Land Reclamation Information System (LRIS) Success



Tuesday June 6, 2023 Bill Zeaman, Missouri's Chief of the Industrial and Metallic Minerals Mining Unit Land Reclamation Program



- Before LRIS Access database, Excel spreadsheets and paper filing/scanning.
- 276 active permits
- 724 active sites





- Before LRIS Access database, Excel spreadsheets and paper filing/scanning.
- Background
 - 8 years in the Points Grading System
 - 2 Years of planning



- Before LRIS Access database, Excel spreadsheets and paper filing/scanning.
- Background
 - 8 years in the Points Grading System
 - 2 Years of planning
 - Outside Contractor
 - Information Resource Group, Inc. (IRG)
 - Work Flow Process
 - \$40K



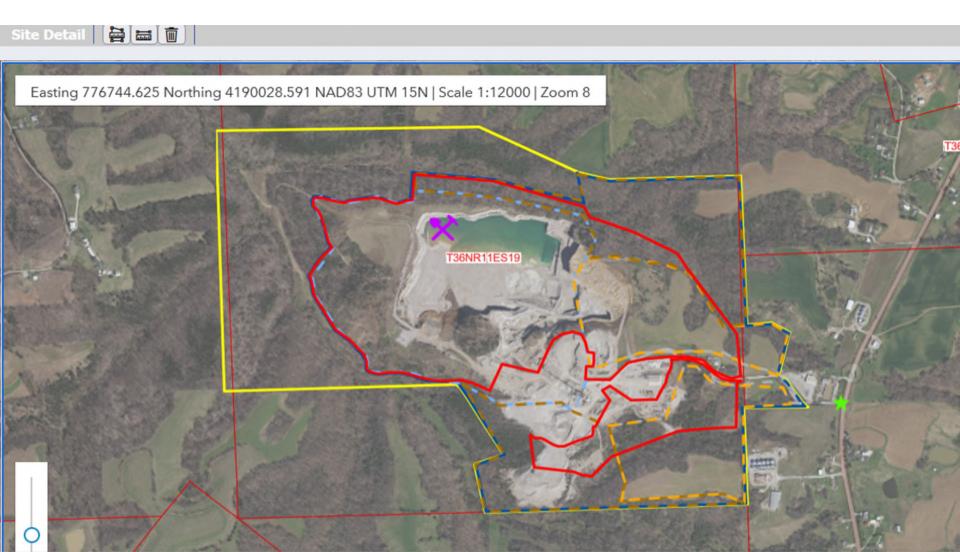
Drop Everything you are doing



- Work with State Information Technology Staff
- Rough Start
 - Change all Site Numbers
 - Time Commitments
 - Upload Mine Plans
 - Upload Bonding Documents
 - Company Information Forms



- Additional Time Commitment Mapping –
 Over 700 sites Four Staff Members
- 16,187 Hectares of Permitted Land



Missouri Gateway for Environmental Management (MoGEM)

• 80% Rule

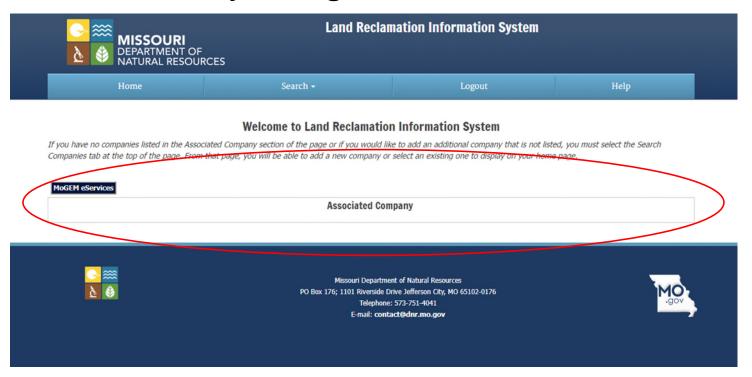


Missouri Gateway for Environmental Management (MoGEM)

- Register for an account in Missouri Gateway for Environmental Management (MoGEM)
- To Access MoGEM go to https://dnr.mo.gov/data-e-services/missouri-gateway-environmental-management-mogem
- A step by step how-to for signing up for MoGEM can be found here: https://dnr.mo.gov/document-search/registering-new-user-account-within-missouri-gateway-environmental-management-mogem-portal



• The first time you log into LRIS, there will be no companies associated with your login.









Land Reclamation Information System (LRIS)

The Land Reclamation Information System (LRIS) was developed to help the mining community a mining operations that engage in extracting industrial minerals in Missouri after Jan. 1, 1972, mu operators requested the department to develop a secure online permit application process.

Currently, LRIS can be used to apply for new, renewed, amended, expanded and revised permits mineral permits, including the mapping of the site. In the future, LRIS may be expanded to include ability to submit annual reclamation status reports. At this time the paper process is still used to

How to Access LRIS

The LRIS system is accessed through the department's **Missouri Gateway for Environmental Mi** MoGEM account in order to access LRIS. Users who do not already have a MoGEM account will r Services to access. For more information, review **Registering for a New User Account within th (MoGEM) Portal**.

Once your MoGEM account is created, you will need to login to the **MoGEM online portal** to ac LRIS, contact the LRIS Helpdesk.

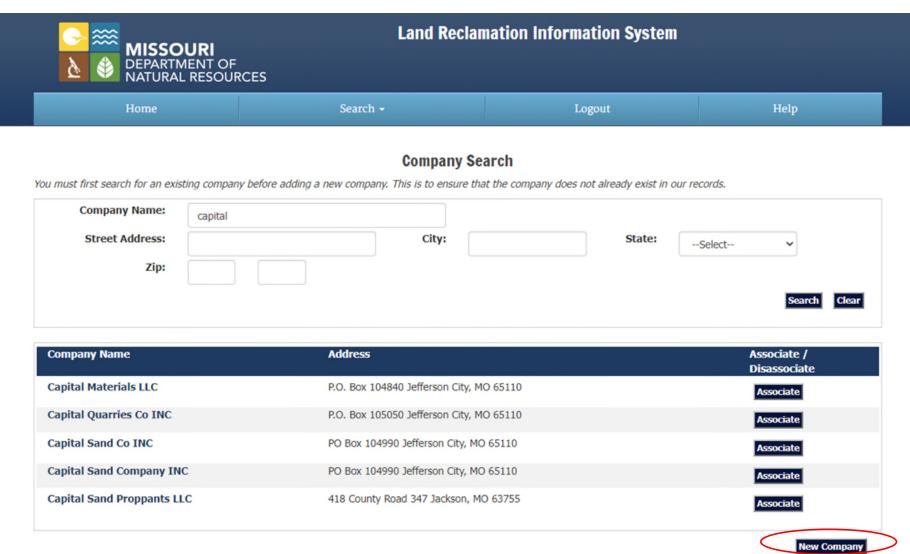
Tutorials

- General Tutorial
- Mapping Tutorial

Additional Resources

- In-stream Sand and Gravel Operations Permit Application Guidance PUB2460
- Open Pit Operations Permit Application Guidance PUB2462

 If you are entering a new company into LRIS you will have to click the new button and create the company before you can associate with the company.

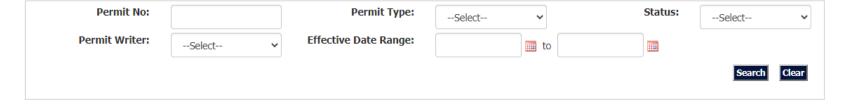


Search

1. By Company information



2. Permit information



3. Site Information





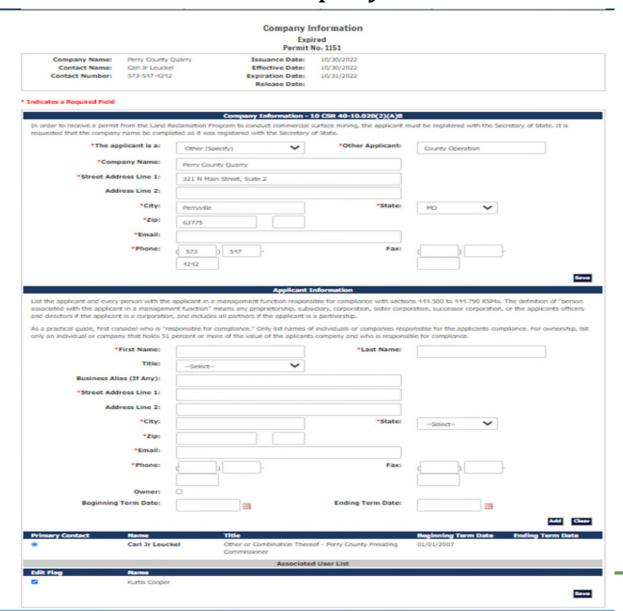
• LRIS Navigation Tabs

Home	Search →	Logout	Help
Company Info	Permit Info	Bonding	Permitted Sites

- Company Info
 - The Company's contact information
- Permit Info
 - Basic permit information: issue date, expiration date, permit writer, etc.
- Bonding
 - Bond type(s) on file, bond amounts, bond company info, etc.
- Permitted Site
 - Lists all sites under permit, mine plans, public notices, etc.



Company Info Tab





Permit Info Tab

Permit Info

Effective

Permit No: 1151

Company Name: Contact Name:

Contact Number:

Perry County Quarry

Mike Sauer

573-547-4242

Issuance Date:

09/12/2022

Modify Permit

Effective Date:

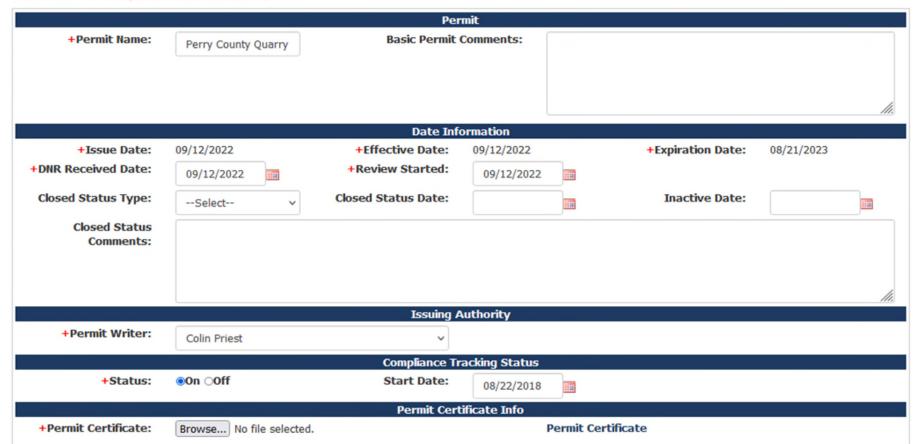
09/12/2022

Expiration Date:

08/21/2023

Release Date:

- * Indicates a Required Field
- + Indicates field is required at time of issuance.



Bonding Tab

Financial Assurance Instrument (FAI) List

Expired

Permit No: 1151

Company Name: Perry County Quarry Contact Name: Carl Jr Leuckel Contact Number: 573-547-4242

Issuance Date: 10/30/2022 Effective Date: 10/30/2022

Expiration Date: 10/31/2022

Release Date:

Active Bonding: \$12,000.00 Posted Bonding: \$12,000.00 **Bonding Required:**

\$12,000.00

Available Bonding: \$0.00

		List of Bonds			
FAI #	FAI Type	FAI Original Amount(\$)	Available Amount(\$)	Active	Date Closed
250019106	Certificate of Deposit	\$12,000.00	\$12,000.00	Υ	

New Instrument

A FAI must be completed for open pit operations. The posted bonding must be at least equal to or greater than bonding required. When obtaining a new FAI, these forms are required for each type and must be completed and submitted with the FAI to the Land Reclamation Program.

Surety Bond

Certificate of Deposit

Letter of Credit

A confirmation of Letter of Credit is required if the issuing bank is outside of Missouri: Letter of Credit Confirmation

• Permitted Sites Tab

Modification - Draft Permit No: 0234

mpany Name:

573-644-2982

ontact Name:

tact Number:

Capital Quarries Co INC Chris Thiltgen

Issuance Date: Effective Date:

11/17/2022 11/28/2022 **Expiration Date:**

11/27/2023

Release Date:

Site Name	County	Permitted Type	Commodity	Permitted Acres	Operation End	Action - Status
					Date	
1st Creek Quarry	Gasconade	Open Pit	Limestone	8	11/27/2120	Effective
Algoa #18	Cole	Open Pit	Limestone	38	11/23/2114	Effective
Arcadia Quarry #24	Iron	Open Pit	Limestone	29	11/27/2023	Effective
Bay #9	Gasconade	Open Pit	Limestone	5	11/27/2102	Effective
California Qy #5 Map	Moniteau Plan Info	Open Pit	Limestone	69		Expansion - Draft
×	×					
Cuba Quarry #16	Crawford	Open Pit	Limestone	49	11/27/2122	Effective
Eugene Quarry	Cole	Open Pit	Limestone	37	11/27/2123	Effective
Hermann Quarry #14	Gasconade	Open Pit	Limestone	19	11/27/2122	Effective
Holts Summit Qy	Callaway	Open Pit	Limestone	135	11/27/2023	Effective
Hwy 50 West Qy	Cole	Open Pit	Limestone	10	11/27/2123	Effective
Hwy 54 South Qy	Cole	Open Pit	Limestone	22	11/27/2123	Effective
Hwy 63 North Qy	Boone	Open Pit	Limestone	89	11/27/2080	Effective
HWY Y #21	Phelps	Open Pit	Limestone	5	11/27/2023	Effective
Jerome Quarry	Phelps	Open Pit	Limestone	75	11/27/2023	Effective
Linn #20	Osage	Open Pit	Limestone	40	11/27/2123	Effective
Owensville #13	Gasconade	Open Pit	Limestone	43	11/27/2122	Effective
Rolla Quarry	Phelps	Open Pit	Limestone	101	04/01/2120	Effective
Route B #22	Cole	Open Pit	Limestone	24	11/27/2123	Effective
Salem	Dent	Open Pit	Limestone	47	11/27/2023	Effective
Stadium West Qy #2	Cole	Open Pit	Limestone	75	11/27/2123	Effective
Sullivan Quarry	Crawford	Open Pit	Limestone	131	11/01/2117	Effective

• Permit Renewal

• Select Permit

Welcome to Land Reclamation Information System

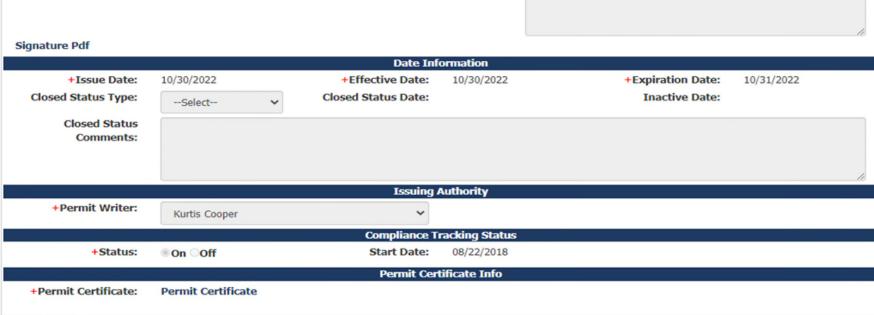
If you have no companies listed in the Associated Company section of the page or if you would like to add an additional company that is not listed, you must select the Search Companies tab at the top of the page. From that page, you will be able to add a new company or select an existing one to display on your home page.

MoGEM eServices

		Associ	ated Company		
Company Name / Permit No	Permit Type	Permit Action	Permit Status	Effective Date	Expiration Date
Ballou Pavement Solution	ns DBA Heartland Materials				
Ballou Pavement Solution	ns DBA Heartland Materials				New Permit
1072 1072	Industrial Mineral Industrial Mineral	Permit Renewal Permit Renewal	Expired In Progress	02/06/2021 02/05/2023	02/10/2021 02/06/2023
Bug					New Permit
Capital Materials LLC 1137 1137 1137	Industrial Mineral Industrial Mineral Industrial Mineral	Permit Renewal Permit Renewal Modification	Expired Expired Draft	06/01/2020 01/02/2022 01/02/2022	06/20/2020 02/20/2022 02/20/2022
Capital Quarries Co INC					New Permit
0234 0234 0234	Industrial Mineral Industrial Mineral Industrial Mineral	Modification Permit Renewal Permit Renewal	Expired Draft Expired	11/28/2018 11/28/2020	11/27/2019 11/27/2022 11/27/2021
Davault Farms					New Permit
1073 1073	Industrial Mineral Industrial Mineral	Modification Modification	Effective Draft	10/28/2022 10/28/2022	10/20/2023 10/20/2023
Ideal Ready Mix Compan	y INC				New Permit
1015 1015	Industrial Mineral Industrial Mineral	Permit Renewal Modification	Effective In Progress	10/16/2022 10/16/2022	10/15/2023 10/15/2023
Ideker INC					New Permit
1074 1074	Industrial Mineral Industrial Mineral	Modification Modification	Effective Draft	10/18/2022 10/18/2022	10/05/2023 10/05/2023
Perry County Quarry					New Permit
1151	Industrial Mineral	Permit Renewal	Expired	10/30/2022	10/31/2022
Test57					New Permit
1241	Industrial Mineral	New Permit	In Progress	10/26/2022	10/25/2023
			-		

- Permit Renewal
 - Click the "Renew Permit" button

Permit Info **Expired** Permit No: 1151 Company Name: Perry County Quarry Issuance Date: 10/30/2022 Renew Permit Contact Name: Carl Jr Leuckel Effective Date: 10/30/2022 Contact Number: 573-547-4242 Expiration Date: 10/31/2022 Release Date: * Indicates a Required Field + Indicates field is required at time of issuance. Permit +Permit Name: **Basic Permit Comments:** Perry County Quarry Signature Pdf **Date Information** +Issue Date: 10/30/2022 +Effective Date: 10/30/2022 +Expiration Date: 10/31/2022 Closed Status Type: Closed Status Date: Inactive Date: --Select--



- Permit Renewal
 - Click the "Continue" button

Permit Renewal

Expired

Permit No: 1151

Company Name: Perry County Quarry

Carl Jr Leuckel

Contact Number: 573-547-4242

Contact Name:

Issuance Date:

Effective Date: 10/30/2022

Expiration Date:

10/31/2022

10/30/2022

Release Date:

Site Number	Site Name	County	Permitted Type	Permitted Acres	Operation End Date	Make Active	Request Action
2683	Perry County Quarry	Perry	Open Pit	16	12/31/2518		Renew
							Continu

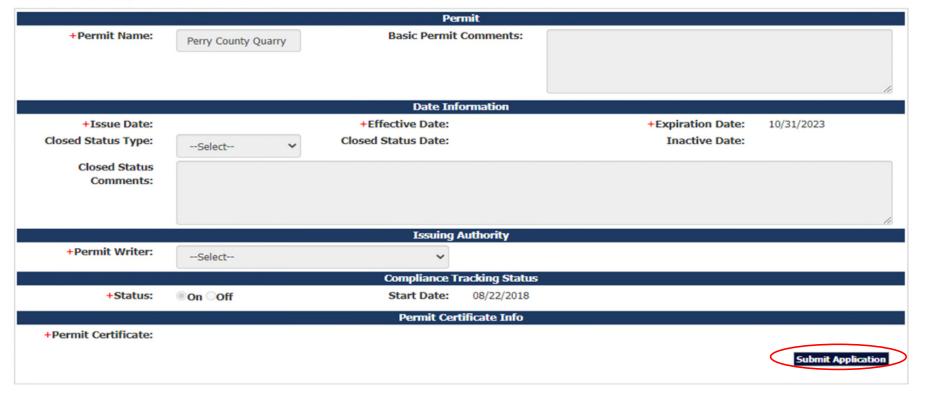
- Permit Renewal
 - Click the "Submit Application" button

Permit Info

Permit Renewal - Draft Permit No: 1151

Company Name: Perry County Quarry Issuance Date:
Contact Name: Carl Jr Leuckel Effective Date:
Contact Number: 573-547-4242 Expiration Date: 10/31/2023
Release Date:

- * Indicates a Required Field
- + Indicates field is required at time of issuance.



Fee

Permit Renewal - Draft Permit No: 1151

eSignature is needed by organization official before proceeding.

Company Name: Perry County Quarry
Contact Name: Carl Jr Leuckel

Contact Number: 573-547-4242

Issuance Date: Effective Date:

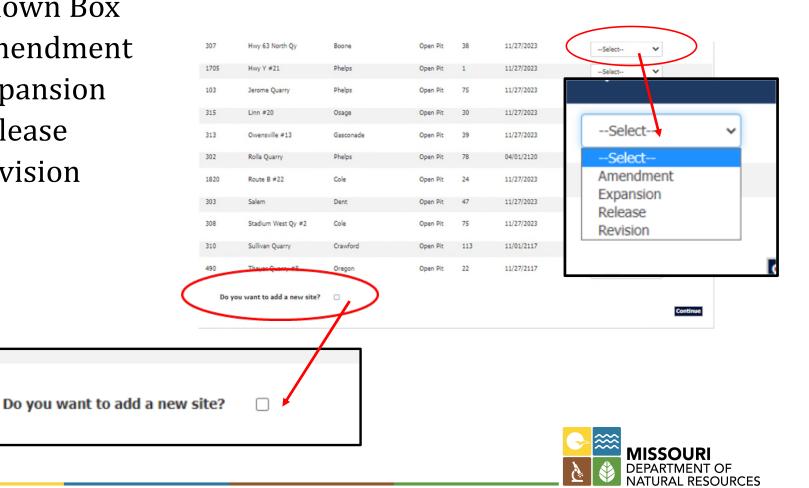
Expiration Date: 10/31/2023

Release Date:

		Industri	al Mineral F	ees - 442.772 R	SMO			
	Annual Fee:						\$800.00	
	Site Fees:	Number of Sites						
	Sites 0.01-10 Acres	0	x	\$200.00	=	\$0.00		
	Sites 10.1-75 Acres	1	X	\$500.00	=	\$500.00		
	Sites 75.1-200 Acres	0	x	\$800.00	=	\$0.00		
	Sites >= 200.1 Acres	0	X	\$1,000.00	=	\$0.00		
9	ite Fee Total:						\$500.00	
	Acreage Fees:	Number of Acre	es Bonded	16 x \$13.00			\$208.00	
Total Industria	l Mineral Fee:						\$1,508.00	imMaxString
		Geologia	Resource F	ees - 256.700 R	SMO			
	Annual Fee:						\$50.00	
	Site Fees:	Numbe	er of Sites	1 x \$50.00			\$50.00	
	Acreage Fees:	Number of Acre	es Bonded	16				
		First 300 acres at \$	6 per acre	\$96.00				
		Acres over 300 at \$	-	\$0.00				
Total Geologic I	Resource Fee:						\$196.00	(\$3,500 Year Maximun



- Note: Permit Modification Page Allows for the following Actions:
- To add a new site
- Dropdown Box
 - Amendment
 - Expansion
 - Release
 - Revision



- Permit Expansion/Amendment
 - "X" marks the spot
 - X's indicate items that need to be completed
 - Click the "Site Name" to complete the items

Site List

Modification - Draft Permit No: 0234

Company Name: Contact Name: Contact Number: Capital Quarries Co INC Chris Thiltgen 573-644-2982 Issuance Date: Effective Date: Expiration Date:

04/26/2023 04/26/2023 11/27/2023

Release Date:

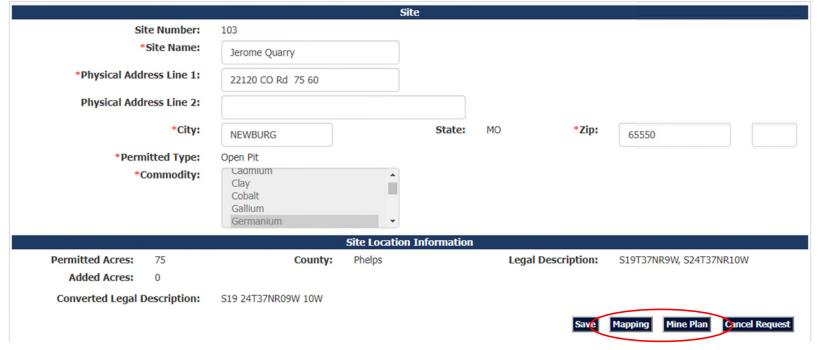
ite Iumber	Site Name	County	Permitted Type	Commodity	Permitted Acres	Operation End Date	Action - Status
311	Algoa #18	Cole	Open Pit	Limestone	38	11/23/2114	Effective
316	Bay #9	Gasconade	Open Pit	Limestone	5	11/27/2023	Effective
979	Eugene Quarry	Cole	Open Pit	Limestone	37		Effective
581	Hermann Quarry #14	Gasconade	Open Pit	Limestone	9	11/27/2023	Effective
301	Hwy 50 West Qy	Cole	Open Pit	Limestone	10	11/16/2028	Effective
306	Hwy 54 South Qy	Cole	Open Pit	Limestone	22	11/27/2023	Effective
307	Hwy 63 North Qy	Boone	Open Pit	Limestone	38	11/27/2023	Effective
1705	Hwy Y #21	Phelps	Open Pit	Limestone	1	11/27/2023	Effective
103	Jerome Quarry Map	Phelps Plan Info	Open Pit	Germanium	75		Expansion - Draft
315	Linn #20	Osage	Open Pit	Limestone	30	11/27/2023	Effective
313	Owensville #13	Gasconade	Open Pit	Limestone	39	11/27/2023	Effective
302	Rolla Quarry	Phelps	Open Pit	Limestone	78	04/01/2120	Effective
1820	Route B #22	Cole	Open Pit	Limestone	24	11/27/2023	Effective
303	Salem	Dent	Open Pit	Limestone	47	11/27/2023	Effective
308	Stadium West Qy #2	Cole	Open Pit	Limestone	75	11/27/2023	Effective
310	Sullivan Quarry	Crawford	Open Pit	Limestone	113	11/01/2117	Effective
490	Thayer Quarry #8	Oregon	Open Pit	Limestone	22	11/27/2117	Effective



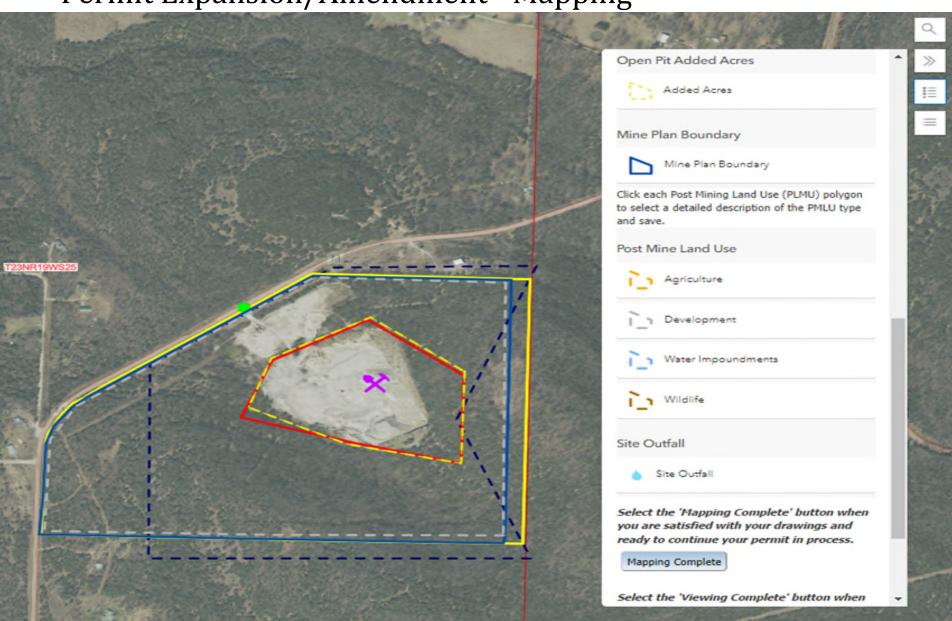
- Permit Expansion/Amendment
 - Click the "Mine Plan" and "Mapping" to complete the items marked on the prior page by X's

Site Details Modification - Draft Permit No: 0234 **Company Name:** Capital Quarries Co INC **Issuance Date:** 04/26/2023 Site Number: 103 **Contact Name:** Chris Thiltgen Effective Date: 04/26/2023 Site Name: Jerome Quarry Contact Number: 573-644-2982 Expiration Date: 11/27/2023 Site Action: Expansion Release Date: Site Status: Draft

* Indicates a Required Field



• Permit Expansion/Amendment - Mapping



Permit Expansion/Amendment - Mine Plan

Mine Plan

Modification - In Progress

Permit No: 1137

07/25/2023

Company Name: Capital Materials LLC
Contact Name: Chris Thiltgen

573-644-2982

 Issuance Date:
 07/29/2022

 Effective Date:
 07/29/2022

Site Number: 349
Site Name: Hilda

Site Status:

Site Action: Expansion

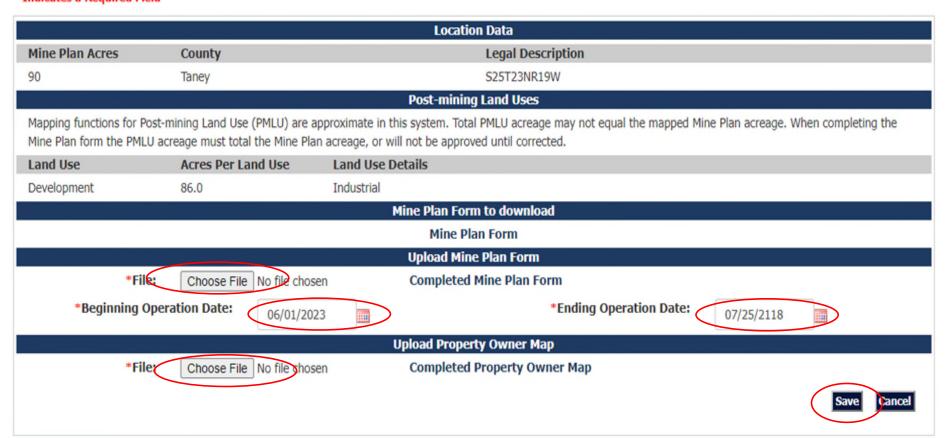
Draft

Release Date:

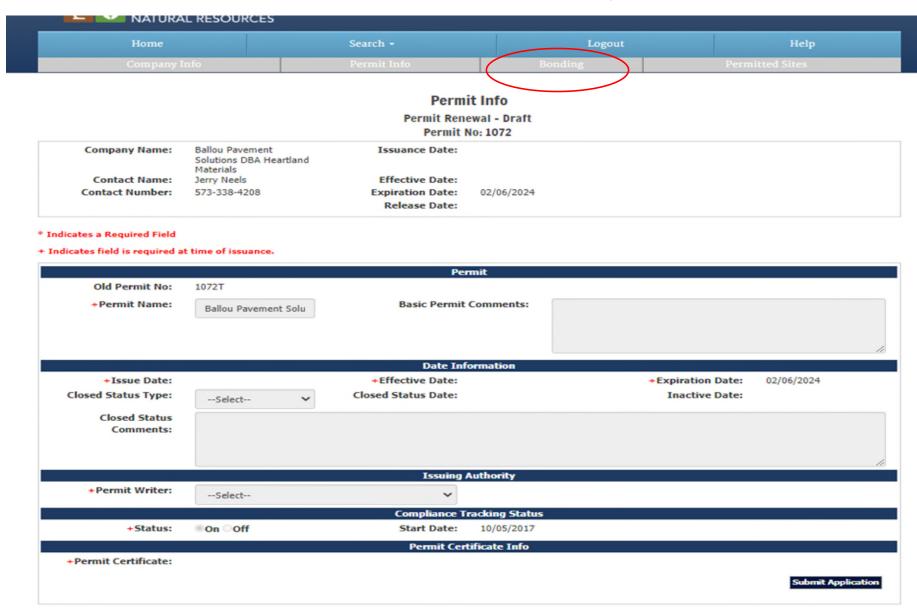
Expiration Date:

* Indicates a Required Field

Contact Number:



• Permit Expansion/Amendment - Bonding



Permit Expansion/Amendment - Bonding

Financial Assurance Instrument (FAI) List

Permit Renewal - Draft Permit No: 1072

Company Name:

Contact Number:

Ballou Pavement

Issuance Date:

Solutions DBA Heartland

Materials

Contact Name: Jer

Jerry Neels

573-338-4208

Effective Date:

Expiration Date:

02/06/2024

Release Date:

Active Bonding: Posted Bonding: \$37,000.00 \$37,000.00 Bonding Required:

\$37,000.00

Available Bonding:

\$0.00

List of Bonds					
FAI #	FAI Type	FAI Original Amount(\$)	Available Amount(\$)	Active	Date Closed
015056381	Surety Bond	\$28,000.00	\$37,000.00	Υ	



A FAI must be completed for open pit operations. The posted bonding must be at least equal to or greater than bonding required. When obtaining a new FAI, these forms are required for each type and must be completed and submitted with the FAI to the Land Reclamation Program.

Surety Bond

Certificate of Deposit

Letter of Credit

A confirmation of Letter of Credit is required if the issuing bank is outside of Missouri: Letter of Credit Confirmation

Financial Assurance Instrument (FAI) Information

Permit Renewal - Draft Permit No: 1072

Company Name: Ballou Pavement

Solutions DBA Heartland

Materials

Contact Name: Jerry Neels

Effective Date:

Contact Number: 573-338-4208 Expiration Date: 02/06/2024

Release Date:

Issuance Date:

* Indicates a Required Field

*Instrument Form:	Choose File No file chosen	Completed Instrument Form	
Active:			
*Financial Institution:	Liberty Mutual Insurance Company		
*Street Address Line 1:	175 Berkeley St		
Address Line 2:			
*City:	Boston	*State:	MA 🕶
*Zip:	02116		
Phone:	(513) 792 - 1861		
*FAI #:	015056381	FAI Date:	08/14/2017
*FAI Type:	Surety Bond	*FAI Original Amount(\$):	28000.00
Date Received:	08/23/2017		
Date Accepted:	10/05/2017	Available Amount(\$):	\$37,000.00
Date Released:		Date Forfeited:	

Note: The original financial assurance instrument with the completed notarized form, must be submitted to the Land Reclamation Program at: Missouri Department of Natural Resources, Land Reclamation Program, PO Box 176, Jefferson City, MO 65102-0176. An open pit permit application will not be deemed complete without the original FAI.

ı

Transactions List					
Transaction Amount (\$)	Date Transaction	FAI Rider	Admin Bond Release Form		
\$9,000.00	12/05/2017	doc			



Main Menu Options

Enhancements to Come

Permitting

- Search Companies
- Search Permits
- Search Sites
- Add a New Application
- · Compliance Monitoring
- Enforcement
- Reports

Permit Transfers

Inspection

- · Inspection Map
- Site List
- Inspection Check Out

HB-246 Registered Operator

- · Search Operators
- Search Sites
- · Add a New Application





Reporting and Visuals of LRIS

- What else does this system do?
- Reports
 - Fiscal Information
 - LRP Reports Industrial Minerals Activities
 - Mail Merge Templates
 - Quality Assurance
 - Site Search Information
 - Permitted Sites Viewer



Server Error

401 - Unauthorized: Access is denied due to invalid credentials.

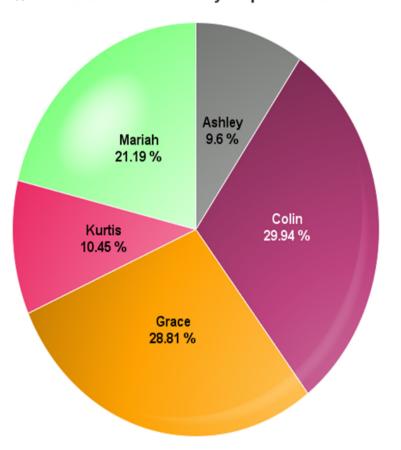
You do not have permission to view this directory or page using the credentials that you supplied.





Help	×	This.	
Preferences		Title †	
New WebI Report	a	Acreage Tracking Sheet (template) Instance Count: 0	
New DashSpace	a	Company Information form from LRIS (needs some updates)	
Favorites	×	Instance Count: 0	
Inbox	a	Expired Permits Instance Count: 19	
Reports	<u>ه</u>	MDM for Reg Entity (Site)	
ACE	×	Instance Count: 11	
DNR Support Documentation	a	Permit Action Table	
Enterprise Reports	×	Instance Count: 0	
LRIS	* ·	Permit Certificate - IM - mail merge Instance Count: 0	
Fiscal Information	a	Permit Certificate - TRANSFERS ONLY	
LRP Reports (IM Activities)		Instance Count: 0	
Mail Merge Templates	*	Public Meeting Table Instance Count: 7	
QA	•	Public Notice Expiration within 230 Days	
Site Search Information		Instance Count: 8	
MoCWIS	*	Search for Contacts for Associated Companies Instance Count: 0	
		Sites for Inspections Instance Count: 16	
	a	<u>Usage of LRIS -Companies Registration</u> Instance Count: 12	
	a	Yearly Cycle of When Permits Expire Instance Count: 0	

This is the % of Permits Processed by Inspector for the Year of: 2022



Total Permits Received	% Processed
34	9.60%
106	29.94%
102	28.81%
37	10.45%
75	21.19%
354	
Percentage:	100.00%
	Permits Received 34 106 102 37 75 354

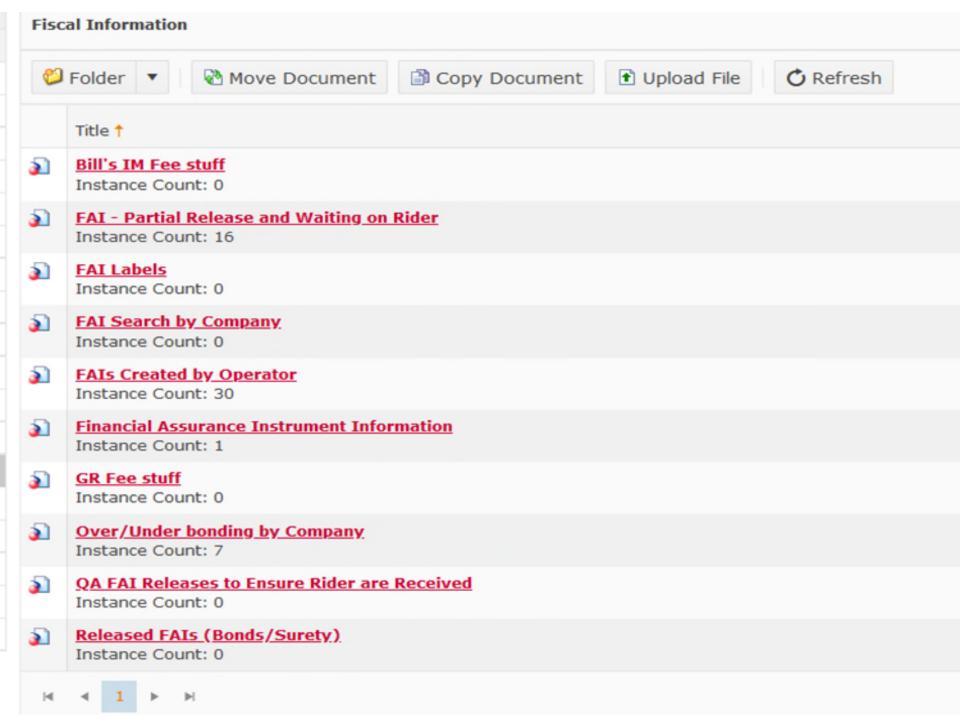
Prior to Creating Date DNR Received in LRIS on 7/2/2019 - Permits Received Before this Date will not be reported as the field did not exist.



Sites That Have Public Notices Expiring in the next 230 Days or have Expired Unless Reclamation Only Checked

Format Current Date	Site Number	Site Name	Archive Flag	Query Site Type	Format Expiration Date	Date Operation End	Reclamation Only	Permit Number	Organization Name
April 29, 2023	120	Site #1		OP	December 31, 2015	12/31/2015	N	96	Simpson Sand and Gravel
April 29, 2023	1685	Site #1		INS	January 01, 2023	1/1/2023	N	853	Peterson Farms
April 29, 2023	2027	Site #2		INS	January 01, 2023	1/1/2023	N	853	Peterson Farms
April 29, 2023	2028	Site #3		INS	January 01, 2023	1/1/2023	N	853	Peterson Farms
April 29, 2023	2029	Site #4		INS	January 01, 2023	1/1/2023	N	853	Peterson Farms
April 29, 2023	2030	Site #5		INS	January 01, 2023	1/1/2023	N	853	Peterson Farms
April 29, 2023	2010	Site #1		INS	August 15, 2023	8/15/2023	N	926	Yeary Trucking LLC
April 29, 2023	2011	Site #2		INS	August 15, 2023	8/15/2023	N	926	Yeary Trucking LLC
April 29, 2023	2012	Site #3		INS	August 15, 2023	8/15/2023	N	926	Yeary Trucking LLC
April 29, 2023	78	Stamper Quarry		OP	October 31, 2023	10/31/2023	N	153	Martin Marietta Materials INC
April 29, 2023	103	Jerome Quarry		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	300	Holts Summit Qy		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	303	Salem		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	315	Linn #20		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	569	Arcadia Quarry #24		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	1705	HWY Y #21		OP	November 27, 2023	11/27/2023	N	234	Capital Quarries Co INC
April 29, 2023	2503	Pace Pit #1		OP	December 10, 2023	12/10/2023	N	1025	River Cement Co DBA Buzzi Unicem USA
April 29, 2023	2505	Vanbibber Pit #1		OP	December 10, 2023	12/10/2023	N	1025	River Cement Co DBA Buzzi Unicem USA





IM Fee Breakdown With Cap

Organization Name	Permit Number	Estimate Ton Amount	All Site Acres	IM Annual Permit Fee	Acreage Fee	Site Fees to Permit Level	Sum Permit and Site Fees	Cap 3000 Factored	Cap 6000 Factored	Cap 7500 Factored	Cap 9000 Factored
Norris Quarries LLC	818		2,374	\$800	\$30,862	\$17,300	\$48,962	\$3,000	\$6,000	\$7,500	\$9,000
Capital Materials LLC	1137		1,530	\$800	\$19,890	\$12,800	\$33,490	\$3,000	\$6,000	\$7,500	\$9,000
Con-Agg of MO, LLC, dba Bo	26		1,644	\$800	\$21,372	\$10,900	\$33,072	\$3,000	\$6,000	\$7,500	\$9,000
Central Stone Company	28	0	1,579	\$800	\$20,527	\$11,200	\$32,527	\$3,000	\$6,000	\$7,500	\$9,000
Capital Quarries Co INC	234		1,013	\$800	\$13,169	\$10,500	\$24,469	\$3,000	\$6,000	\$7,500	\$9,000
Magruder Limestone Co INC	86	0	990	\$800	\$12,870	\$5,400	\$19,070	\$3,000	\$6,000	\$7,500	\$9,000
HarbisonWalker Internationa	146		451	\$800	\$5,863	\$9,400	\$16,063	\$3,000	\$6,000	\$7,500	\$9,000
River Cement Co DBA Buzzi	43	0	1,071	\$800	\$13,923	\$1,000	\$15,723	\$3,000	\$6,000	\$7,500	\$9,000
Conco Quarries, A CRH Con	29		640	\$800	\$8,320	\$6,300	\$15,420	\$3,000	\$6,000	\$7,500	\$9,000
Bussen Quarries INC	135	0	808	\$800	\$10,504	\$3,000	\$14,304	\$3,000	\$6,000	\$7,500	\$9,000
Martin Marietta Materials INC	153	0	724	\$800	\$9,412	\$2,800	\$13,012	\$3,000	\$6,000	\$7,500	\$9,000
Trap Rock and Granite Quarr	1078		849	\$800	\$11,037	\$1,000	\$12,837	\$3,000	\$6,000	\$7,500	\$9,000
New Frontier Materials Opera	1190	0	634	\$800	\$8,242	\$3,700	\$12,742	\$3,000	\$6,000	\$7,500	\$9,000
APAC-Tennessee, INC.	718	0	793	\$800	\$10,309	\$1,000	\$12,109	\$3,000	\$6,000	\$7,500	\$9,000
APAC Kansas INC	40	0	649	\$800	\$8,437	\$2,800	\$12,037	\$3,000	\$6,000	\$7,500	\$9,000
Indian Creek Materials LLC	1160		506	\$800	\$6,578	\$4,400	\$11,778	\$3,000	\$6,000	\$7,500	\$9,000
Ash Grove Aggregates INC	2	0	454	\$800	\$5,902	\$5,000	\$11,702	\$3,000	\$6,000	\$7,500	\$9,000
Specialty Granules INC	520	0	709	\$800	\$9,217	\$1,000	\$11,017	\$3,000	\$6,000	\$7,500	\$9,000
Nestle Purina PetCare Comp	552	0	581	\$800	\$7,553	\$2,600	\$10,953	\$3,000	\$6,000	\$7,500	\$9,000
Continental Cement Co LLC	321		407	\$800	\$5,291	\$4,800	\$10,891	\$3,000	\$6,000	\$7,500	\$9,000



Current Total Bond

- •CD's \$2,274,420.00
- •LOC's \$2,260,000.00
- •SB's \$15,236,950.00

•\$19,771,370.00

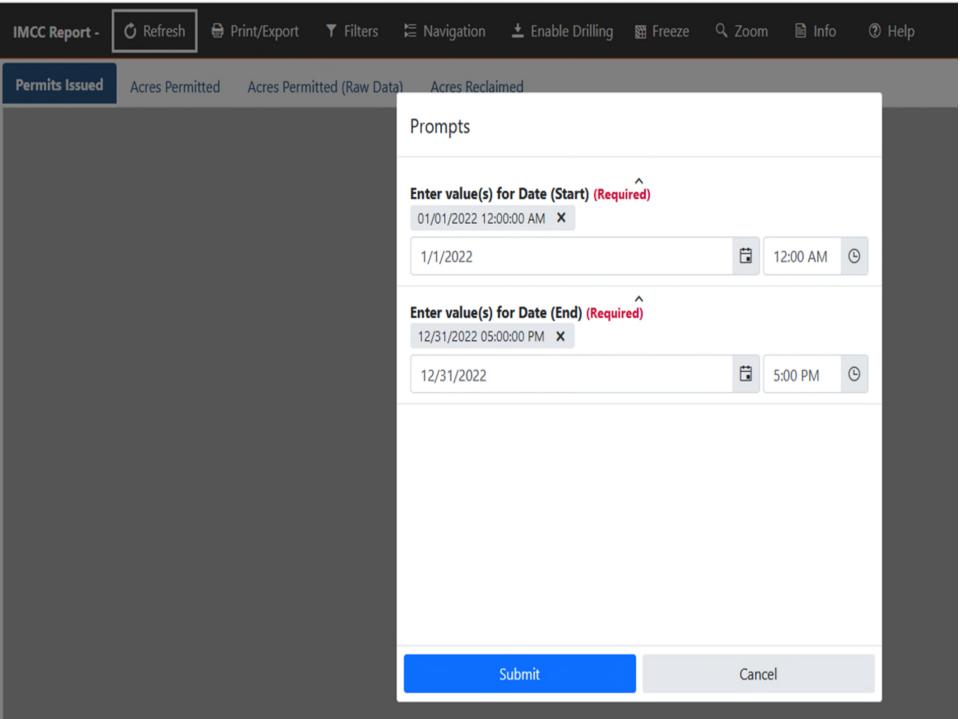


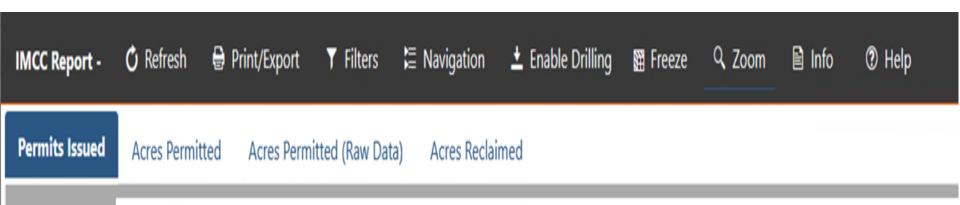
The Amount of Financial Assurance by Company - Accepted and Active in BIG SAFE

Company Name	Date Issuance	Permit Number	Instrument Order	Instrument Number	Financial Institution
A-1 Quality Stone, LLC	7/15/2019	0713	LOC - 755	755	Southwest Missouri Bank
A and M Quarries INC	10/2/2008	0116	CD - 5920	5920	Sherwood Community Bank
AA Quarry LLC	11/16/2012	1094	CD - 1068	1068	Community Bank of Pleasant Hill
AA Quarry LLC	10/31/2016	1094	CD - 800385	800385	Community Bank of Pleasant Hill
AA Quarry LLC	1/1/2022	1094	CD - 900424	900424	Community Bank Pleasant Hill
Allen Quarries INC	7/30/1982	0065	CD - 3779	3779	Bank of America
Allen Quarries INC	6/20/1989	0065	CD - 067821	067821	Bank of America
Allen Quarries INC	4/12/1991	0065	CD - 85445	85445	Bank of America
Allen Quarries INC	8/23/1991	0065	CD - 090544	090544	Bank of America
Allen Quarries INC	1/22/2008	0065	CD - 091000111995990	091000111995990	Bank of America
American R and C LLC DBA Buchanan Materials	9/9/2017	0997T1	LOC - 9006194	9006194	OAKSTAR BANK
Amer-Yenom LLC dba Ralls County Stone	2/17/2022	1219	Bond - 7901094318	7901094318	Nationwide Mutual Insurance Company
Anchor Stone Co	6/28/1995	0678	Bond - 137855567	137855567	Continental Casualty Company - CFR
Anchor Stone Co	8/16/1995	0678	Bond - 137945835	137945835	Continental Casualty Co - CFR
Anchor Stone Co	4/30/2004	0678	Bond - BD0104423	BD0104423	Mid-Continent Casualty Company - CFR Inc.
Anchor Stone Co	7/22/2014	0678	Bond - 38BSBGP7269	38BSBGP7269	Hartsford Fire Insurance Company
Anchor Stone Co	2/24/2015	0678	LOC - BOK15SDF08440	BOK15SDF08440	BOK Financial Services
Anchor Stone Co	4/26/2016	0678	Bond - 38BSBGP7275	38BSBGP7275	Hartsford Fire Insurance Company



LRP Reports (IM Activities) Move Document C Refresh Folder ▼ Copy Document 1 Upload File Title 1 **a Count for Active Permits** Instance Count: 0 **a** Count of Sites Issued/Active -Instance Count: 0 End Land Use Acres Released During a Select Time Period **a** Instance Count: 1 3 IMCC Report -Instance Count: 0 **a** Industrial Minerals Data from LRIS for Monthly Dashboard Instance Count: 22 **a** MLPA List of Sites Instance Count: 0 **a** MMC IM Activities Report -Instance Count: 0 3 Number of Days to Issue a Permit -Instance Count: 21 **a** Revoked Permits with Contacts (needs work) Instance Count: 0 Revoked Sites with Reclamation Liability **a** Instance Count: 0





Number of IM Permits Issued for dates between 01/01/2022 and 12/31/2022

Note: Any data collected before Conversion on 7/1/2018 may be inaccurate.

Permits Processed
356





Acres Reclaimed

Acres Permitted (Raw Data)

Number of Released Acres Approved by Land Use for dates between 01/01/2022 and 12/31/2022

Note: Any data collected before Conversion on 7/1/2018 may be inaccurate.

Land Use Code	Land Use Acres
Agriculture	74
Development	16
Unaffected	114
Water	69
WildLife	64
Total:	337

Permits Issued

Acres Permitted

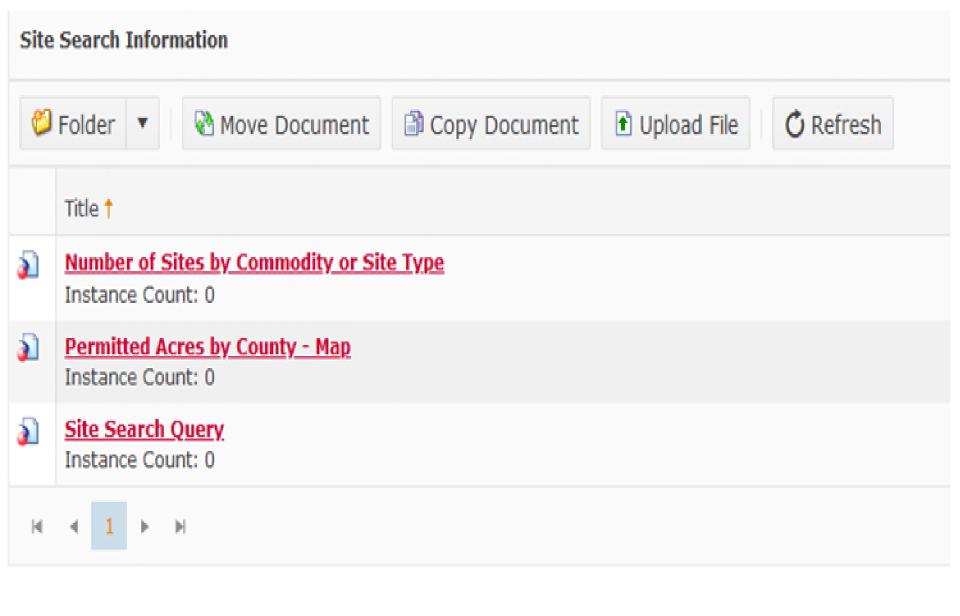
Land Use Code	Land Use Acres	Percentage:
Agriculture	74	33.18%
Development	16	7.17%
Water	69	30.94%
WildLife	64	28.70%
Total:	223	
	Percentage:	100.00%

Revoked Sites, Count: 10

Organization Name	Permit#	Site Number	Site Name	County	Site Type	Date Inspection	Site Closed Flag
Quality Stone Co	0140	149	Rob Quarry	Randolph	Open Pit	5/15/19	N
W A Dillon Clay Mining	0242	325	Soete Pit #1	Phelps	Open Pit	8/15/19	N
National Refractories and Minerals Corp	0389	441	T E Hook	Audrain	Open Pit	7/10/07	N
National Refractories and Minerals Corp	0389	444	Jones	Audrain	Open Pit	8/9/19	N
National Refractories and Minerals Corp	0389	455	Baumgarth	Gasconade	Open Pit	9/20/19	N
National Refractories and Minerals Corp	0389	459	Roethemeyer	Gasconade	Open Pit	9/20/19	N
Russell Cook	1026	2284	Site 1	Taney	Open Pit	9/18/19	N
Mid America Brick and Structural Clay Products LLC	1068	2377	Site #1	Audrain	Open Pit	8/9/19	N
Summit Proppants INC	1096	2465	Colony Church #1	Ste. Genevieve	Open Pit	9/25/19	N
Legacy Quartz Sand Company LLC	1133	2603	Vision Quest Quarry	Dent	Open Pit	8/13/20	N
Legacy Quartz Sand Company LLC	1133	2603	Vision Quest Quarry	Texas	Open Pit	8/13/20	N

Monthly Permit Reminder Folder ▼ 1 Upload File C Refresh Move Document Copy Document Title † Permit Certificate - Mail Labels Instance Count: 0 Permit Reminder to Renew List for Mail Merge Letter Instance Count: 6





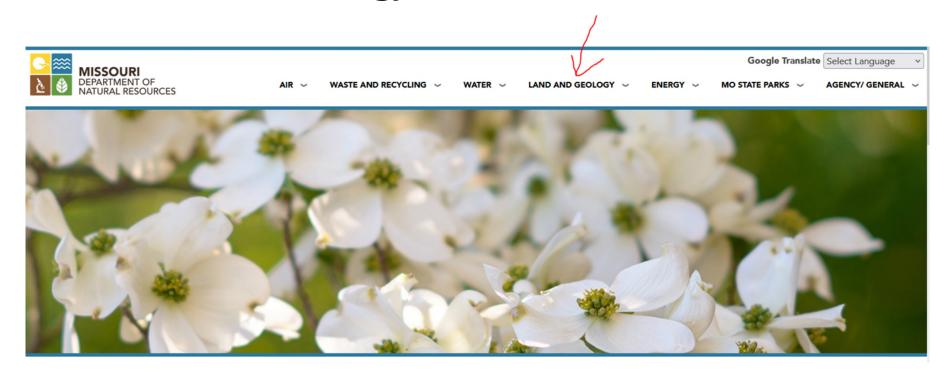


Count of Sites As of Today with Commodity Mined,

Commodity	Site Count
Clay	115
Granite	7
Limestone	343
Sand and/or Gravel	245
Sandstone	14
Shale	4
Traprock	2
Sum:	730

Industrial Minerals Map Viewer

- All of our permitted mine sites
- Accessible in the MO DNR web site
- dnr.mo.gov
- Land and Geology



LAND AND GEOLOGY

Missouri's land and geology are essential natural resources. From surface topsoil to underground caves, land supports all human activities. Resources like industrial and metallic minerals, oil, water, vegetation, trees supplying oxygen and wood, and animals are all supported by the land.

The food we eat depends on the soil in which it is grown. Minerals in our food and drinks, limestone and minerals used in the construction of buildings and roads, to the minerals found in items we use every day contribute to the high quality of life we enjoy. Protecting these resources is important to the Missouri Department of Natural Resources. Geological activities and best soil conservation practices of farmers and landowners affects the daily life of every person in the state. The decisions we make also contribute to the economy of our state. Unearth more about Missouri's land.

In This Section:

Geology

Maps, Data and Research

Geologic Hazards

Dam and Reservoir Safety

Soil and Water Conservation

Mining and Land Reclamation

Businesses, Landowners and Permittees

What We're Doing

Get Involved

Laura Dulas and Damulations



Mining and Land Reclamation

The department ensures beneficial restoration of mined lands to protect public health, safety and the environment from the adverse effects of mining within the state. We administer state statutes and regulations, and Missouri Mining Commission policies and directives. Staff ensure Missouri's mineral resources are available for economic development and after reclamation, the land is available for new development or public use.

- Land Reclamation Program Biennial Report 2020-2021 PUB3014
- Land Reclamation Program Biennial Report 2018-2019 PUB2827
- Industrial Mineral Resources Support PUB3023



History of Mining

Mining activity in Missouri began as early as the 1740s



Permitted Industrial and Metallic Mineral Mine Sites

Locate sites permitted to mine industrial and metallic minerals



Industrial Minerals

Sites no longer in operation are reclaimed for new development or public use

Industrial Mineral Mines and Metallic Mineral Mine Waste Management Areas

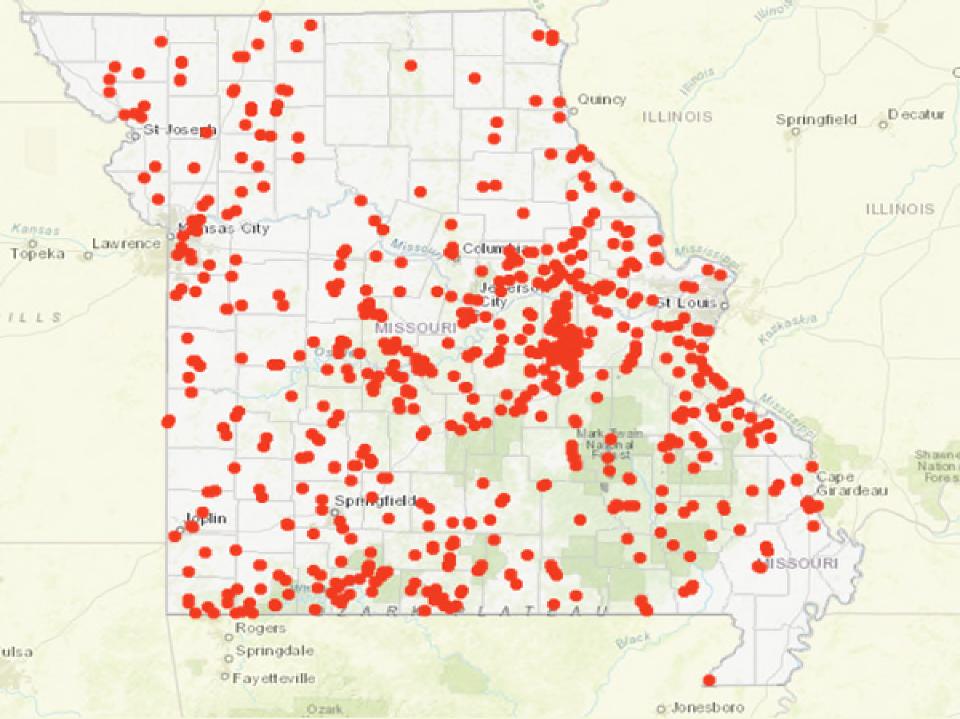
The Industrial Minerals and Metallic Mineral Waste Management Areas Viewer is an ArcGIS web application that depicts active sites permitted to mine industrial minerals, under the Land Reclamation Act, and sites permitted to mine metallic minerals under the Metallic Minerals Waste Management Act. The Land Reclamation Program enforces the statutes of these congressional acts, under direction of the Missouri Mining Commission.

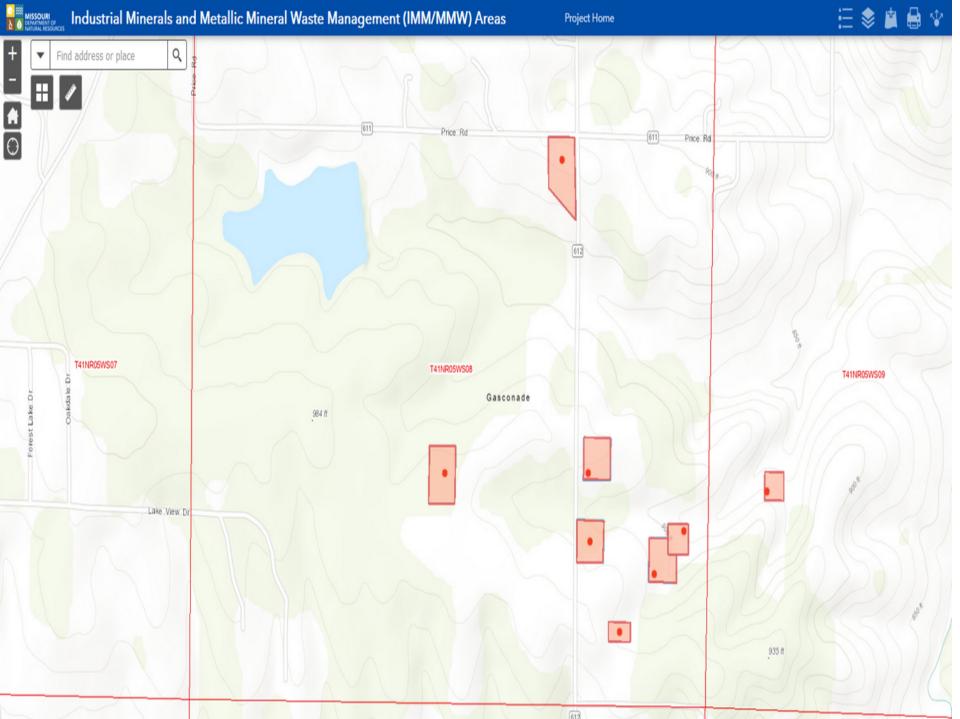
For mine sites under an active permit, the Land Reclamation Program is responsible for permitting actions, inspections, enforcement proceedings and reclamation provisions of the mining laws. All **Missouri mining laws** require the post-mining restoration of land to a certain beneficial land use.

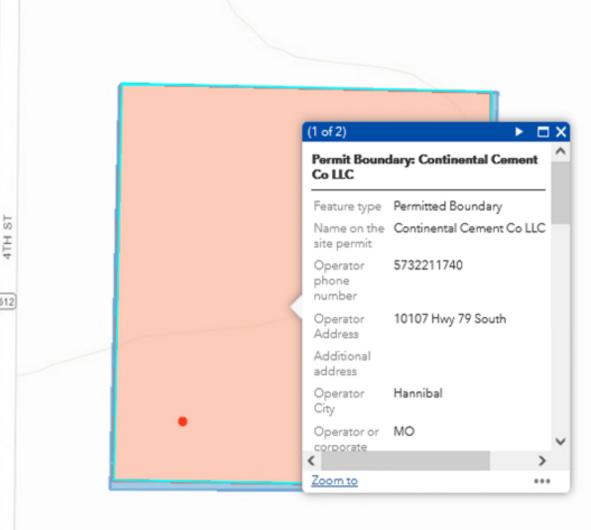


The viewer is updated nightly through our online Land Reclamation Information System, except for the Metallic Mineral Waste Management Areas. The map contains different layers with information in attribute tables, and illustrates the long-term mine plan boundary and current bonded and permitted areas. By selecting the feature, information about the site will appear or you can view this information in a table to search for specific information regarding a site. Data also can be sorted in ascending or descending order. In addition, operator contact information is also available.

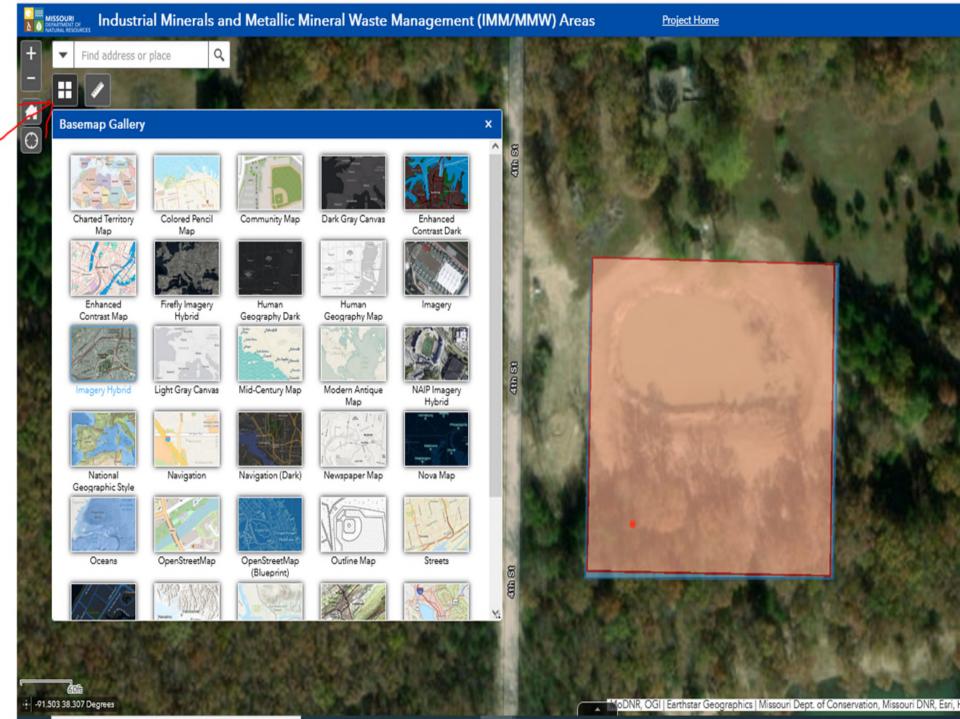


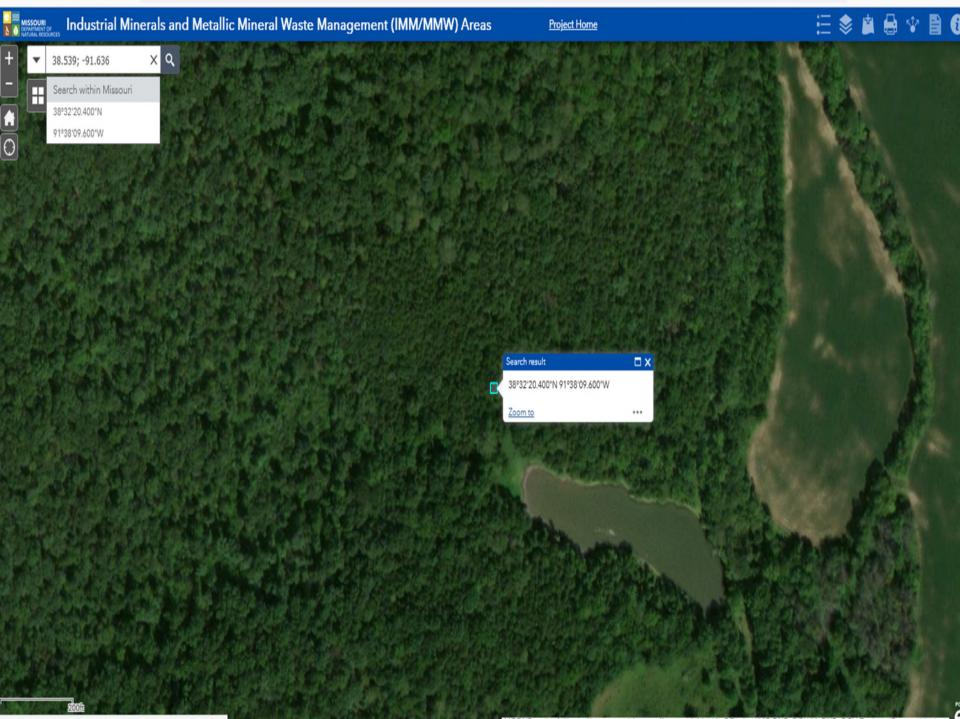


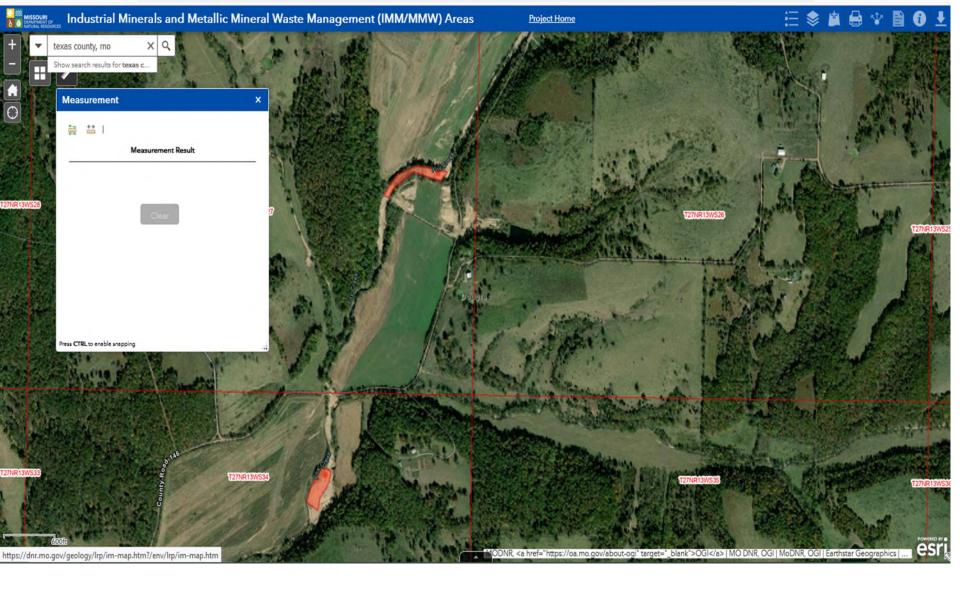




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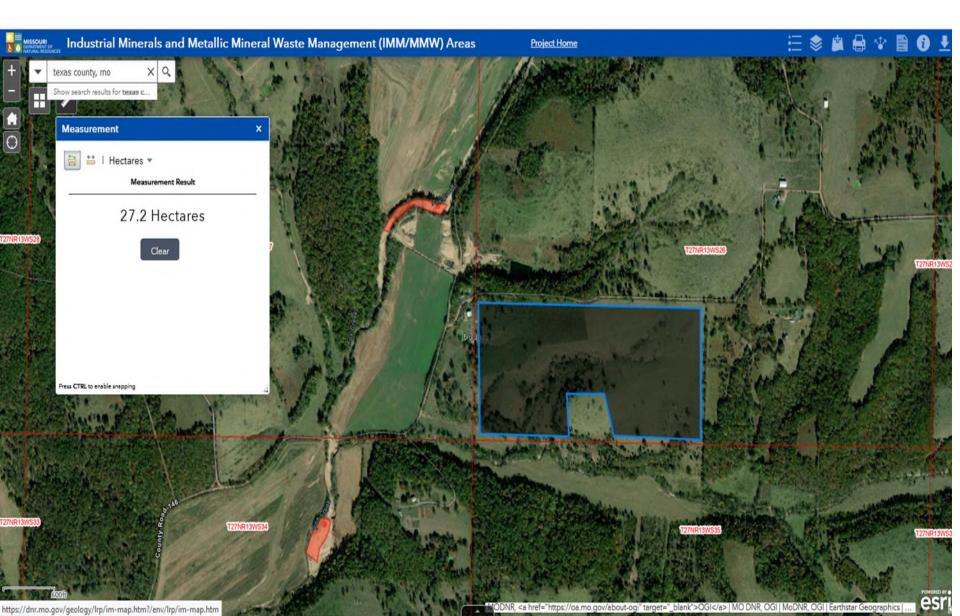




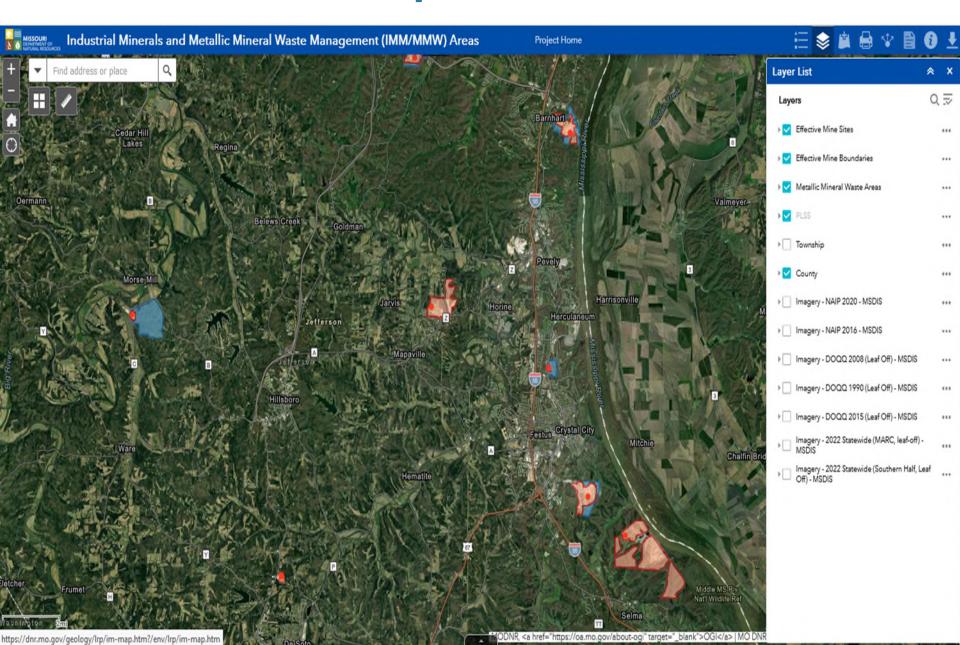




Measurement Tool



Sunshine Law Requests:



Current Users in LRIS

Percentage of Companies in LRIS	Percent of Users In LRIS	Percent Sites With Users in LRIS	
41.85%	38.96%	62.46%	









Land Reclamation Program
 573-751-4041

bill.zeaman@dnr.mo.gov



