIKEVILLE | 37.47917 | -82.51889 STATE SUPERFUND |
| 34871 COLUMBIA GAS AND TRANSMISSION #2165 | SION #2165 | 11/01/1994 | | GAS PIPELINES | ACTIVE | PIKEVILLE | | STATE SUPERFUND |
| 34872 COLUMBIA GAS AND TRANSMISSION #4302 | SION #4302 | 11/01/1994 | | GAS PIPELINES | ACTIVE | PIKEVILLE | 37.47917 | -82.51889 STATE SUPERFUND |
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HENRY C. LIST SECRETARY



DIV OF PLANNING 2003 SEP - 3 P 2: 00

COMMONWEALTH OF KENTUCKY NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR SURFACE MINING RECLAMATION & ENFORCEMENT FRANKFORT, KENTUCKY 40601 CARL E. CAMPBELL COMMISSIONER

September 2, 2003

Ms. Annette Coffey, P.E Director, Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, KY 40622

RE: Planning Study Harlan, Leslie and Perry Counties New or Improved Highway Between Harlan and Hazard Item No.11-137.00

Dear Ms. Coffey:

Thank you for the opportunity to review and comment on the abovereferenced proposed highway construction project.

Personnel from our department's field offices have conducted a review of the information provided and have not identified any specific issues or concerns regarding the proposed project at this time. However, the study area contains numerous mine sites currently permitted by this department. A map of this area is attached depicting the location of these permits. This may aid in the future determination of the location of the proposed highway. You may also view this same information the following internet at link: http://www.surfacemining.ky.gov/gis/interactive maps.htm. You may contact Christy Rice at the number below, should you have any questions regarding this information.

Once a proposed location for the highway has been determined, we welcome the opportunity to further comment on the project.



An Equal Opportunity Employer M/F/D Printed on If my staff or I may be of any further assistance in this or any other matter, please do not hesitate to contact me at (502) 564-6940.

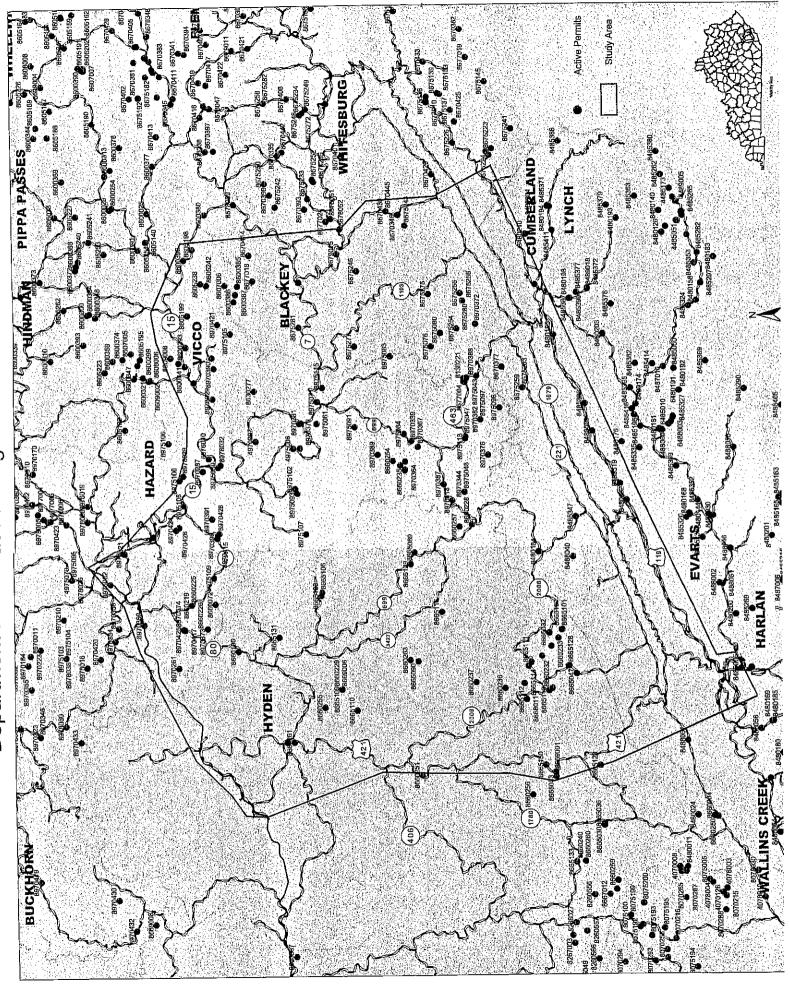
Sincerely,

Corl Compbell

Carl Campbell Commissioner

CEC/KS/ksm

Attachment



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Siria, Bruce (KYTC)

From: Sent: To: Subject: Greer, Daryl (KYTC) Tuesday, September 02, 2003 4:07 PM Siria, Bruce (KYTC) FW: Comments on Planning Study - Harlan, Leslie and Perry Counties

 -----Original Message----

 From:
 Coffey, Annette (KYTC)

 Sent:
 Tuesday, September 02, 2003 2:11 PM

 To:
 Greer, Daryl (KYTC); Wilson, Jimmy (KYTC)

 Subject:
 FW: Comments on Planning Study - Harlan, Leslie and Perry Counties

-----Original Message-----

From:Leathers, Valerie (NREPC, DSMRE)On Behalf Of Campbell, Carl (NREPC, DSMRE)Sent:Tuesday, September 02, 2003 1:34 PMTo:Coffey, Annette (KYTC)Subject:Comments on Planning Study - Harlan, Leslie and Perry Counties

We will be sending a letter to you regarding this subject. Basically, we do not find any specific issues or concerns, but the study area contains numerous mine sites and we would welcome further opportunity to comment once the location has been determined.

Sorry this is past the deadline - intended to send to you on Friday.

Valerie Leathers DSMRE - Comm. Office 502/564-6940 HENRY C. LIST SECRETARY



Commonwealth of Kentucky **NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET** DEPARTMENT FOR ENVIRONMENTAL PROTECTION DIVISION FOR AIR QUALITY 803 SCHENKEL LN FRANKFORT KY 40601-1403

July 23, 2003

Ms. Annette Coffey, P.E., Director Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, Kentucky 40622

Dear Ms. Coffey,

The Division has reviewed the Planning Study for the new or improved highway between Harlan and Hazard in Harlan, Leslie, and Perry Counties, Item Number 11-137.00. The following Kentucky Administrative Regulations apply to this proposed project:

Kentucky Division for Air Quality Regulation 401 KAR 63:010 Fugitive Emissions states that no person shall cause, suffer, or allow any material to be handled, processed, transported, or stored without taking reasonable precaution to prevent particulate matter from becoming airborne. Additional requirements include the covering of open bodied trucks, operating outside the work area transporting materials likely to become airborne, and that no one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. Please note the attached Fugitive Emissions Fact Sheet.

Kentucky Division for Air Quality Regulation 401 KAR 63:005 states that open burning is prohibited. Open Burning is defined as the burning of any matter in such a manner that the products of combustion resulting from the burning are emitted directly into the outdoor atmosphere without passing through a stack or chimney. However, open burning may be utilized for the expressed purposes listed on the attached Open Burning Fact Sheet incorporated by reference in 401 KAR 63:005 Section 3, Prohibition of Open Burning.

Finally, the projects listed in this document must meet the conformity requirements of the Clean Air Act as amended and the transportation planning provisions of Title 23 and Title 49 of United States Code.



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Every effort should be made to maintain compliance with the preceding regulations and requirements. The Division also suggests an investigation into compliance with applicable regulations in the local governments. If there are any questions relating to this matter, please contact me at (502) 573-3382 extension 347.

Sincerely

John E. Gowins Supervisor, Evaluation Section Program Planning & Administration Branch

JEG/jmf

Siria, Bruce (KYTC)

From: Sent: To: Cc: Subject: Palmer-Ball, Brainard (NREPC, KSNPC) Monday, July 21, 2003 11:10 AM Siria, Bruce (KYTC) Dott, Don (NREPC, KSNPC); Archer, Hugh (NREPC, DNR) KSNPC response to Planning Study

TO: Bruce Siria, KTC/Division of Planning

FROM: Brainard Palmer-Ball, Jr., KSNPC

DATE: July 21, 2003

RE: Planning Study for Harlan to Hazard Highway, Harlan/Leslie/Perry cos.

KSNPC has reviewed the Planning Study summary. A review of our natural heritage database revealed the presence of numerous KSNPC-listed species and unique natural areas that we believe could be impacted by implementation of the project. Some preliminary issues of concern to us include 1) nature of a crossing of Pine Mountain associated with such a road (the last generation of a US 421 crossing included plans for a cut through the mountain that would constitute 1/3 of it's entire valley-to-ridge elevation!); 2) presence of Indiana bat; 3) presence of Appalachian rosinwee; 4) forest fragmentation.

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Notes - RSR Meeting with KSNPC, <u>12/10/03</u> Location: Schenkel Lane, Frankfort

Subject: Harlan to Hazard, 11-137.00

Began 10:00 AM

Attending:

KSNPC - Joyce Bender, Marc Evans, Brainard Palmer-Ball DEA – Tom Koos Planning – Bruce Siria, Steve Ross Consultant - Qk4 – David Smith

Project Description

Bruce Siria described project background, issues and current status. Another round of public meetings is scheduled in the next two weeks. One public concern has been to create no new cuts over Pine Mountain.

Deep Cuts and Animal Crossings

Deep cut across Pine Mountain would be biggest concern to KSNPC. Deep cut would impede movement of eik and other animals across mountain. Would recommend wildlife crossings be included in designs. It was noted that this would be a design detail, not specifically addressed during the planning phase. We can include this concern in our recommendations in the study report.

KSNPC said there is essentially no existing cut for US 421 now over Pine Mountain, that the road passes over the mountain top at a gap. There is a quarry on the north side of the mountain that might make a good location for a tunnel portal from an environmental point of view. If a tunnel is not an option, KSNPC recommends avoiding perpendicular cuts, would prefer to approach mountain less directly and employ switch backs to lessen depth of cut at mountain top. KSNPC noted that this method would increase the overall length of road on the mountain but prefers this to a deep cut. A "one-third" mountain cut would not be acceptable.

Blanton Forest Land Purchase

KSNPC is holding property on east side of US 421 – is open to negotiate road improvements on this side. Would have a real issue with any improvements on the west side of US 421 in this area. Also noted that Sonny Gaines owns a large tract of land in this area; owns Gaines Lumber and a sawmill at the bottom of the mountain (north side?).

Agency Coordination Comments

Bruce Siria noted that he will be sending formal letters asking for comments and that KSNPC should include contents of today's discussion in their response.

Meeting ended approximately 11:00 AM

FISE & WILDLIFE COMMISSION Mike Boatwright, Paducah Tom Baker, Bowling Green Allen K. Gailor, Louisville Ron Southall, Elizabethtown Dr. James R. Rich, Taylor Mill, Chairman Ben Frank Brown, Richmond Doug Hensley, Hazard Dr. Robert C. Webb, Grayson David H.Godby, Somerset





COMMONWEALTH OF KENTUCKY DEPARTMENT OF FISH AND WILDLIFE RESOURCES C. Thomas Bennett, Commissioner

July 22, 2003

Annette Coffey, P.E. Director, Division of Planning Kentucky Transportation Cabinet 125 Holmes Street Frankfort, KY 40601

Re: Planning Study, New or Improved Highway between Harlan and Hazard, Item No. 11-137.00, Harlan, Leslie, Letcher, and Perry Counties, Kentucky

Dear Ms. Coffey:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for the above-referenced information. The Kentucky Fish and Wildlife Information System indicates that several federally threatened and endangered species are known to occur in Letcher, Harlan, and Perry Counties (see attached list). Please be aware that our database system is a dynamic one that only represents our current knowledge of the various species distributions.

Based on the information provided, KDFWR cannot determine the extent of impacts to fish and wildlife resources without knowing the extent of the proposed project. When further information is available to our agency we can make a final determination regarding environmental impacts.

The federally endangered Indiana Bat (*Myotis sodalis*) inhabits this area. It forms maternity colonies and roosts with it's young under the bark of trees along streams and adjacent upland areas, usually from the middle of May to the middle of August. Disturbance in riparian areas during this time period should be avoided in order to minimize potential impacts to the species. The applicant should contact the USFWS to determine the extent of survey needed and what measures will be needed to protect the species and it's habitat.

The black-side dace (Phoxinus cumberlandensis) could inhabit the proposed project area. KDFWR requests the applicant contact the USFWS to determine the extent of impact to the species and to determine whether a survey would be warranted and what protection would be needed to offset any impacts to the endangered species and it's habitat.



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Arnold L. Mitchell Bldg. #1 Game Farm Road Frankfort, Ky 40601 An Equal Opportunity Employer M/F/D Page Two Ms.Coffey July 22, 2003

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KDFWR has determined that potential negative impacts to the aquatic resources can occur in the project area and offers the following recommendations:

- 1) crossing should be designed and constructed to accommodate high flow conditions;
- 2) development in or near streams only during low flow periods to minimize disturbances;
- 3) culverts should be placed even with substrate to allow aquatic organisms to move freely within stream channel:
- proper placement of erosion control structures below disturbed areas to minimize entry of silt to stream;
- 5) replanting of disturbed areas after construction, including stream banks and right-of-ways, with native vegetation for soil stabilization and enhancement of fish and wildlife populations;
- return of disturbed instream habitat to its original condition upon completion of construction in the area;
- 7) avoidance of tree canopy overhanging streams; and
- 8) return all right-of-ways to original elevation.

KDFWR also recommends any excavation of stream channel for placement of bridge piers should be kept at a minimum and the existing transportation corridors should be used as the main crossing of the stream during bridge construction if possible to minimize impacts to the aquatic resources.

I hope this information will be helpful to you. Should you require additional information, please contact me at (502) 564-7109, ext. 367.

¢,

Sincerely,

Marla Barboux Callagran

Marla Barbour Callaghan Fisheries Biologist III

cc: Environmental Section File

HOME | CONTACT US | BUY LICENSES | LINKS | EVENTS | WHAT'S NEW | GENERAL INFORMATION | Site Set

| Species | Species Information | | |
|-----------------------------------|---|--|--|
| nformation | Federal Threatened and Endangered Species observations for selected counties | | |
| /iewable/ DownLoadable Maps | Linked life history provided courtesy of <u>NatureServe Explorer</u> . US Status Definitions Kentucky Status Definitions | | |
| Download GIS | List Federal Threatened and Endangered Species observations in 4 select | | |
| Data | counties. | | |
| KFWIS FTP | Selected counties are: HARLAN, LESLIE, LETCHER, PERRY. | | |
| Site | 5 records are listed. | | |

Links

Page 1 of 1

| Scientific Name | Common Name | Class | County | US Status | KY Status | R |
|------------------------------------|-------------------|--------------|---------|--------------|--------------|---|
| <u>Phoxinus</u> cumberlandensis | blackside dace | Osteichthyes | LETCHER | LT | т | R |
| <u>Phoxinus</u> cumberlandensis | blackside dace | Osteichthyes | HARLAN | LT | Т | R |
| <u>Myotis sodalis</u> | Indiana myotis | Mammalia | LETCHER | LE | E | R |
| Myotis sodalis | Indiana myotis | Mammalia | PERRY | LÉ | E | R |
| Myotis sodalis | Indiana myotis | Mammalia | HARLAN | LE | E | R |

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Last Updated - 03

Privacy Policy | Disclaimer | Disability Statement | Site Map

http://www.kdfwr.state.ky.us/kfwis/speciesInfo/countyListSpecies.asp

7/22/2003

Siria, Bruce (KYTC)

| From: | Greer, Daryl (KYTC) | |
|---------------------------|---|--|
| Sent: | Monday, July 21, 2003 2:59 PM | |
| То: | Siria, Bruce (KYTC) | |
| Cc: | Ross, Steve (KYTC) | |
| Subject: | FW: New or improved highway between Hazard and Harlan | |
| Follow Up Flag: Follow up | | |
| Flag Status: | Flagged | |

-----Original Message----- **From:** Coffey, Annette (KYTC) **Sent:** Monday, July 21, 2003 2:58 PM **To:** Greer, Daryl (KYTC) **Subject:** FW: New or improved highway between Hazard and Harlan

-----Original Message----- **From:** Sanderson, Joseph D - (DMA) [mailto:Joseph.Sanderson@ky.ngb.army.mil] **Sent:** Monday, July 21, 2003 2:41 PM **To:** Coffey, Annette (KYTC) **Cc:** Barker, Larry C - (DMA) **Subject:** New or improved highway between Hazard and Harlan

Ms. Coffey,

Thank you for allowing this agency's input and comments for the planning study of the above referenced project.

Fortunately I am unaware of any negative connotations that could result from the new or improved highway between Hazard and Harlan.

The improved conditions would more than be welcomed to improve safety and travel time for our maintenance workers/tradesmen as well as troops that train there and citizens of the Commonwealth that use our facilities for various activities.

Please let me know if there is anything I can do to assist you in this endeavor.

Cordially,

Joe Sanderson, Director Facilities Division Department of Military Affairs Boone National Guard Center Frankfort, Kentucky 40601-6168 502-607-1535



NY OF PLANNING

PAUL E. PATTON GOVERNOR

ANN R. LATTA SECRETARY TOURISM DEVELOPMENT CABINET COMMONWEALTH OF KENTUCKY DEPARTMENT OF PARKS CAPITAL PLAZA TOWER 500 MERO STREET 11TH FLOOR FRANKFORT, KY 40601-1974 502-564-2172 FAX 502-564-9015 MEMORANDUM 2003 JUL 22 P 1:51

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KENNY RAPIER COMMISSIONER DEPARTMENT OF PARKS

TO: Annette Coffey Director Bed **Division of Planning** FROM: **Bob Bender** Deputy Commissioner

SUBJECT: New or Improved Highway Between Harlan & Hazard

DATE: July 21, 2003

Please be advised that the Kentucky Department of Parks does not have any comment related to the proposed new and/or reconstruction of an existing highway between Harlan and Hazard.

Thank you for the opportunity to comment on this proposed project.



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DIV OF PLANNING

W. H. LILE SECRETARY

PAUL E. PATTON GOVERNOR CABINET FOR WORKFORCE DEVELOPMENT []] JUL 28 P 1: 48 OFFICE OF THE SECRETARY CAPITAL PLAZA TOWER, 2nd FLOOR 500 MERO STREET FRANKFORT, KENTUCKY 40601 PHONE (502) 564-6606 FAX (502) 564-7967

CONNECTING KENTUCKY TO EMPLOYMENT, WORKFORCE INFORMATION, EDUCATION AND TRAINING.

July 21, 2003

Ms. Annette Coffey, P.E. Transportation Cabinet Division of Planning 125 Holmes Street Frankfort, KY 40622

Dear Ms. Coffey:

Re: Planning Study Harlan, Leslie, and Perry Counties Item No 11-137.00

Thank you for the opportunity to respond to the Planning Study for the counties of Harlan, Leslie, and Perry. As Secretary of the Cabinet for Workforce Development, I believe that a good motor transportation route is of key importance to the goals of this agency. This agency is instrumental in working with the Economic Development Cabinet, the Education Cabinet, the Technical College System and other private and public entities in providing a well-trained workforce, thereby attracting industry and sustaining the state's economy. Such a workforce is now in existence throughout Kentucky and it grows stronger each year. However, the absence of adequate roadways, railways, waterways and air transportation systems is definitely detrimental to industrial growth and the economic development of the Commonwealth.

After reviewing the site plan for the construction of a new highway in the area described, I offer the following comments. This area of the state contains two state parks (Buckhorn Lake State Park and Pine Mountain State Park) and several industrial sites in Perry, Harlan, and Letcher Counties. The major transportation routes in the vicinity are the Daniel Boone Parkway and the Mountain Parkway. The construction of an additional highway traversing a more direct route may provide for additional industry growth, industry expansion, promote the development of more and better educational facilities, promote better healthcare, provide for better law enforcement, and improve the quality of life for all residents of the area. There are no major railways or waterways for economic development to offset the limited highway system.



EQUAL EDUCATION AND EMPLOYMENT OPPORTUNITIES M/F/D

In addition, better roadways may stimulate the housing market in the region, thereby producing growth in residential home construction and sales. Such action is directly related to more and better school systems.

Specifically, the Cabinet for Workforce Development has four major Technical School facilities in the area, one in Leslie County, one in Letcher County, one in Harlan County, and one in Perry County, that would benefit from an improved roadway. Poor roadways in inclement weather serve as a major factor in hampering educational development and are a factor in low enrollment figures and decreased interest in school activities. Traditionally, schools in this region of the state are closed due to inclement weather a substantial number of days during winter months. In addition, schools are often closed due to roadway flooding and mudslides further hampering transportation of children to and from schools.

The new roadway may further stimulate the growth of tourism. New restaurants and other service facilities may appear, thereby bringing additional jobs into the vicinity. The area along the proposed road site is a scenic route with many possibilities for growth and renewed interest in this portion of the state. The location of the proposed roadway surrounds the Daniel Boone National Forest and touches the Jefferson National Forest. A better roadway system may stimulate economic growth from bordering states, such as West Virginia and Tennessee.

Further, it is my belief that a new highway system may stimulate the growth of better and more healthcare facilities in the area. At this time, residents are often forced to travel to Lexington or nearby West Virginia to obtain adequate healthcare. Emergency medical services and law enforcement services, such as State Police services, would also be improved by the addition of a new highway in this triangle.

I fully support the concept of a new roadway and wish you well in completing the project. An improved transportation route may serve to open up the Southeastern part of the state so that it does not appear to be so isolated. At this time, other than financial concerns due to the economic downturn and geographical considerations, I see no reason why the project should not be a major success for the citizens of this state. I remain available should you have additional questions. Thank you again for allowing me the opportunity for input.

Sincerely,

W.1k

W. H. Lile, Secretary Cabinet for Workforce Development

WL/



DIV OF PLANNING

2003 SEP 12 P 2: 17

Commonwealth of Kentucky Transportation Cabinet

Paul E. Patton Governor

Frankfort, Kentucky 40622

Clifford C. Linkes, P.E. Deputy Secretary

TO:

James C. Codell. III

Secretary of Transportation

MEMORANDUM

Annette Coffey, P.E. Director, Division of Planning

FROM: Michael L. Hill, P.E. Multh Director, Division of Multimodal Programs

DATE: September 12, 2003

SUBJECT: Harlan, Leslie, and Perry Counties New or Improved Highway Between Harlan and Hazard Item No. 11-137.00

Thank you for the opportunity to assist in the identification of specific issues and concerns regarding the proposed construction of a highway between Harlan and Hazard.

The coordination and connectivity of bicycle and pedestrian facilities is important in the early planning and design stages of projects. Implementation of the guidelines in KYTC's 2002 Pedestrian and Bicycle Travel Policy will ensure that bicycle and pedestrian issues are considered and accommodated throughout this project.

Evaluation of the proposed highway should consider accommodations for bicycle connectivity through use of a shoulder bikeway. A shoulder bikeway requires five feet of pavement outside the rumble strips. Extra fill materials from the project could be used to build lookout and/or pull-off sites as scenic rest areas for motorists and bicyclists. Tourism opportunities are listed as one of the issues in this planning study. A study sponsored by the Maine Department of Transportation in April 2001, reported spending by bicycle tourists was estimated to be \$36.3 million in 1999.

Please contact Paula Nye of this Division for any questions about bicycle and pedestrian concerns.

MLH/LJS/JGM/PEN/AJT/LMD



KENTUCKY TRANSPORTATION CABINET "PROVIDE A SAFE, EFFICIENT, ENVIRONMENTALLY SOUND, AND FISCALLY RESPONSIBLE TRANSPORTATION SYSTEM WHICH PROMOTES ECONOMIC GROWTH AND ENHANCES THE QUALITY OF LIFE IN KENTUCKY." "AN EQUAL OPPORTUNITY EMPLOYER M/F/D"

Siria, Bruce (KYTC)

From: Sent: To: Subject: Harmon, Dave (KYTC) Monday, August 18, 2003 9:35 AM Siria, Bruce (KYTC) RE: 11-137

Yep. We are talking about future phases, including comment #3.

| Original Message | | | |
|------------------|---------------------------------|--|--|
| From: | Siria, Bruce (KYTC) | | |
| Sent: | Monday, August 18, 2003 8:56 AM | | |
| To: | Harmon, Dave (KYTC) | | |
| Subject: | RE: 11-137 | | |

Dave:

I assume that your comments 1 and 2 refer to tasks needed in future phases, i.e. Phase 1 Design/Environmental? Also, I'm not sure we can address your comment 3 at the corridor level but there may be some things we can look at to avoid/minimize channel changes.

Thanks

-Bruce

 From:
 Harmon, Dave (KYTC)

 Sent:
 Friday, August 15, 2003 4:17 PM

 To:
 Siria, Bruce (KYTC)

Subject: 11-137

Bruce,

Here are DEA's comments on the Planning Study for 11-137.

1) A full Historic Baseline will be required.

2) UST/Hazmat needs a good Phase 1 investigation.

3) Channel changes should be avoided. Stream mitigation sites are difficult to find in this area if we have to do off-site mitigation.

1

Dave.

David Smith

(P-8-03) Addendum No. 1

MEMORANDUM

TO: Annette Coffey, P.E. Director, Division of Planning

FROM: William Broyles, P.E. Geotechnical Engineering Branch Manager Division of Materials

RTWILDON R. T. Wilson, P.G. / Geotechnical Branch

DATE: October 23, 2003

BY:

SUBJECT: Harlan, Perry and Leslie Counties FD39; Mars No 7325301D Harlan to Hazard Rd Geotechnical Review Item 11-137.0

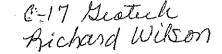
From the geotechnical perspective the existing US 421 location is the only practical location to cross-Pine Mountain in this study. Previous studies at US 421 and US 119 contrast how different locations can have large effects on constructibility issues.

The proposed US 421 crossing near Harlan effectively traversed Pine Mt. with acceptable grades (<7%) over Pine Mountain; a cut depth of approximately 400' and corresponding embankment of approximately 400' will be required. Because this crossing occurs at the drainage divide, no structures are needed in the fill and the adjacent embankment offers a place to put the most 12.5 million cubic yards of excavated materials from the Pine Mt cut. (HMB, Preliminary Line and Grade Report, January 1998)

Cut alternatives studied for the US 119 crossing at Whitesburg, included a cut 600 feet in depth extending up to 1.5 miles in length. A cut of this size will generate excavation quantities of 42.5 million-yards. The embankment adjacent to the cut required 13 million yards to construct, making several extremely large waste areas necessary. (Golder Associates, Geotechnical Considerations for the Feasibility Study US 119 Alternate Open Cut or Tunnel Crossing Pine Mountain Kentucky, September 1992)

Because of the relative short distance between the Poor Fork valley and ridge crest of Pine Mt., alternates B, C, D, and F will encounter similar geotechnical issues as the US 119 crossing. In addition, alternates B, C, D and F will require a large culvert under high fill or tall bridge north of Pine Mt. for drainage.

In conclusion, alternate A is still the preferred location to cross Pine Mt. If there are questions please advise.



A-2

DIV OF PLANNING

(P-8-03) MG 19 A 9:45

MEMORANDUM

Annerte Coffey, P.E., Director, Division of Planning

FROM: William Broyles, P.E. Geotechnical Engineering Branch Manager Division of Materials

BY:

TO:

R. T. Wilson, P.G. R. T. Wilson Geotechnical Branch

DATE: August 18, 2003

SUBJECT:

CT: Harlan, Perry and Leslie Counties FD39; Mars No 7325301D Harlan to Hazard Rd Preliminary Geotechnical Review Item 11-137.0

At your request, a limited review of the geologic formations and geotechnical problems to be encountered by the subject project is completed. This a compilation of several previous reports. Giving the size of the study area once specific corridors are identified, then refined comments can be made.

This project is on the Cumberland Plateau situated in the Kentucky and Cumberland River drainage basins. Drainage south of Pine Mountain and in Straight creek flow into the Cumberland River. Drainage north of Pine Mountain follows the Middle and North Fork of the Kentucky River. Portions of the western study area are in the Middle Fork of the Kentucky River basin and the headwaters of Buckhorn Lake. The city of Hyden's water intake is above this area. Portions of the eastern study area are in the North Fork of the Kentucky River basin and above the Hazard water intake also.

Rock formations along the proposed route are part of the Quaternary, Pennsylvanian Mississippian and Devonian Systems.

Quaternary alluvium is detrital material consisting of clays, silts, sands, gravels and boulders. A thickness of approximately 0 to 35 feet is estimated along the streambeds.

Pennsylvanian age rocks of the Breathitt Formation (North of Pine Mountain) consist of an alternating series of sandstone, siltstones, shales and coals. Sandstones are generally characterized as brown to gray in color, fine to medium grain size, in beds 1 inches to greater than 30 feet in thickness, and are considered suitable for most road construction applications. Shales consist of durable shale or siltstone, and non-durable shale or clay shales.

Eleven major coal zones are present in the 1280 foot thickness of the unit. Coal seams to be encountered are Knob coal zone, Hazard No.9 (Hindman), Hazard No. 8 (Francis), Hazard No. 7, Hazard coal bed, Haddix coal zone, Copland coal bed, Hamlin coal zone, Hazard No.4 (Fire Clay) coal zone, Whitesburg coal zone, and Amburgy coal zone. Along and south of Pine Mountain the Formations are Hance and Lee, both Pennsylvanian age rocks. Pennington, Newman, and Grainger are Mississippian age rocks, and the Chattanooga Shale is of Devonian age.

The lower part of the Hance Formation to be encountered in the study area is composed of sandstones, siltstones, nondurable shales and discontinuous coal seams. Previous highway projects have found that deep excavations in this dipping strata are unstable and require special design and construction practices.

The Lee Formation is present only on Pine Mountain and consists of Bee Rock Sandstone Member, Hensley Member, and Middlesboro Member. Bee Rock Sandstone Member is composed primarily of a quartose, porous, cross bedded sandstone with a persistent dark gray carbonaceous shale unit near the middle. The member forms south dipping hogbacks while the shale forms the swales and ranges in thickness from 180 - 300 feet thick. The Hensley Member, ranging from 250 - 385 feet in thickness is composed of sandstone, siltstone, nondurable shale and coal ranges. Sandstone is white to gray in color; fine grained to conglomeratic, cross bedded and is cliff forming. The shale contains the Tunnel Coal bed, which locally is slickensided and may be a potential hazard to highway construction on Pine Mountain. The Middlesboro Member is composed of sandstones, siltstones and shale and ranges in thickness from 385 - 490 feet. The coarse grained, friable to conglomeratic sandstone forms prominent sets of hogbacks along Pine Mountain and it is a potential aquifer.

The Pennington Formation is composed of two members. They consists of sandstones, siltstones (lower unit only), nondurable shales and thin limestones (lower unit only). Upper member ranges in thickness 265 - 385 feet and the lower unit is 530 - 710 feet thick. Siltstones and shales form steep talus covered slopes.

The Newman Limestone consists of two members. The upper unit ranges in thickness from 80-100 feet and lower unit 285 - 295 feet. The upper unit is composed primary of calcareous shale and argillaceous limestone. The lower unit is gray crystalline limestone with chert nodules. The limestone forms a prominent bench on the face of Pine Mountain and should be stable on 1/4:1 slopes. Solution features are likely and may contain water.

The Grainger Formation composed primarily of siltstones and shale, ranges in thickness from 285 - 345 feet. The unit is the lateral equivalent of the Borden Formation, which tends to slide and slump.

The Chattanooga Shale is black, carbonaceous, and pyritic. It does produce acid and is reported to be thickened by drag folding related to the Pine Mountain Thrust Fault.

The regional dip north of Pine Mountain is approximately 40 feet per mile to the north. South of Pine Mountain all strata are striking northeast to southwest and dipping approximately 20 degrees southeastward at the fault scarp. The dip diminishes gradually to become nearly horizontal south of the Cumberland River. Pine Mountain is structurally classified as a low angle thrust fault. Natural slopes composed of large talus deposits are reasonably stable; however, any excavation into the toe of these slopes would produce unstable conditions resulting in landslides.

The most likely locations for springlines, saturated slopes and wet areas can be anticipated to be down dip from coal outcrops, base of the Middlesboro Member, and Newman Limestone.

Mineral Considerations consist of coal, oil, and gas.

1. Eleven commercial coal seams are present on these alignments. These seams are Knob coal zone, Hazard No.9 (Hindman), Hazard No. 8 (Francis), Hazard No. 7, Hazard coal bed, Haddix coal zone, Copland coal bed, Hamlin coal zone, Hazard No.4 (Fire Clay) coal zone, Whitesburg coal zone, and Amburgy coal zone. All commercial seams have potential to be mined within the study area to continue into the future. A mineral evaluation study will be required after a preferred alignment is selected.

Active and abandon underground coalmines are present within the study area. If active coalmines are present at the time of construction, special safety regulations will be necessary for construction activities when crossing mains or active sections of coalmines. These can include temporary suspension of mine production and evacuation of personnel from the mine. The mining companies may request compensation for reduced production during roadway construction blasting activities.

2. The study area is located within the Avawan, Viper, Dow, Farler, Daley, Cornettsville West, Carcassonne, Wiscoat, Ulvah, Hallie, Blackey, Blackey South, Banks, Cutshin, Asher, Chapel, Muncy, and Straight Creek Church Gas Fields. Many gas or oil wells could be affected by construction. The types of wells include oil, gas, and injection and abandon wells. Some of the affected wells can be salvaged.

Environmental Considerations ...

1. The alignments cross abandon strip mines which are producing acid drainage as well as the Chattanooga Black Shale. Embankments constructed from this material should be encased with 2 feet (minimum) of soil. Cut sections in acidic material should have drainage ditches lined with limestone.

2. The Hazard No. 8 (Francis) and Amburgy coal seams are anticipated to contain levels of acid producing materials that require treatment. The "hot coal" should be wasted outside of the roadway and buried or encased with 4 feet of soil and/or nondurable shale.

3. The proposed alignments cross many blueline streams where disturbance may be required and attempts will be made to minimize the impacts by appropriate methods such as limited channel changing, erosion control and fish habitat improvement structures.

4. The Middlesboro Member is friable sandstone and is exposed on the north side of Pine Mountain. Erosion control methods such as silt fences, straw bales and settling ponds will be needed to prevent stream siltation.

5. Contaminated soils are anticipated. Identified sources of contaminated soils are underground storage tanks at gas stations, oil & gas wells, garages, auto salvage yards, and equipment repair facilities for mining & drilling firms. The department needs to investigate these sites to determining if they present problems that would make other alignments more economically viable.

Geotechnical Considerations

1. Soil overburden depths may vary from a few millimeters on ridge tops to more than 30 feet along the Kentucky River.

2. The average soil strippage depth is estimated to be 3 inches and a soil shrinkage factor of 2 percent is recommended to be applied in accordance with the Design Guidance Manual Section.

3. Rock Swell Factors for this project are estimated to be as follows: 0% to 10% for Non-Durable Shales; and 15% for Sandstone, Limestones and Durable Shales.

4. A CBR value of 6 is recommended if nondurable shales are utilized. If sandstone or durable shales are available in sufficient quantities for subgrade a CBR of 11 or 9 respectfully is anticipated.

5. The proposed road alignments are crossing both reclaimed and unreclaimed strip mines. Unreclaimed strip mines generally predate 1977 and foundation materials have consolidated making settlement problems less severe. Strip mines completed after 1977 are generally reclaimed and contained unconsolidated materials making settlement in the foundation of fills very likely. In order to minimize fill settlement removal of the top 5 feet of strip mine waste and recompaction in 1.0-foot lifts is recommended. Another alternate is to use dynamic compaction.

6. Cut slopes in strip mines wastes will generally be 3:1 extending to the disturbed limit.

7. The proposed study area may impact active and abandon underground mines. Multiple seam mines present within the study area. Deep mines are typically room and pillar with secondary recovery in certain areas of them. However, longwall-mining techniques are also present. Subsidence related problems are possible where roadways cross these mines. Given the potential problems which can arise from coal mine subsidence avoidance of these areas is recommended if possible. In areas where avoidance of the mine is not possible, detailed subsidence studies with appropriate site-specific recommendations will be required.

8. Cut slopes in the durable shales, and sandstones will be stable on 1:20 to 1/2:1 presplit slopes with 18 - 20 foot benches and a 15 foot overburden bench at the bottom of the rock disintegration depth. Back slopes will depend on the joint angles and the lift heights will be determined by lithology. The average rock disintegration depth extends approximately 10 - 15 feet below groundline in cut sections.

9. Cut slopes in nondurable shales should be 1:1 or flatter. Side hill conditions should be avoided in these formations where possible.

10. For estimation purposes, an overall 1:1 slope should be used for cuts north of Pine Mountain.

11. South of the crest of Pine Mountain will be on strata dipping into the roadway. Cuts made on the left of centerline will require removing all material above the bedding plane intersecting the ditchline, and following the apparent bedding plane up dip. Cuts in sandstones dipping into the roadway should be less than 30 feet and may require special construction practice (bolts, dowels and shooting or breaking up sliding planes).

12. A 2:1 slope is recommended for embankments north of Pine Mountain.

13. South of Pine Mountain embankments will be constructed on dipping strata and talus filled drains. The external stability of the fills will be increased by using shear keys, tied back walls, and limiting embankment heights 20 -30 feet.

14. Special shale compaction procedures may be required where nondurable shales are utilized.

15. Sandstone or siltstones should be placed in bottom of fills to the maximum high water elevations.

16. All major stream crossings have talus deposits at the proposed bridge abutments. Piling or caissons are likely at these locations.

17. Embankment benches will be necessary in sidehill conditions. Limestone or sandstone (2-foot minimum) should be placed on the benches for drainage.

18. Spring boxes and underdrains will be necessary when springs, coalmine adits and water bearing coal seams are encountered in the embankment areas and undercuts.

19. Durable Sandstone & Durable Shale are suitable for all roadway uses.

20. Friable Sandstone is suitable for free draining fill & embankments, however it shall be constructed in 1-foot lifts and protected from erosion.

21. This project is in a classified Seismic Risk Zone 2 that is defined as an area of moderate damage due to earthquake activity.

CONCLUSIONS

This study is broken into a Pine Mountain Crossing section and Bledsoe north section.

PINE MOUNTAIN CROSSING

It is recommended that an alternate be examined which would construct @ a 351 foot deep by 3008 foot long cut on a bearing of North 70 degrees West and above elev. 2204' (Perpendicular to the Strike of Pine Mt.). The cut should begin in the headwaters of Tom Jones Branch and go through the existing US 421 road gap. The associated 400' fill with the cut to the north of Pine Mountain occurs at the top of a drainage divide making it unnecessary for structures beneath the fill. The geotechnical advantage of this location is it avoids side hill conditions in the unstable slopes on the north side of Pine Mountain. At this roadway bearing the through cut does not have rock dipping into the durable sandstones and limestones present. The US 421 location is the only place where all these conditions come together in this study area.

NORTH OF PINE MOUNTAIN

Using the alternate Pine Mt. crossing the large fill would intersect the opposite hill at @ elev. at 2200 feet. This area is adjacent to several generally trending North-south Mountain top removal strip mines which could be used to construct significant lengths of roadway with minor fills and cuts. The advantage of using these strip mines is it would not require construction of large fills, cuts or structures. There are other non-geotechnical advantages (economical) but they are beyond the scope of this report.



Commonwealth of Ketthick 23 A 9: 13 Transportation Cabinet

Frankfort, Kentucky 40622

Paul E. Patton Governor

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James C. Codell, III Secretary of Transportation

Clifford C. Linkes, P.E. Deputy Secretary

RE:

MEMORANDUM

| TO: | Annette Coffey, P.E. Director Division of Planning |
|-------|--|
| FROM: | Edward Sue Perkins, P.E. Branch Manager Permits Branch |

July 18, 2003 DATE:

Harlan, Leslie and Perry Counties - Planning Study

The Permits Branch has reviewed the data provided for subject study site and wish to offer the following.

- We urge the Cabinet to classify this project and all new projects as partially controlled access 1. facilities.
- Assuming the project is partial control access, we encourage all possible access points be set 2. on the plans in accordance with 603 KAR 5:120, even if they are not to be constructed at that time.
- In addition, we would like to make every effort possible to have the design speed to be the 3. same as anticipated posted speed when the project is complete.

We would like to see access control fence installed with the project. 4.

- Please notify this office if the proposed roadway is to be placed on the National Highway 5. System. This information is needed to assist us in regulating the installation of any outdoor advertising device.
- If the proposed roadway is to be on the N. H. S., early notification of the final line and grade is 6. needed. This enables us to monitor outdoor advertising devices prior to road construction being completed.
- Please notify this office if the proposed roadway is to be placed on the National Highway 7. System. This information is needed to assist this office in regulating the installation of any outdoor advertising device.

Thank you for the opportunity to verbalize our concerns.

ESP/jr



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HARLAN COUNTY PUBLIC SCHOOLS

"TRANSPORTING OUR MOST PRECIOUS CARGO"

TRANSPORTATION DEPARTMENT 285 BALL PARK ROAD HARLAN, KENTUCKY 40831



Fax (606) 573-9236 Telephone (606) 573-9297

August 26, 2003

Ms. Annette Coffey, P.E., Director Division of Planning 125 Holmes Street Frankfort, KY 40622

Dear Ms. Coffey:

As the Director of Transportation of Harlan County Public Schools, I am writing this letter to show my support for the urgent need of improvements to U.S. Highway 421 between Harlan and Hazard. As the chief transportation official for the school district, U.S. 421 across Pine Mountain causes great concern for me in weather related decisions on whether to cancel schools due to inclement weather.

On Thursday, August 21, 2003, I traveled 421 from James A. Cawood High School to the end of our bus routes on 421 and 221. It took me an hour one way to complete the route in a truck. It takes a school bus one hour and 20 minutes to complete the route. The complete route is curve after curve. Truly students could suffer from motion sickness as a result of the condition of this highway.

Because of the excessive number of curves on the roadway, school bus stops are extremely hazardous. I am fearful each day of what could happen as a result of the highway's condition.

I also want to point out that due to the truck related traffic around the rock quarry atop Pine Mountain, that the road conditions often become very slick.

Without hesitation, I must say that during the winter months this is by far the most dangerous area our buses travel. This is the area of the county that is assessed first and foremost on decisions to hold or cancel classes.

In closing, I must say that I am very concerned about the travel on U.S. 421 across Pine Mountain to the Leslie County line. I also say that I am concerned about the condition of the highway through Leslie County as our buses also travel that section of the highway for various school related extra curricular and field trips.

Our buses transport elementary and high school students on a daily basis. Even in sunny weather, conditions are less than ideal because of the existing condition of the highway with its curves, heavy truck traffic and narrow shoulders. I urge you to consider these factors in your decision to improve and/or rebuild U.S. 421 from Harlan to Hazard. Our children's lives are in jeopardy as they travel this dangerous highway.

If you have questions, please feel free to contact me at your convenience by calling 606-573-4330, Extension 2050.

Thank you for considering my remarks in your decision.

Sincerely, ndirson loga

Joan Anderson Transportation Director Harlan County Public Schools

HARLAN COUNTY PUBLIC SCHOOLS

251 BALL PARK ROAD HARLAN, KENTUCKY 40831-1753 Timothy W. Savior, Superintendent (606) 573-4330

this century belongs to our children

August 26, 2003

Transportation Cabinet Commonwealth of Kentucky Department of Administrative Services State Office Building Frankfort, KY 40622

Dear Sirs:

Please accept this correspondence as written comments for the public hearing of Tuesday, August 26, 2003, in support the rebuilding/improvements to U.S. 421 from Harlan to Hazard.

As Superintendent of Harlan County Public Schools, U.S. 421 across Pine Mountain creates great concern for me as our school buses loaded with children must cross the mountain on a daily basis. While our buses travel other dangerous roads, U.S. 421 across Pine Mountain creates serious concern. The treacherous curves; compounded by the heavy truck traffic, are tremendous barriers for safe travel to and from our schools. The travel also serves as an obstacle to participate in many educational opportunities during the wintry months of the school year. The treacherous condition of the highway, along with snow and ice, are most often the deciding factor that forces Harlan County Public Schools to miss extensive numbers of days annually due to inclement weather.

We have been fortunate to avoid serious accidents in the past, but several close calls in recent years prompt my plea for speedy improvements to this treacherous highway. While our buses have been involved in minor accidents, I truly believe that had it not been for the prompt and preventive actions of our drivers the accidents would have been disastrous with loss of life and serious injury.

The Harlan County Board of Education has previously adopted a resolution calling for improvements to U.S. 421. The resolution was forwarded to Governor Paul Patton and to the Kentucky House of Representatives and Kentucky State Senate.

Improvements to U.S. 421 are crucial not only for the safety of our students, but will allow for additional opportunities through economic and cultural growth. Our students attend events in Leslie and Perry Counties, such as athletics and academic competitions, cultural and educational enrichment activities including visits to the Challenger Learning Center, WYMT-TV, Hazard Community College and many others. Transportation Cabinet August 26, 2003 Page 2

In addition, in Harlan County alone, improvements to U.S. 421 will allow for better utilization of Pine Mountain Settlement School, providing students and staff with a safer trip for the study of Appalachian heritage and environmental education. It will allow for safer travel to and from academic and athletic competitions at Green Hills Elementary School.

Again, I encourage you to consider the safety issues for all traveling this highway in its current condition. It is imperative that the current U.S. 421 be reconstructed to provide much safer travel. The improved route, reducing the extensive travel time required ,will provide great opportunity for economic development and enhance tourism initiatives as well. Improvements to this road will open new and exciting opportunities for our region.

Thank you for considering these comments in your decision to reconstruct/improve U.S. 421.

Sincerely,

timothy 1. Saylow

Timothy W. Saylor Superintendent



2003 JUL 21 P 2: 23

OFFICE OF THE MAYOR BILL GORMAN

July 17, 2003

Ms. Annette Coffey Ky. Transportation Cabinet Division of Planning SOB Annex, 2nd Fl. Frankfort, KY 40601

Dear Ms. Coffee:

Thank you for allowing me to comment on the proposed Hazard to Harlan Road, Item No. 11-137.00. I am not sure how familiar you are with the existing roads that must be traveled to get from Hazard to Harlan. Simply put, these roads are terrible and extremely "out of the way". It takes about an hour and twenty minutes to travel the roughly 28 air miles between Hazard and Harlan. No good route exists between our two cities. Probably, the best route is to take Daniel Boone Parkway to Hyden, and then 421 to Harlan. With reference to the exhibits you sent me, it is plain how curvy and circuitous this route is.

Our communities are significantly entwined. The City of Hazard has the largest Appalachian Regional Hospital facility in eastern Kentucky with over 160 doctors and a new heart center. Harlan probably has the second largest ARH facility in the region. Travel to and from these facilities is of course often, and frequently, extremely time critical.

Interestingly, your exhibits mention Harlan, Letcher, Leslie, and Perry Counties. The Perry, Harlan, Letcher, Leslie and Breathitt Industrial Authority (commonly called Coalfields Industrial Authority) was organized in 1998 as a regional industrial recruitment tool. Presently, the Industrial Authority operates the Coalfields Industrial Park located in northern Perry County. This industrial park has been successful and employees hundreds of people from our region. Sadly, the Kentucky River Area Development District (KRADD) reports that no employees within the Park are from Harlan County. Why? Because of the terrible road between the two areas.

The problems discussed above are just two of the many reasons why we need this road. Our region desperately needs this project. Please let me know what else I can do to further the cause.

Sincerely,

CITY OF HAZARD William D. Gorman, Mayor