
AN OVERVIEW FOR THE UK WATERSHED ACADEMY: KENTUCKY DIVISION OF MINE RECLAMATION AND ENFORCEMENT



**KENTUCKY DEPARTMENT FOR NATURAL RESOURCES
ENERGY AND ENVIRONMENT CABINET
JULY 22, 2020**

DMRE MISSION STATEMENT

“Through inspection and enforcement activities, the Kentucky Division of Mine Reclamation and Enforcement (DMRE) ensures that the extraction of our natural resources is conducted in an environmentally conscientious manner that protects the citizens of the Commonwealth. DMRE is responsible for implementing the Surface Mining Control and Reclamation Act (SMCRA) of 1977 as it applies to coal mining, the permitting and regulation of non-coal mining, as well as the licensing, training, inspection, and enforcement of blasting and explosives across the State.”

WHAT DOES DMRE DO?

Coal Program

- *Inspecting all surface and underground coal mining permits in the State to assure compliance with the 1977 Federal Surface Mining Control and Reclamation Act (SMCRA).*

Non-Coal Program

- *Permits, regulates and enforces the surface mining reclamation laws and regulations for non-coal mining sites in the State.*

Explosives and Blasting Program

- *Maintains the safety of blasters in the Commonwealth and protects the public from harmful effects of blasting operations.*

COAL PROGRAM: OVERVIEW

- The Division of Mine Reclamation & Enforcement is one of five Divisions within the Department for Natural Resources (DNR) responsible for administering Kentucky's mining laws.
 - DMRE works closely with:
 - Division of Mine Permits
 - Division of Abandoned Mine Lands
 - Office of the Reclamation Guaranty Fund.



COAL PROGRAM: REGIONS



- The coal program has four (4) regional offices: Hazard, Pikeville, Madisonville, and Middlesboro.
- The central office is located in Frankfort, Kentucky at 300 Sower Blvd.

DMRE COAL INSPECTION REGIONS

Madisonville Branch

✉ [Robert Yonts](#), Environmental Control Manager

State Office Building
625 Hospital Drive
Madisonville, KY 42431
Phone: 270-824-7536
Cell: 270-971-9532

Counties - Union, Henderson, Webster, Daviess, McLean, Hopkins, Muhlenberg, Ohio

Frankfort Central Office

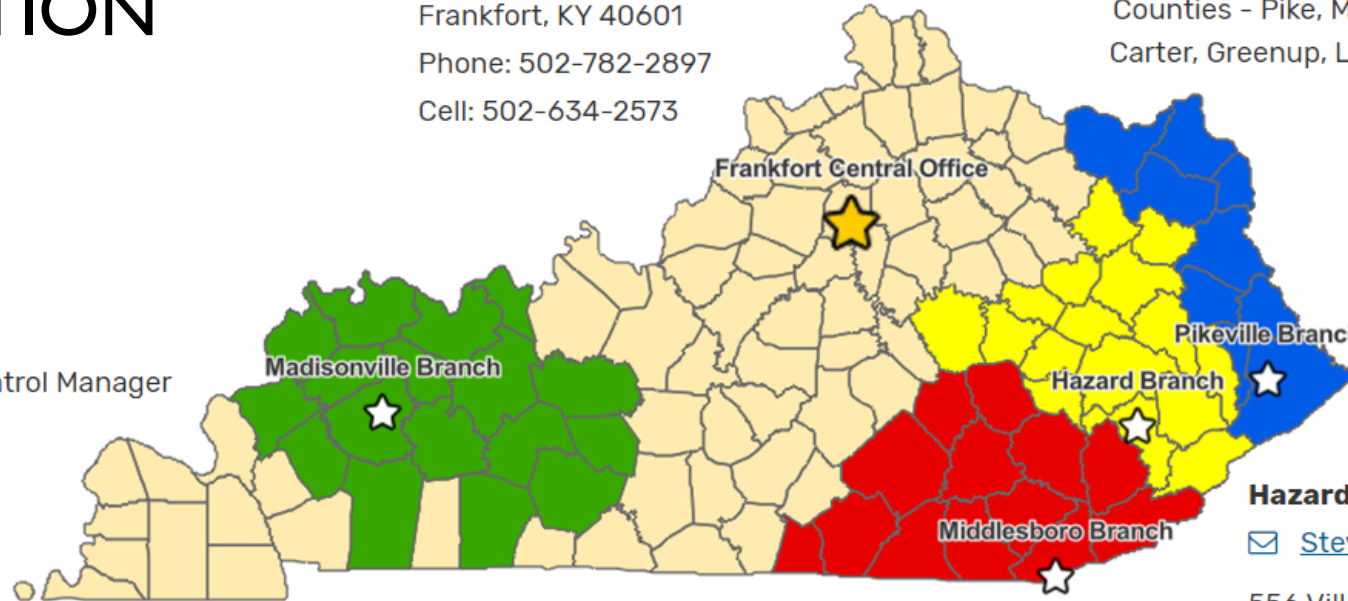
✉ [Jim Ward](#), Director

300 Sower Boulevard, 2nd Floor
Frankfort, KY 40601
Phone: 502-782-2897
Cell: 502-634-2573

Pikeville Branch

✉ [Charles Holbrook Jr.](#), Environmental Control Manager

121 Mays Branch Road
Pikeville, KY 41501
606-433-4008
Cell: 606-401-3505
Counties - Pike, Martin, Floyd, Johnson, Lawrence, Boyd,
Carter, Greenup, Lewis



Middlesboro Branch

✉ [Lonis Morgan](#), Environmental Control Manager

1804 E Cumberland Avenue
Middlesboro, KY 40965
Phone: 502-782-2148
Cell: 606-269-7035

Counties - Clinton, Wayne, McCreary, Pulaski, Rockcastle, Jackson, Laurel, Clay, Leslie, Harlan, Knox,
Bell, Whitley

Hazard Branch

✉ [Steve Vance](#), Environmental Control Manager

556 Village Lane
Hazard, KY 41702
Phone: 606-487-3745
Cell: 606-231-8488

Counties - Letcher, Knott, Perry, Breathitt, Owsley, Lee,
Estill, Madison, Powell, Wolfe, Menifee, Rowan, Elliott,
Morgan, Magoffin, Floyd

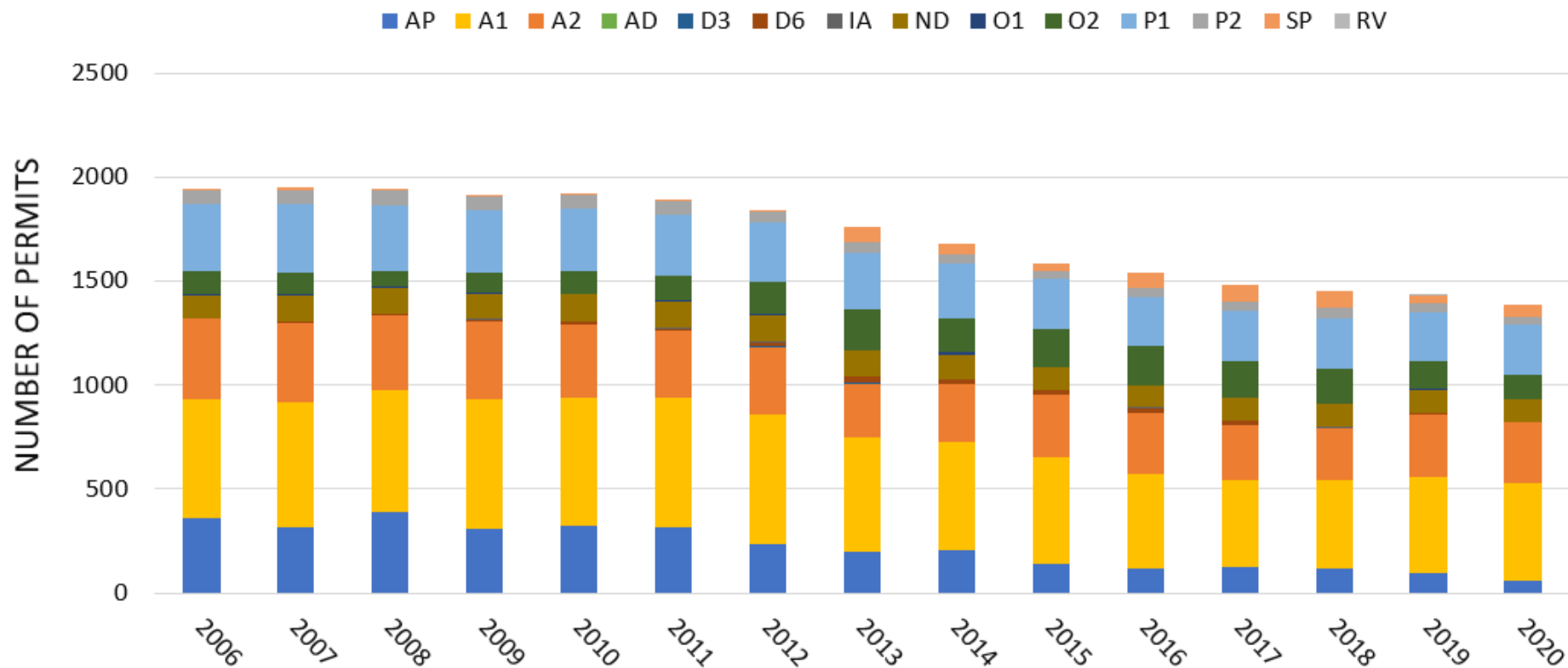
COAL PROGRAM: INSPECTION AND ENFORCEMENT

- DMRE personnel within the coal program conduct inspections to ensure compliance with:
 - The approved mining permit (reviewed and issued by the Division of Mine Permits)
 - Chapter 405 of the Kentucky Administrative Regulations
 - Chapter 350 of the Kentucky Revised Statutes
- Inspections and enforcement continue until a permit is considered completely reclaimed and is released from the program.
- Currently have 1,391 inspectable units.



COAL PROGRAM: ACTIVE PERMITS

PERMIT STATUS BY YEAR
2006 - CURRENT



COAL PROGRAM: INSPECTION FREQUENCY

- As per 405 KAR 12:010 Section 3(5), inspectors are required to conduct:
 - **Active mine sites:** One (1) complete and two (2) partial inspections per calendar quarter;
 - **Inactive mine sites:** One (1) complete inspection per quarter;
 - **Additional inspections:** Citizen complaints, Notice of Non-Compliances, and Cessation Orders.
- The number of inspections performed per year in comparison to the number required is referred to as '*inspection frequency*'. During this past fiscal year, DMRE inspection frequency was **99.5** percent.
 - **DMRE conducted more than 17,000 coal-related inspections in FY2020.**

COAL PROGRAM: PREVENTATIVE ENFORCEMENT, NNC'S AND CO'S

- Tools to ensure compliance:
 - Preventative Enforcement
 - Notice of Non-Compliances (NNC's)
 - Cessation Orders (CO's)
- As coal production steadily decreases and the industry continues to decline, ensuring statutory and regulatory compliance is essential in the protection of the citizens and environment of the Commonwealth.
 - *Approximately 25 to 30 percent of permits are currently in a stage of bankruptcy. Cabinet is pursuing reclamation on bankrupt permits through legal processes.*



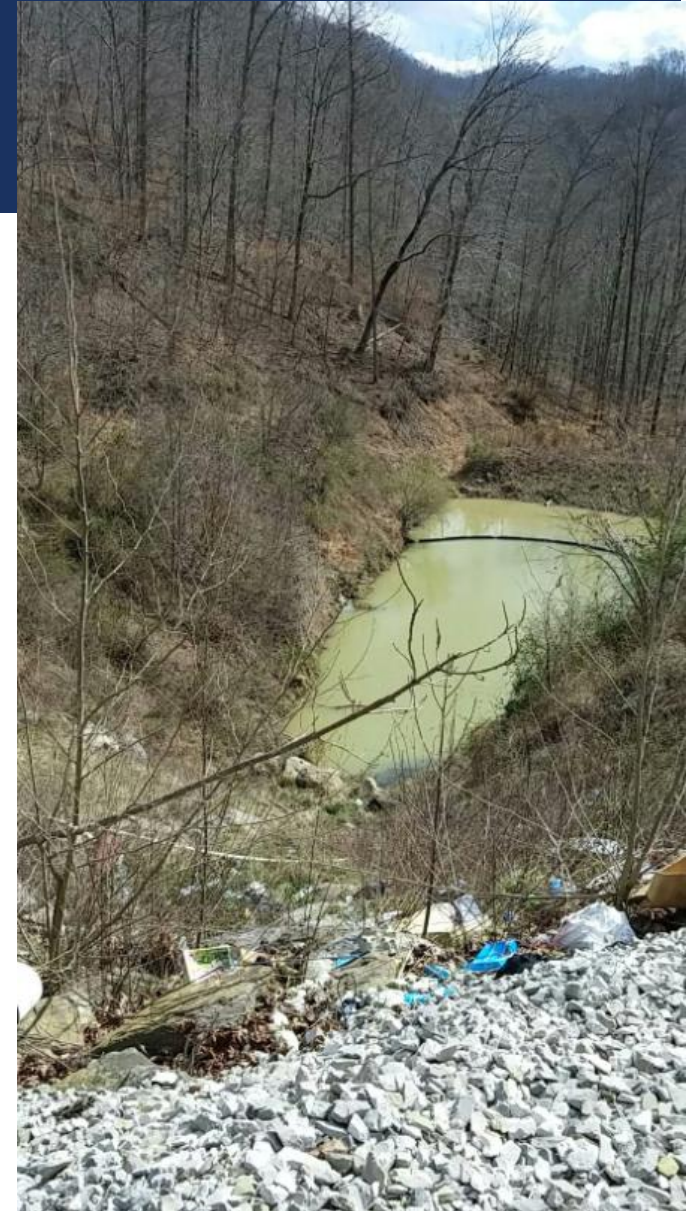
COAL PROGRAM: NOTICE OF NON-COMPLIANCES (NNC'S)



- A 'Notice of Non-Compliance' (NNC) is a violation.
 - A violation is written on a specific issue, identified as a 'Performance Standard'
 - Such as 'sediment control', 'off-permit disturbance', etc.
 - One NNC can contain multiple performance standards if the inspector identified multiple issues.
 - The NNC will describe the violation and the remedial measures required for each performance standard written.
 - NNCs are associated with specific time frames for remediation.

COAL PROGRAM: EXTENSIONS

- If the remedial measures of a non-compliance have **not** been performed and the non-compliance has **not** been abated within the required timeframe, then an extension may be requested.
- 405 KAR 12:020 Section 2 Subsection 2 (b) (1-4) identifies the following reasons or conditions in which a non-compliance may be extended beyond ninety (90) days:
 - Awaiting approval of a permitting action
 - Pending valid judicial order
 - Labor strike
 - Unfavorable climatic conditions (weather)



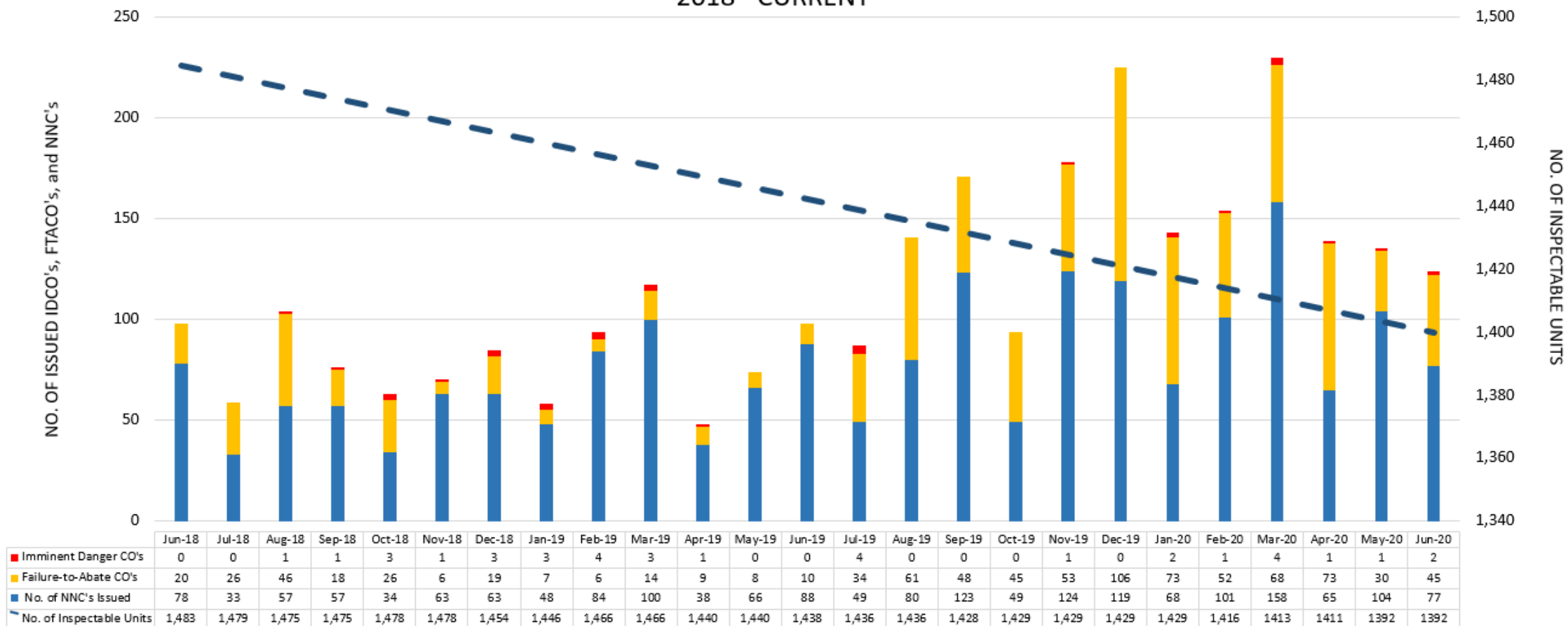
COAL PROGRAM: CESSATION ORDERS

- **Cessation orders** require a permittee to immediately cease mining operations on a portion of (or the entire) permit.
 - There are two (2) types of cessation orders (KRS 350.130 (4)):
 1. **Imminent danger:** “*Imminent danger to the health and safety of the public*”.
 2. **Failure-to-abate:** Non-compliances that have not been abated within the timeframe provided.
- The Cabinet may also issue a cessation order if a person(s) is operating a surface coal mining and reclamation operations are being conducted by a person *without* a valid permit.



COAL PROGRAM: ENFORCEMENT TRENDS

ENFORCEMENT METRICS BY MONTH
2018 - CURRENT



COAL PROGRAM: ENFORCEMENT MECHANISMS

- Whenever a permittee and/or operator is issued a notice of non-compliance or a cessation order, **penalties** may be assessed.
- If a permittee has *multiple violations or the same violation multiple times* within a twelve month period they may be evaluated for a '**Pattern of Violation**'.
- A **show-cause order** is an order or hearing for the Cabinet to an Administrative Hearing Officer as to why a permit should be revoked or suspended.
 - The permittee may argue why the permit should not be revoked or suspended.
- **Permit revocation** is the final course the Cabinet may take upon a permittee.
 - This bars the permittee from mining within the state of Kentucky and removes or withdraws the permit from the permittee name.
 - The permittee is no longer able to hold a permit in the State of Kentucky, but the Surety Company may perform the required reclamation.
 - If the surety or bonding company does not want to perform the reclamation, then the bond is **forfeited**.

COAL PROGRAM: BOND RELEASE



- **KRS 350.064 (1)** requires that prior to a permit being issued, the applicant must post a **reclamation bond**.
- As the permittee works towards their approved post-mining land use (such as pastureland, forestland, fish & wildlife habitat, and industrial/commercial landuses) the bond is returned in phases.

COAL PROGRAM: PHASES OF BOND RELEASE

Phase I:

- Permittee has completed backfilling, regrading, topsoil replacement, and drainage control including soil preparation and initial seeding and mulching in accordance with the approved reclamation plan and a report for the area has been submitted to the cabinet in accordance with **405 KAR 16:200, Section 8 or 405 KAR 18:200, Section 8;**

Phase II:

- Permittee has established revegetation in accordance with the approved reclamation plan and the standards for the success of revegetation, except productivity standards, have been met; The lands are not contributing suspended solids to stream flow or run off outside the permit area or increment in excess of the requirements of **KRS 350.420, 405 KAR Chapters 16 or 18**, or the permit; With respect to prime farmlands, soil productivity has been restored as required by **405 KAR 20:040, Section 6** and the plan approved under **405 KAR 8:050, Section 3**; and the provisions of a plan approved by the cabinet for the sound future management of any permanent impoundment by the permittee or landowner have been implemented to the satisfaction of the cabinet.

Phase III:

- Permittee has completed all surface coal mining and reclamation operations in accordance with the approved reclamation plan, such that the land is capable of supporting the postmining land use approved pursuant to **405 KAR 16:210 or 405 KAR 18:220**; and has achieved compliance with the requirements of **KRS Chapter 350, 405 KAR Chapters 7 through 24**, and the permit; and the applicable liability period under **405 KAR 10:020, Section 3(2)** has expired.

COAL PROGRAM: BOND FORFEITURE

- At times, permittees and bonding companies may **forfeit** a performance bond.
- When a bond is forfeited consistent with the provisions of KRS 350.130 (2), the entire amount of the bond for the permit area or increment shall be forfeited.



ACHIEVING RECLAMATION

- Once a permit is forfeited and bond collected by DMRE; proceeds from the bond forfeiture are transferred from DMRE to the KRGF for future disbursement to DAML.
- In some cases, the surety will commence reclamation activities.
- Major causes for permit bond forfeiture:
 - Permittee failure to rectify enforcement actions
 - Failure to pay KRGF fees
 - Voluntary forfeiture due to bankruptcy/insolvency
 - Administrative forfeiture initiated by DMRE



COAL PROGRAM: CERTIFICATIONS

- **Certifications** must be submitted to the regional offices ensuring facilities are built according to plan.
 - Mining often requires the construction of multiple facilities, such as excess spoil structures (hollow fills), sediment ponds, roads, slurry impoundments, coarse refuse fills, etc.
 - Applicants are required to **design** these structures to meet the performance standards outlined in 405 KAR Chapters 16 (surface) and 18 (underground).
- **Water Sampling:** 405 KAR 16:110 and 18:110 requires the permittee and operator to submit water sample results **quarterly** for surface and groundwater monitoring locations.



COAL PROGRAM: PROTECTING THE WATERS OF THE COMMONWEALTH

- DMRE works in conjunction with the Division of Water (DOW) to protect the waters of the Commonwealth from the negative effects of coal mining.
- This is accomplished through the issuance, inspection, enforcement, and release of permits and certifications through the general provisions of SMCRA, KRS Chapter 350, KAR Title 405, and the Clean Water Act (CWA), including KRS 151, KRS Chapter 224, and Title 401 KAR Chapters 4 and 5.
- **DMRE conducts field enforcement activities regarding Kentucky Pollutant Discharge Elimination System (KPDES) permits.**
 - KPDES permits are obtained for discharges such as sediment ponds and wet seals on underground mines.
 - Typical parameters:
 - Flow, Total Suspended Solids, Total Iron, Total Manganese, pH, specific conductivity, sulfate, and precipitation volume.



COAL PROGRAM: LONG TERM TREATMENT

- Sometimes a permittee / operator may need to treat water prior to it leaving the permit area to maintain compliance with the KPDES permit. Whenever this happens, the site is evaluated for placement on the **Long Term Treatment List**.
- Permittees may treat water via chemical (active) or non-chemical treatment (passive).
- *Discussed in Module 4.*



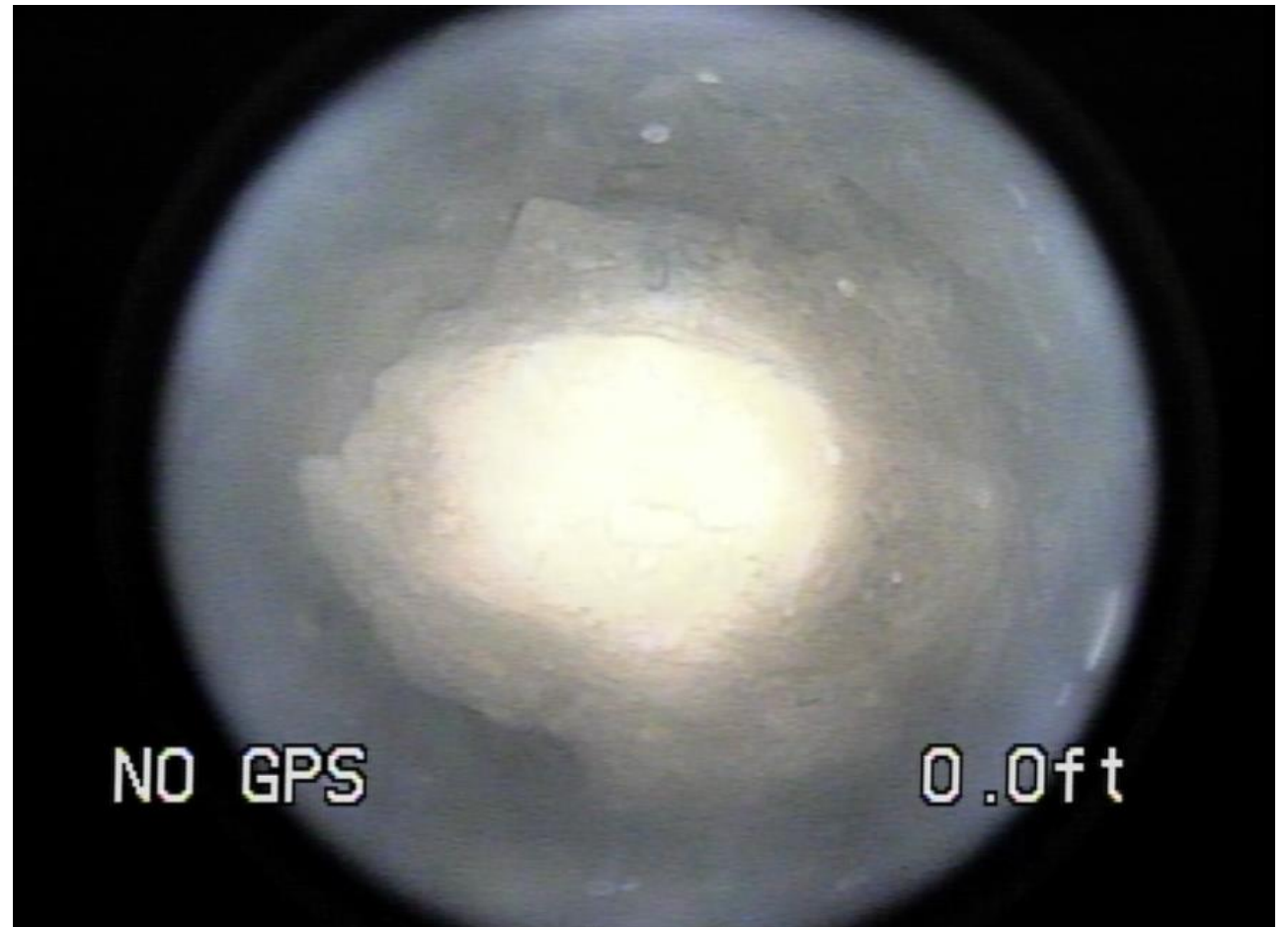
COAL PROGRAM: LONG TERM TREATMENT

- Whenever a permittee is added to the LTT list, communication between DMRE and the Division of Mine Permits (DMP) is initiated in order to request additional bond from the permittee.
 - Bond calculations include chemical and maintenance costs; labor cost; initial set-up costs; and any other costs incurred by the permittee per year multiplied by a factor of 25.
- The site **cannot be removed** from the list until the water quality issues are resolved (*water chemistry in compliance for 12 consecutive months with no treatment*).



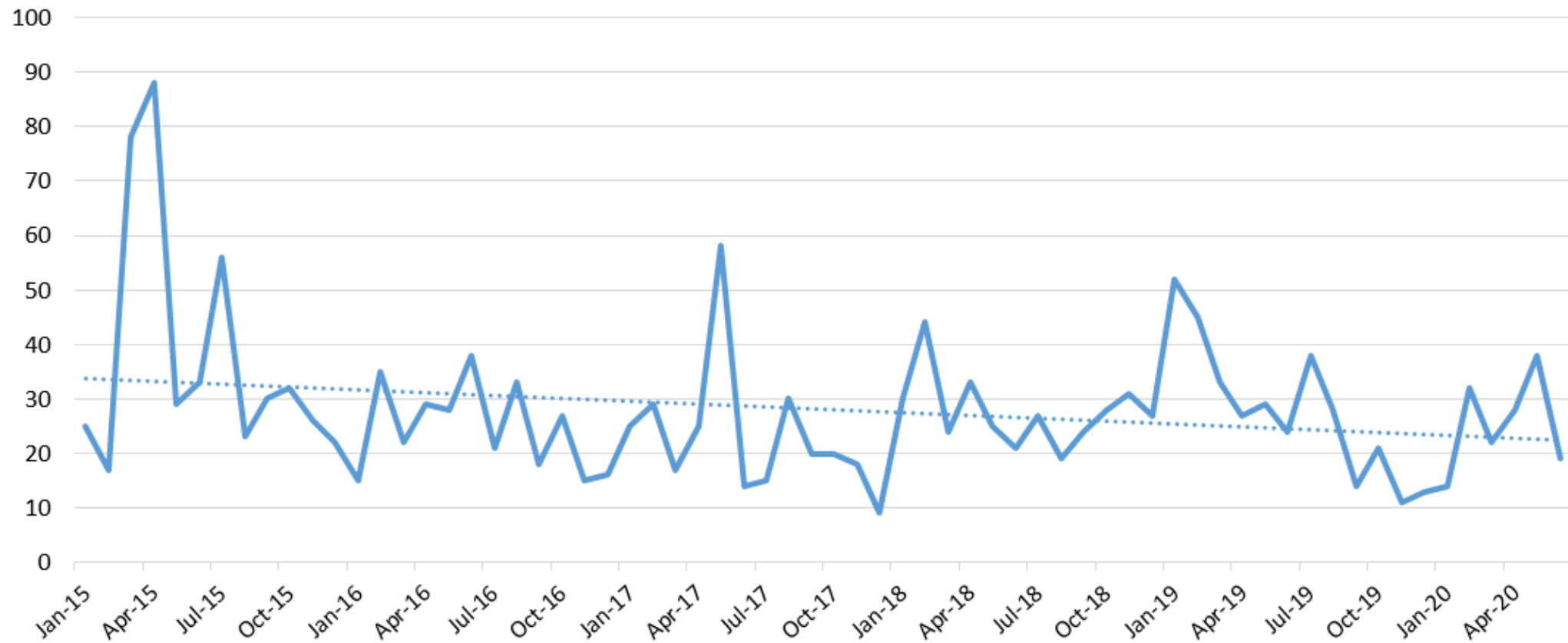
COAL PROGRAM: CITIZEN'S REQUEST FOR INSPECTION

- DMRE inspection staff respond to citizen complaints regarding problems and concerns that are potentially related to active and idled mining.
- These complaints are referred to as 'Citizen's Requests for Inspections', or CRIs, and must be responded to within mandated time frames.
 - Complaints often involve seeps, landslides, subsidence, and water wells
 - The number of complaints received often correlates with extreme weather events.



COAL PROGRAM: CITIZEN'S REQUEST FOR INSPECTION

NUMBER OF CRI's RECEIVED



COAL PROGRAM: CITIZENS REQUEST FOR INSPECTION



- Complaints regarding complex hydrologic issues are referred to the Complaints & Technical Investigations Section of DMRE for comprehensive review.
- DMRE staff have been working to improve response times to CRI's and to reduce the backlog of complaints.
 - While the overall number of investigations has declined with industry, the complexity of investigations and their litigiousness has increased.
 - In 2019, additional investigation staff were hired in the central Frankfort office, the Hazard Branch, and the Pikeville Branch to address these issues.

COAL PROGRAM: CITIZENS REQUEST FOR INSPECTION

- To file a Citizen's Request for Inspection:
 - Contact your Regional Office.
 - Explain the nature and location of your concerns.
 - *Complaints can be anonymous* (ensure you state that you prefer to remain anonymous).
 - A final response letter from DMRE will be sent upon conclusion of the inspection/investigation.



NON-COAL PROGRAM: OVERVIEW

- The Non-Coal Review Section of the Division of Mine Reclamation and Enforcement (DMRE) permits, regulates and enforces the surface mining reclamation laws and regulations for non-coal mining sites in the State.
- Non-coal mining includes:
 - Limestone, dolomite, sand, gravel, clay, fluorspar, tar sands or rock asphalt, shale, surface effects of dredging river sand and gravel, and other vein minerals.



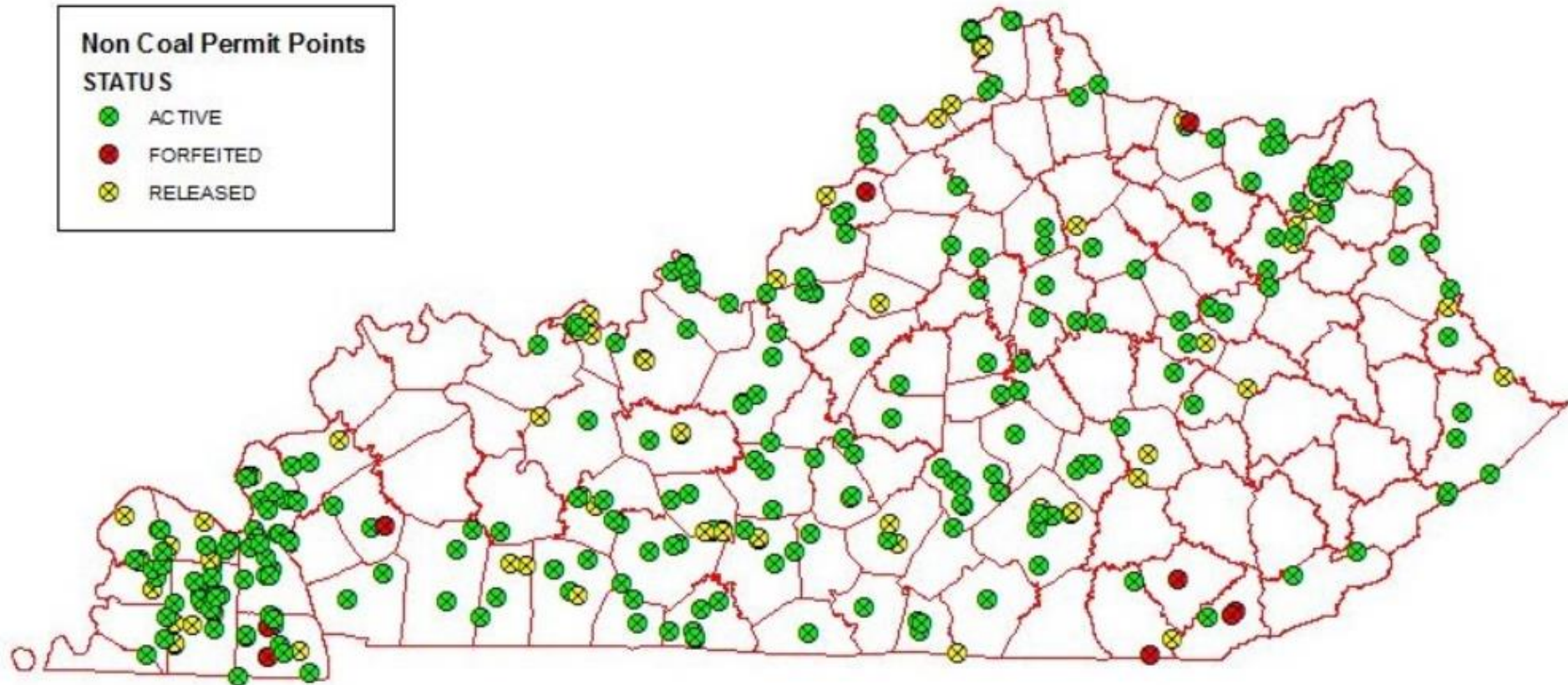
NON-COAL PROGRAM: PERMIT REVIEW AND ENFORCEMENT

- As of FY2020:
 - 223 active non-coal permits in Kentucky
 - 40,645 total permitted acres
 - 1,388 inspections conducted



NON-COAL PROGRAM: PERMITS

Distribution of Non-Coal Permits Across Kentucky



EXPLOSIVES AND BLASTING PROGRAM: OVERVIEW



- The statutory responsibility of the Explosives and Blasting Section is to *maintain the safety of blasters* in the Commonwealth and to *protect the public* from the harmful effects of blasting operations.
- The Section is in charge of:
 - Licensing blasters
 - Responding to blasting complaints
 - Training
 - Testing
 - Issuing permits to purchase or possess explosives
 - Controls the manufacture, transportation, storage, distribution, and eventual use of explosives.

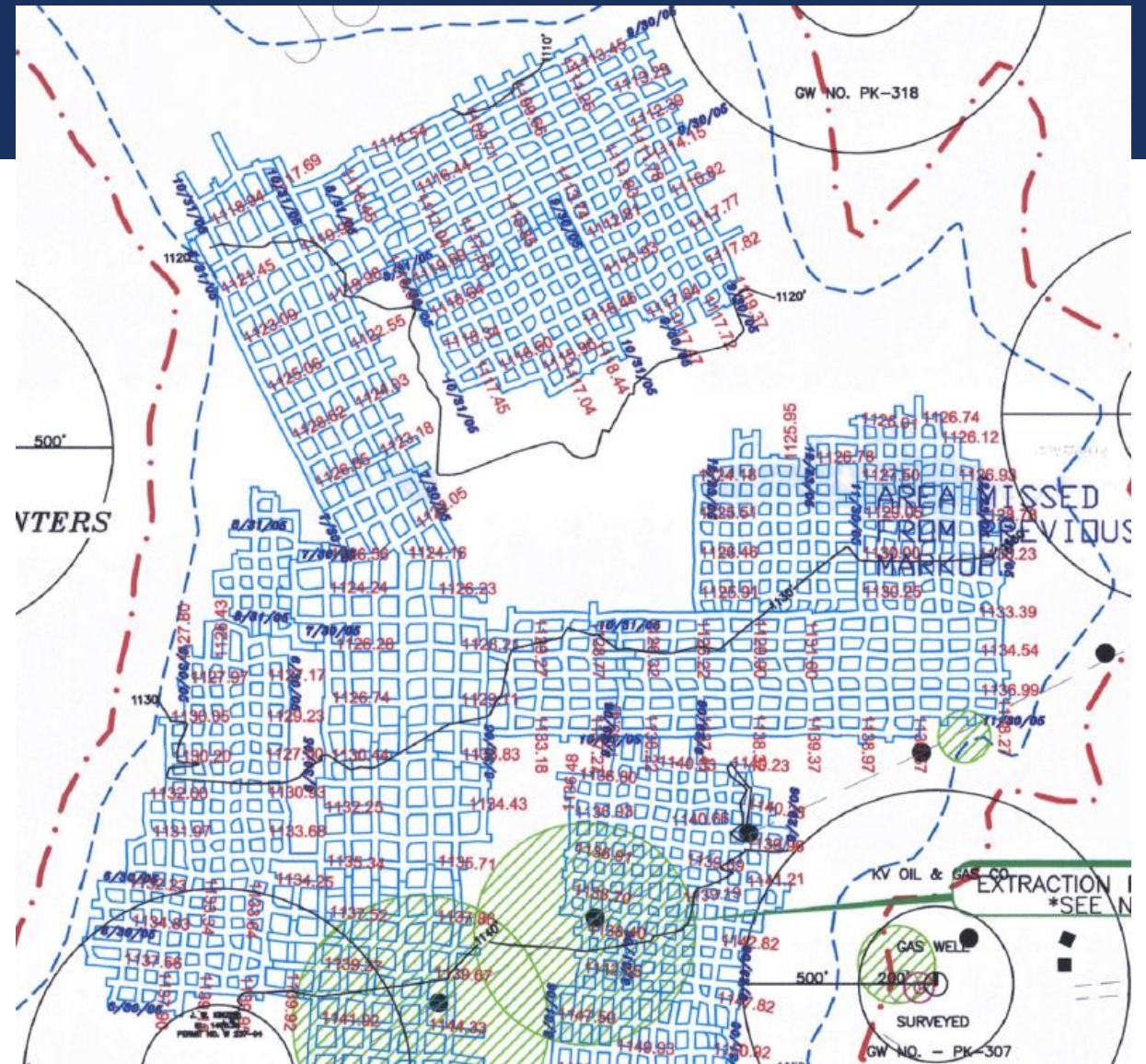
EXPLOSIVES AND BLASTING PROGRAM: OVERVIEW



- Responsible for the inspection and enforcement of the use of explosives in Kentucky.
- This includes the following:
 - Building demolition
 - Mining
 - Road construction
- In FY2019, the Explosives and Blasting Section conducted 584 blasting inspections.

ONLINE RESOURCES

- GIS Support Section of DMP
 - Provides technical geographic information system and mapping support for DMP and DMRE.
 - Includes georeferencing Mine Reclamation Plan maps, scanning historical mine maps, and georeferencing annual mine maps from the Office of Mine Safety and Licensing.
 - *Used by the Department of Revenue for annual unmined mineral tax calculations and are also uploaded to the Kentucky Mine Mapping Initiative database.*



ONLINE RESOURCES

- Numerous online tools are available to the general public from the EEC website:
 - These tools include:
 - Surface Mining Information System (SMIS)
 - Surface Mining Interactive Viewer
 - Kentucky Mine Mapping Information System
 - Cumulative Hydrologic Impact Assessments
- Access these tools by visiting the EEC website: <https://eec.ky.gov/Natural-Resources/Mining/Pages/default.aspx>



COVID-19 Alert - For the latest information on the novel coronavirus in Kentucky, please visit kycovid19.ky.gov

Ky.gov An Official Website of the Commonwealth of Kentucky

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Energy & Environment Cabinet

Our mission is to provide regulatory guidance, environmental awareness and implement an energy strategy that will bring economic benefits to the Commonwealth while protecting the environment and improving the quality of life for Kentucky businesses, workers and the public in general.

NATURAL RESOURCES

🏠 / [Natural Resources](#)

Natural Resource Divisions



Conservation

Provides support to Kentucky's 121 local conservation districts in the development and implementation of sound soil and water conservation programs.



Forestry

Works to protect, conserve and enhance Kentucky's forest resources through stewardship and forest protection programs.



Mining

Supports the inspection, permitting, and reclamation of Kentucky's coal mines and the safety of mine workers.



About DNR



DNR contacts, phone directory, organizational structure and directions can be found here.

DNR Public Notices



This page contains Public Hearing notices for Conservation, Forestry, Mining, Oil & Gas, 401 Water Quality, and Nature Preserves.

Kentucky Reclamation Guaranty Fund



The fund is a revolving, interest-bearing account that will provide financial assistance to the cabinet in the event the permit-specific reclamation bond is insufficient to complete reclamation on a mine site.

Reclamation Advisory



MINING

[Home](#) / [Natural Resources](#) / Mining



Mine Reclamation and Enforcement

Responsible for inspecting all surface and underground coal mining permits in the state to assure compliance with the 1977 Federal Surface Mining Control Act.



Mine Permits

Protect human health and the environment from adverse effects of coal mining and reclamation operations.



Mine Safety

Ensuring Kentucky coal miners are provided with a safe working environment, effective training and ensure the statutes and regulations regarding coal mining are enforced.



[Surface Mining Information System \(SMIS\)](#)



[Surface Mining Interactive Viewer](#)



[Mine Mapping Information System](#)



Hotline

24-Hour Emergency Toll-Free Number

Whenever a serious physical injury or loss of life occurs in a mine or in the machinery connected therewith the mine foreman in charge of the mine or his designee, shall within 15 minutes of

ONLINE RESOURCES: SURFACE MINING INTERACTIVE VIEWER

← → ↻ Not secure | eppcgis.ky.gov/smis/ ☆

Apps SMIS DocTree Gmail YouTube Maps ESRI Login EEC Website KHRIS KMMIS Date Calculator Coal Facts PDSI values Oversight Docume... KRS 350 405 KAR »

KY Surface Mining Viewer

Division of Mine Permits

ArcGIS World Geocoding Se 🔍

37.312309 -81.627305 Degrees

30mi

Kentucky Division of Geographic Information (DGI) | Esri, HERE, Garmin, FAO, USGS, EPA, NPS

ONLINE RESOURCES: SURFACE MINING INTERACTIVE VIEWER

The screenshot displays the 'KY Surface Mining Viewer' interface. At the top left, the title 'KY Surface Mining Viewer' and 'Division of Mine Permits' is visible. A search bar contains 'ArcGIS World Geocoding Se'. The map shows a topographic view with various mine permit boundaries in brown and orange. A specific permit boundary is highlighted in cyan. A pop-up window titled 'Active Permitted Mine Boundaries: KENTUCKY FUEL CORPORATION' provides the following details:

PermitNo	8365580
FeatCLS	UG
Source	KYDMP
Contact	KY Division of Mine Permits
Type_Flag	ACT
Calc_Acres	3,519.37
QUAD_DESC	HANDSHOE
MINE_STATU	P2
PER_NAME	KENTUCKY FUEL CORPORATION
REGION_DES	HAZARD
PERM_ACT	MI 5 09/23/2015 SU 1 08/12/2010

At the bottom of the map, the coordinates '37.487818 -82.839406 Degrees' and a scale bar are shown. The footer includes 'Kentucky Division of Geographic Information (DGI) | VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA' and the Esri logo.

ONLINE RESOURCES: SMIS

SURFACE MINING INFORMATION SYSTEM

[Home](#) / [Natural Resources](#) / [Mining](#) / Surface Mining Information System

The Kentucky Surface Mining Information System (SMIS) is an extensive computer database that is used for tracking all permitting and enforcement actions on coal mining activity in the Commonwealth of Kentucky. Examples of information contained in SMIS include:

- status of pending and issued permit applications;
- general background information on permitted coal mining operations;
- inspection background and frequency;
- status of mining activity;
- past or pending violation problems; and,
- performance bond information.

Recommended Prerequisites:

1. The recommended browser for accessing SMIS is either Google Chrome, Mozilla Firefox or Microsoft Edge. SMIS will not work with Internet Explorer
2. A 24 inch monitor is recommended but would adjust accordingly to any monitor size
3. We recommend a resolution of 1920 x 1080

[ENTER SMIS](#)

Please contact [✉ jim.neal@ky.gov](mailto:jim.neal@ky.gov) with any issues.

SMIS Login



Please Note !!! Our SMIS database is refreshed nightly from 1-2:30 a.m. EST. SMIS will be unavailable during this process

ONLINE RESOURCES: SMIS

SMIS SMIS ▾

- Applications ▾
- Permits ▾**
- Notices ▾
- Violations ▾
- Complaints ▾
- Entities / Owners ▾


Permits

- Bonds
- Inspections
- Inspector Workload / Assignment
- Coal Marketing Deferment
- Coal Market Reviewer Workload
- Blaster Certification
- Highwall Permits
- Lab Number
- OSM Fill Data
- Temporary Cessation
- Water Monitoring Point

The Kent coal min

- Sta
- Ge
- Ins
- Status of mining activity
- Past or pending violation problems
- Performance bond information

Surface Mining Information System



(SMIS) is an extensive computer database that is used for tracking all permitting and enforcement actions on tucky. Examples of information contained in SMIS include:

- ations
- ted coal mining operations

ONLINE RESOURCES: SMIS

SMIS SMIS ▾

Permits

Permit Search: ↕

Search: 8980960 🔍 Search 🗑️ Clear

Export to Excel

Permit #	Entity Id	Entity Name	Type	Mine St...	Orig Issue ...	Permit Exp...	Activity Iss...	Fed...
8980960	015459	JMEG MINE LLC	MT	SP	03/23/2015	10/25/2020	04/10/2018	N

◀ 1 ▶ 5 items per page 1 - 1 of 1 items

General

Permit Number: 8980960 Issue Date: 03/23/2015 Acreage Fees: Original Acres: 58.19 Land Slope %: Kpdes No: KYG046220 Mine Name: Powderhouse Hollow Mine Primary Mine Type: SURFACE Representative: JAN BERKOWITZ	Transfer From: 8980802 Transfer To: Permit Fees: Current Acres: 59.89 Fed: N Fed#: No. Incr.: 4 Mine Status: SUSPENDED PERMIT ND Ext. Date: Scanned and Verified: Revoked: NO
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Suspensions

Reason Description	Start Date	Date Lifted	Comments
UNPAID KRGF FEES	05/30/2019		
Activity		Date	
PERMIT SUSPENDED		05/30/2019	
UNPAID KRGF FEES	11/27/2017	12/07/2017	
Activity		Date	
SUSPENSION LIFTED		12/07/2017	

ONLINE RESOURCES: KMMIS

The screenshot displays the Kentucky Coal Mine Mapping Information System (KMMIS) web application. The browser address bar shows the URL eppcgis.ky.gov/minemapping/. The page title is "Kentucky Coal Mine Maps" and the subtitle is "Ky Mine Mapping Information System".

The main map area shows a map of Kentucky with various mine-related layers overlaid. The layers include county names, mine portals, oil and gas wells/storage fields, available mine maps, and mined out areas. The map is centered on the state of Kentucky, with major cities like Louisville, Frankfort, and Lexington visible.

On the left side, there is a search tool titled "MMIS Search Tools". It has four tabs: "By Shape", "By Value", "By Spatial", and "Results". The "By Shape" tab is selected. The search layer is set to "Available Mine Maps - Active". The search alias is "Company Name". The search parameters are "Company Name is" with a dropdown menu. An example search term is "Dale Coal Co". There is a "Search" button and a checkbox for "Limit search to map extent".

On the right side, there is a "Map Contents" panel. It lists the following layers:

- Operational Layers
 - Ky County Names
 - Ky Mine Portals
 - Ky Oil Gas Wells/Storage Fields
 - Ky Available Mine Maps
 - Ky Mined Out Areas
 - Ky Quad Index Grid
 - Ky Geologic Quadrangle Maps
 - DOQQ Phase 2 (1 Meter)
 - DOQQ Phase 1 (1 Meter)
 - KyFromAbove 5FT DEM (Shaded Relief)
 - KyFromAbove 5FT DEM (Hillshade)
 - KY_Coal_Beds

ONLINE RESOURCES: KMMIS

Kentucky Coal Mine Maps
Ky Mine Mapping Information System

ArcGIS World Geocoding Service

MMIS Search Tools

By Shape | By Value | By Spatial | Results

Search layer: Available Mine Maps - Active

Search alias: Company Name

Specify parameters for this search:

Company Name is:

Example: Dale Coal Co

Limit search to map extent

Map Contents

- Operational Layers
 - Ky County Names
 - Ky Mine Portals
 - Ky Oil Gas Wells/Storage Fields
 - Ky Available Mine Maps
 - Ky Mined Out Areas
 - Ky Quad Index Grid
 - Ky Geologic Quadrangle Maps
 - DOQQ Phase 2 (1 Meter)
 - DOQQ Phase 1 (1 Meter)
 - KyFromAbove 5FT DEM (Shaded Relief)
 - KyFromAbove 5FT DEM (Hillshade)
 - KY_Coal_Beds

Map coordinates: 37.476579 -83.016474 Degrees

Scale: 0.4mi

VITA Esri HERE Garmin

ONLINE RESOURCES: KMMIS

The screenshot displays the Kentucky Coal Mine Maps (KMMIS) web application. The browser address bar shows the URL `eppcgis.ky.gov/minemapping/`. The page title is "Kentucky Coal Mine Maps - Ky Mine Mapping Information System". The interface includes a search bar, a search tools panel, a map view, and a map contents panel.

The search tools panel is titled "MMIS Search Tools" and has four tabs: "By Shape", "By Value", "By Spatial", and "Results". The "By Value" tab is selected. The search layer is set to "Available Mine Maps - Active". The search alias is "Company Name". The search parameters are "Company Name is" with a dropdown menu. A search button is present, along with a checkbox for "Limit search to map extent".

The map view shows a topographic map of a region in Kentucky, with a search results popup overlaid. The popup is titled "(1 of 2)" and lists the following attributes for a selected mine:

- MINE_TYPE_
- OPERATOR
- COUNTY
- NEAREST_TO
- STREAM
- BRANCH
- SEAM_NAME
- SEAM_ELEV
- SEAM_THICK
- KDOR_SEAM
- SOURCE
- CENTROID_X -83.03
- CENTROID_Y 37.51
- MAPSEARCH [More info](#)

The "MAPSEARCH" attribute and its associated "More info" link are circled in red. A "Zoom to" link is also visible at the bottom of the popup.

The map contents panel is titled "Map Contents" and lists the following layers:

- Operational Layers
 - Ky County Names
 - Ky Mine Portals
 - Ky Oil Gas Wells/Storage Fields
 - Ky Available Mine Maps
 - Ky Mined Out Areas
 - Ky Quad Index Grid
 - Ky Geologic Quadrangle Maps
 - DOQQ Phase 2 (1 Meter)
 - DOQQ Phase 1 (1 Meter)
 - KyFromAbove 5FT DEM (Shaded Relief)
 - KyFromAbove 5FT DEM (Hillshade)
 - KY_Coal_Beds

ONLINE RESOURCES: KMMIS



Q Mine / Map Search

Q Search Fields:

State File Name (SFN):

08977-27

Federal Id:

Mine Name:

Permit Number:

Company:

Operator:

Nearest Town:

Nearest Stream:

County:

Seam Name:



Status:

Both

Q Search

Clear

Drag a column header and drop it here to group by that column

Mine Maps	Mine Report	SFN	Status	Federal Id	Permit #	Company	Mine Name	Operator
 View	 View	08977-27	Inactive	15-10365	813-0117	Marty Corporation	Lynn Log 23 (21)	Russell Large

ONLINE RESOURCES: KMMIS

← → ↻ Not secure | minemaps.ky.gov/maps/availablemaps?sfn=08977-27

Apps SMIS DocTree Gmail YouTube Maps ESRI Login EEC Website KHRIS KMMIS Date Calculator Coal Facts PDSI values Oversight Docume... KRS 350 405 KAR



Home Maps ▾ FAQ History Benefits Customers Links

Available Maps

Selected Mine Details:

State File Name (SFN): 08977-27

Company: Marty Corporation

Nearest Town:

Seam Name: Skyline Zone

Federal Id: 15-10365

Mine Name: Lynn Log 23 (21)

Nearest Stream:

Status: Inactive

Permit Number: 813-0117

Operator: Russell Large

County: Knott

Drag a column header and drop it here to group by that column

Map Year	Map Date	Purpose	Name	
1987	01/27/1987	License	08977-27_1987L_19870127	View Map Images
1987	01/27/1987	License	08977-27_1987L_19870127_s1of2	View Map Images
1987	01/27/1987	License	08977-27_1987L_19870127_s2of2	View Map Images

◀ ◁ 1 ▷ ▶ 5 items per page

1 - 3 of 3 items

ONLINE RESOURCES: KMMIS

Federal Id: 15-10365

Permit I

Operato

County:

Download Map Image Files

X

File Type

File Name

JPG

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TIF

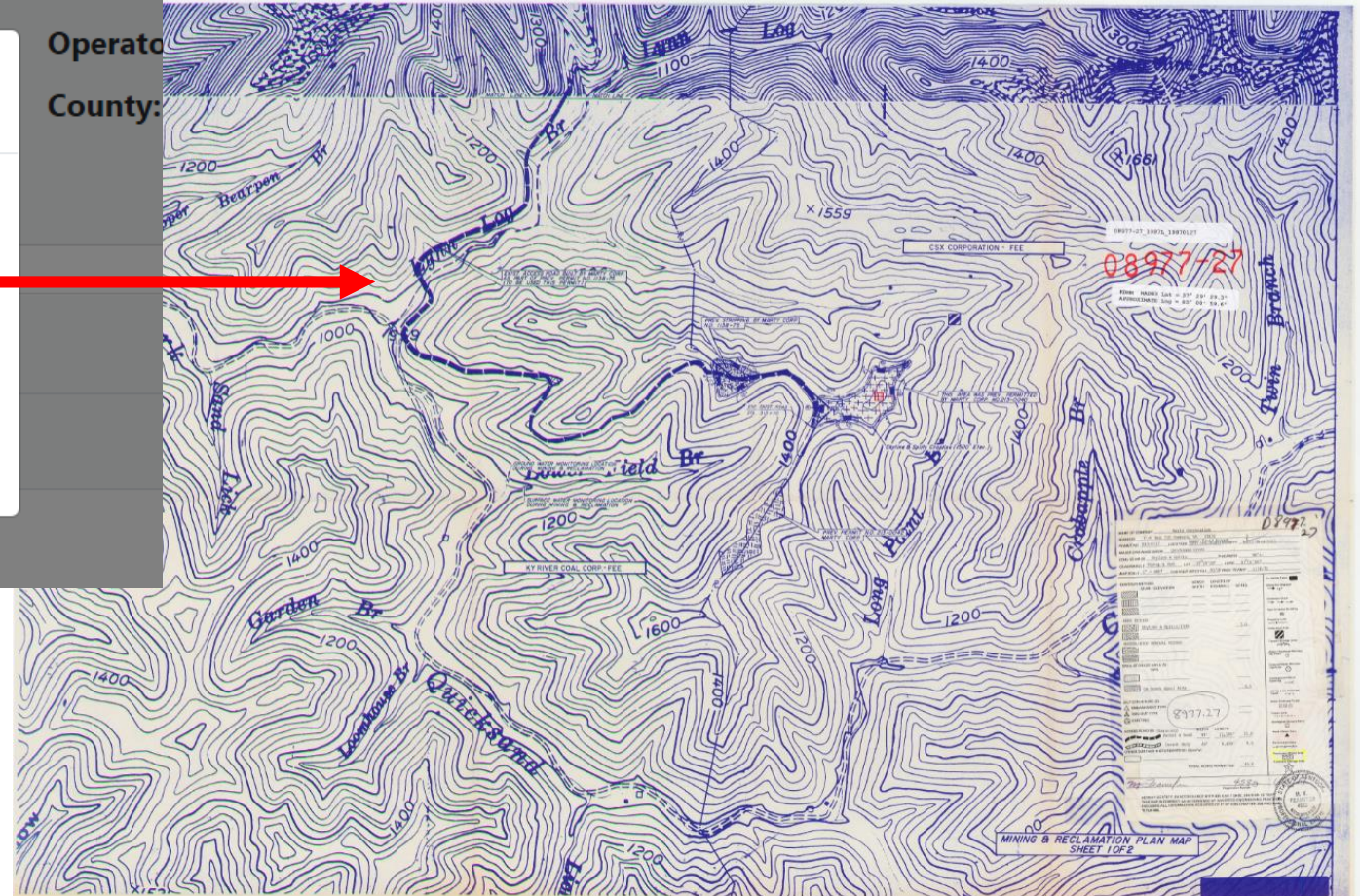
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TFW

[Download File](#)

27_1987L_19870127

View Map Images



NATURAL RESOURCES

🏠 / [Natural Resources](#)

Natural Resource Divisions



Conservation

Provides support to Kentucky's 121 local conservation districts in the development and implementation of sound soil and water conservation programs.



Forestry

Works to protect, conserve and enhance Kentucky's forest resources through stewardship and forest protection programs.



Mining

Supports the inspection, permitting, and reclamation of Kentucky's coal mines and the safety of mine workers.



Oil & Gas

Oversees the permitting, inspection, and reclamation of the crude oil and natural gas industry in the Commonwealth.



About DNR



DNR contacts, phone directory, organizational structure and directions can be found here.

DNR Public Notices



This page contains Public Hearing notices for Conservation, Forestry, Mining, Oil & Gas, 401 Water Quality, and Nature Preserves.

Kentucky Reclamation Guaranty Fund



The fund is a revolving, interest-bearing account that will provide financial assistance to the cabinet in the event the permit-specific reclamation bond is insufficient to complete reclamation on a mine site.

Reclamation Advisory Memoranda (RAM) List



A RAM is an open correspondence from the commissioner that provides information related to DNR's surface mining regulatory program.

Kentucky Underground Mine Mapping Information System



Public access to Kentucky underground mine maps and associated information.

Careers

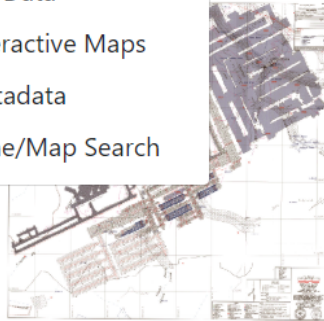


If you are interested in working at the Kentucky DNR we encourage you to...



- Annual Reports
- Coal Seam Listings
- GIS Data
- Interactive Maps
- Metadata
- Mine/Map Search

to Kentucky Mine Mapping Information System



Users of the Kentucky Mine Mapping Information System web site and all associated data and resources should carefully read the metadata to determine if a particular published resource is of sufficient accuracy for their particular application. When any question as to currency or degree of accuracy is not adequately answered within the metadata, users are encouraged to contact the contributing agency directly using the contact information provided at the bottom of this page.

* Disclaimer

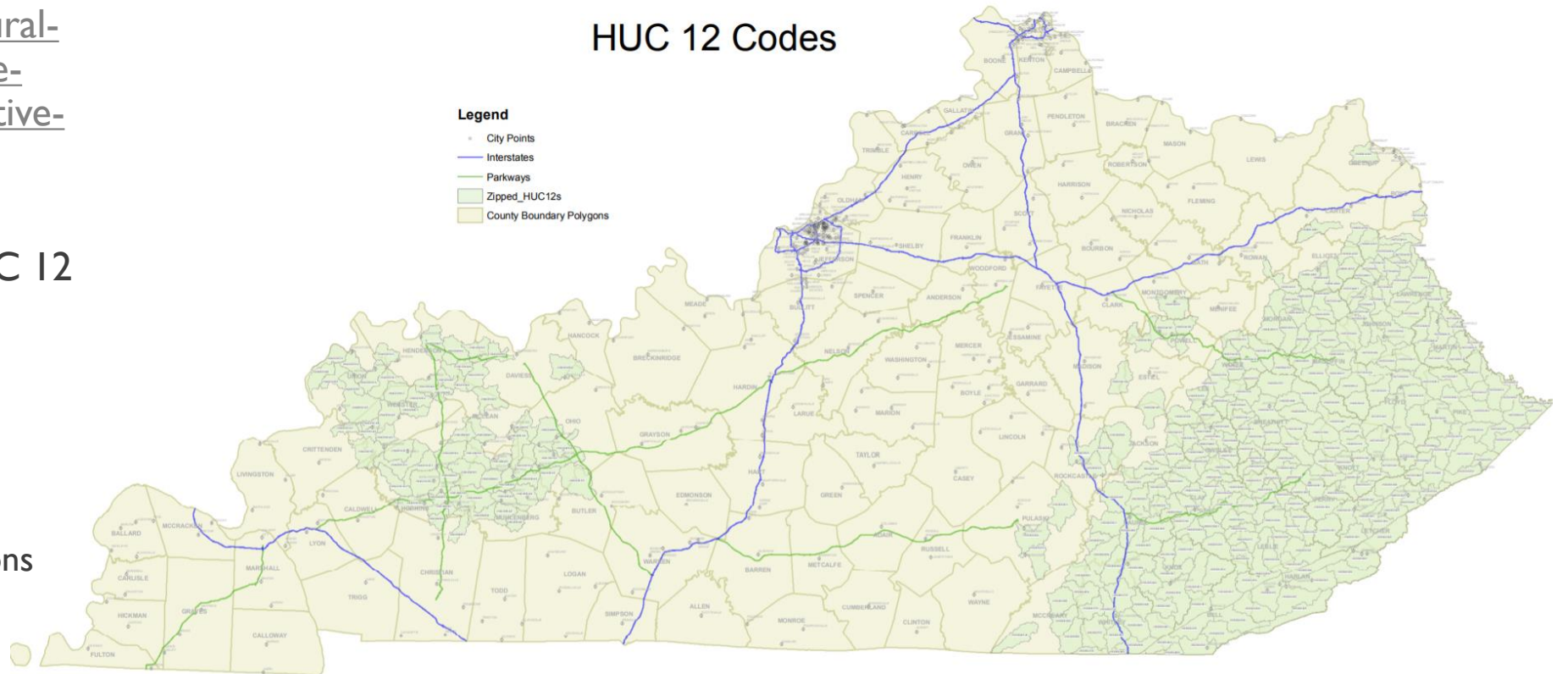
No endorsement is intended or made of any hypertext link, product, service, or information either by its inclusion or exclusion from this page or site. While all attempts are made to insure the correctness and suitability of information under our control and to correct any errors brought to our attention, no representation or guarantee can be made as to the correctness or suitability of that information or any linked information presented, referenced, or implied.

All critical information should be independently verified.

The inclusion of links from this site does not imply endorsement by the Commonwealth of Kentucky. The Commonwealth makes no endorsement, express or implied, of any links to or from its site, nor is it responsible for the content or activities of any linked sites. Any questions should be directed to the administrator's of this or any other specific sites.

ONLINE RESOURCES: CUMULATIVE HYDROLOGIC IMPACT ASSESSMENTS

- <https://eec.ky.gov/Natural-Resources/Mining/Mine-Permits/Pages/Cumulative-Hydrologic-Impact-Assessment.aspx>
- Extensive data for HUC 12 watersheds:
 - Surface water quality
 - Benthics
 - Groundwater quality
 - Water quality violations
 - KPDES information
 - Mine history
 - Information regarding pending mines.





MINE PERMITS

Natural Resources / Mining / Mine Permits

The goal of the Division of Mine Permits is to protect human health and the environment from adverse effects of coal mining and reclamation operations. This is accomplished by evaluating mining and reclamation plans and issuing permits to ensure that all established standards of operation are met before a mining permit is issued.



Electronic Forms

The Division of Mine Permits is responsible for reviewing mining applications to ensure that all established standards of operation are met before a mining permit is issued.



Permitting Statistics

Permitting statistics are compiled monthly by the Division of Mine Permits.



Permitting Actions

A monthly report listing which permits were issued or denied.



Technical Reclamation Memoranda

A Technical Reclamation Memorandum (TRM) is a guidance document relating to engineering or other specific technical material.



Reclamation Advisory Memoranda

A Reclamation Advisory Memorandum is an open correspondence from the commissioner of the Department for Natural Resources to operators and other interested persons, that provides information related to DNR's surface mining regulatory program.



Maps & Spatial Data

Various resources pertaining to mapping and spatial data.



Shapefile Submission

The Division of Mine Permits is currently accepting shapefile format for proposed permit boundaries, approved permit boundaries, files, haul roads, and other requirements and bond requirements.



Cumulative Hydrologic Impact Assessment

The Division of Mine Permits is responsible for assessing the impact of an applicant's proposed operation on the environment. A Cumulative Hydrologic Impact Assessment is conducted for each application.

Quick Links

Contact Division of Mine Permits

Electronic Permitting FAQs
Helpful answers and tips for Electronic Permitting.

2019 Annual Report

Online Services

Historical Background Water Data
The Baseline Water Monitoring Data Bank provides access to baseline water monitoring data that has been received by the Division of Mine Permits in previously reviewed permit applications.

Surface Mining Interactive Viewer

Testing Application

Testing Applications (Zip)
Applications for industry testing.

Testing Applications (Excel)
Applications for industry testing.



CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Natural Resources / Mining / Mine Permits / Cumulative Hydrologic Impact Assessment

The Division of Mine Permits is responsible for assessing the impact of an applicant's proposed operation on the environment. A Cumulative Hydrologic Impact Assessment (CHIA) is conducted for each application. The data is organized by the watershed's Hydrologic Unit Code (HUC), which is used to identify the unique watershed. The data may include surface water quality, benthic information, groundwater quality, water quality violations, pollutant discharge elimination information, mine history and information regarding pending mines.

The files are organized by their HUC 12 watershed and are available for download. There are several ways to obtain the HUC 12 number:

- Follow "quick links" on the right to utilize maps to obtain the code number. You may also download the data files from the Kentucky Surface Mining Viewer from a link within the DMP HUC 12 table.
- Note:** Data Packages will be available for only those watersheds in which mine applications are submitted. [A detailed description of the files contained in the Data Packages.](#)

Each Watershed Characterization Data Package contains a Water Quality Results Viewer. This is a forms-driven Microsoft Access application designed to enable the viewer to easily view, filter, sort, graph and export groundwater and surface water quality sample results data. Download a PowerPoint presentation on how to use this viewer.

Kentucky HUC 12 CHIA Map

Shapefile of HUCs with CHIA Data

CHIA Data Packages

Kentucky Water Sample Data Viewer

Watershed Trend Station Data
Historic information on how the CHIA program began.



The Kentucky Department for Natural Resources has posted water quality data taken from in-stream sampling sites throughout the Kentucky coalfields. The data represents analyses of water samples taken quarterly from July 2010 through July 2015. Samples were taken from 135 sites in the eastern and western coalfields during the time period.

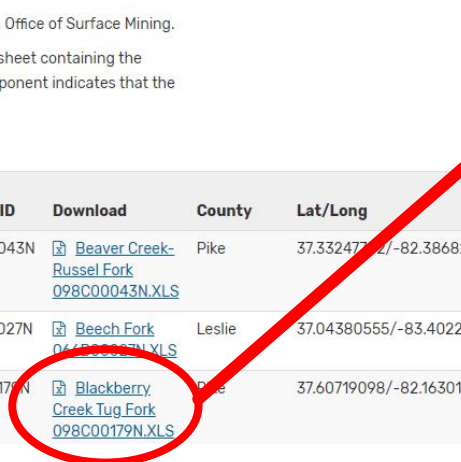
The project was funded by a grant from the U.S. Department of the Interior, Office of Surface Mining.

The table below lists information for each sample site and a link to its data sheet containing the measurements of concentration for tested analytes. A null value for a component indicates that the concentration is below the detection limits of the laboratory.

Watershed Trend Station Data

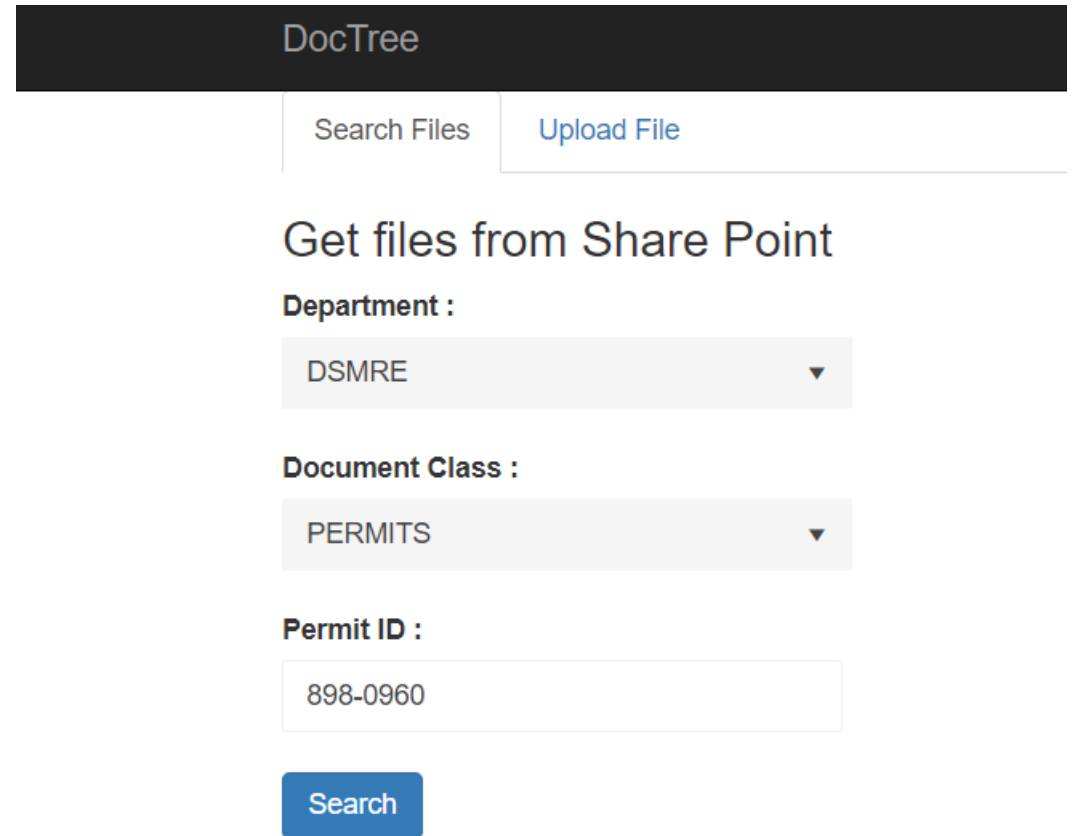
Watershed	HUC-12	Trend Station ID	Download	County	Lat/Long
Beaver Creek-Russel Fork	051301030201	098C00043N	Beaver Creek-Russel Fork 098C00043N.XLS	Pike	37.332477/-82.38682447
Beech Fork	051002020204	066B00027N	Beech Fork 066B00027N.XLS	Leslie	37.04380555/-83.40222275
Blackberry Creek Tug Fork	050702010310	098C00179N	Blackberry Creek Tug Fork 098C00179N.XLS	Pike	37.60719098/-82.16301588

A	B	C	D	E	F	G	H	I	J
SAMPID	SAMPDAT	ANALYTE	RESULT	UNITS	METHOD	CIA	County	Long_	Lat
098C00179	7/21/2015	TDS	543	mg/L	SM2540C	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Flow	15.1	cfs	Field	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Cadmium		ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Copper	3.83	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Lead	1.42	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Manganese	120	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Nickel	6.34	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Selenium	1.28	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Zinc	10.2	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Acidity		mg/L	SM2310B	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Alkalinity	90.5	mg/L	SM2320B	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Chlorides		mg/L	SM4500-C	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Hardness	454	mg/L	SM2340B	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	TSS	52.5	mg/L	SM2540D	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Temp (Air)	29	Deg C	Field	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Aluminum	1090	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Potassium	5.45	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Sodium	17.1	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Magnesium	59.7	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Calcium	83.3	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Hardness (208	mg/L	SM2340B	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Arsenic	0.66	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Temp (Wat	25	Deg C	Field	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	pH	7.97	SU	Field	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	SPCON	1230	uS/cm	Field	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Mercury		ug/L	245.1	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Sulfates as	314	mg/L	375.4	Blackberry	Pike	-82.163	37.60719
098C00179	7/21/2015	Iron	0.498	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	TDS	858	mg/L	SM2540C	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	Temp (Air)	25	Deg C	Field	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	Flow	14.5	cfs	Field	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	Selenium	2.22	ug/L	200.8	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	Iron	0.0643	mg/L	200.7	Blackberry	Pike	-82.163	37.60719
098C00179	4/13/2015	Calcium	11.4	mg/L	200.7	Blackberry	Pike	-82.163	37.60719



ONLINE RESOURCES: DOCTREE

- Doctree:
 - Permitting and enforcement information is kept on an online data management system
 - Must visit the central or regional offices to use Doctree
- Information can also be requested by Open Records:
 - E-mail EEC.KORA@ky.gov
 - Visit <https://eec.ky.gov/pages/Open-Records.aspx#:~:text=The%20Kentucky%20Open%20Records%20Act,.KORA%40ky.gov%20.>



The screenshot shows the Doctree web interface. At the top, there is a dark blue header with the text "DocTree". Below the header, there are two buttons: "Search Files" and "Upload File". The main content area is titled "Get files from Share Point". Below this title, there are three sections, each with a label and a dropdown menu:

- Department :** A dropdown menu with "DSMRE" selected.
- Document Class :** A dropdown menu with "PERMITS" selected.
- Permit ID :** A text input field containing "898-0960".

At the bottom of the form, there is a blue "Search" button.

CONCLUSION

