

From: "Cameron, Scott J" <scott_cameron@ios.doi.gov>

To: "Williams, Colin F" <colin@usgs.gov>, "KSweeney@nma.org" <KSweeney@nma.org>, "jprosser@nma.org" <jprosser@nma.org>

Cc: "Ryker, Sarah J" <sryker@usgs.gov>, "Kirschling, Teresa L" <tkirschling@usgs.gov>, "Russell, Kendra L" <klrussell@usgs.gov>

Subject: Re: Follow-up information on mine permitting timelines

Date: Sun, 02 Mar 2025 22:41:48 -0000

Importance: Normal

Inline-Images: image.png

Thanks,

Scott

Scott J. Cameron

Senior Advisor to the Secretary of the Interior

Get [Outlook for iOS](#)

From: Williams, Colin F <colin@usgs.gov>

Sent: Sunday, March 2, 2025 4:46:57 PM

To: KSweeney@nma.org <KSweeney@nma.org>; jprosser@nma.org <jprosser@nma.org>

Cc: Ryker, Sarah J <sryker@usgs.gov>; Kirschling, Teresa L <tkirschling@usgs.gov>; Russell, Kendra L <klrussell@usgs.gov>; Cameron, Scott J <scott_cameron@ios.doi.gov>

Subject: Follow-up information on mine permitting timelines

Katie and Justin,

Thank you for the informative and productive discussion last Wednesday. It was great meeting you and talking through some of the issues faced by the mining sector. As promised, I'm including a figure below with the information USGS compiled in two publications that addressed mine development timelines. As you know, we don't have permitting responsibilities, but for these two publications - the results of the USGS global copper resource assessment and a survey of rare earth element deposits in the United States - the authors wanted to include information on development timelines in order to better inform resource strategies.

The table from the REE report is the more relevant as it has information on the time involved in permitting, the time from completion of permitting to production, and whether litigation was involved for all the mine projects for which the authors could find information in the period 1998 to 2010. Two of the mines, Eagle and Arizona 1, were not yet in production at the time of publication, but I have added that information in red.

The bottom line is that in 1998-2010 time period it took approximately 8 years to permit (longest being 17 years) and between 2 and 3 years to start production after permitting (longest being 5 years). I should note that the table includes Federal and State permitting for both new mines and restarting production at existing mine sites. The shortest permitting timelines are associated with the existing mine sites.

As I noted above, tracking permitting is not a normal USGS function but was relevant to these two publications. I expect there is information available which could fill in the gaps in the S&P Global study (a topic for a different time!) and in the 15 years since 2010.

0001089

Please feel free to reach out on any other topics related to our USGS mission.

cheers,
Colin

Colin F. Williams, PhD
Program Coordinator
Mineral Resources Program
US Geological Survey
Building 19
350 N. Akron Rd.
P.O. Box 158
Moffett Field, CA 94035
colin@usgs.gov
Tel: 650-439-2881
Cell: 650-888-3755

USGS INFORMATION ON MINE PERMITTING TIMELINES

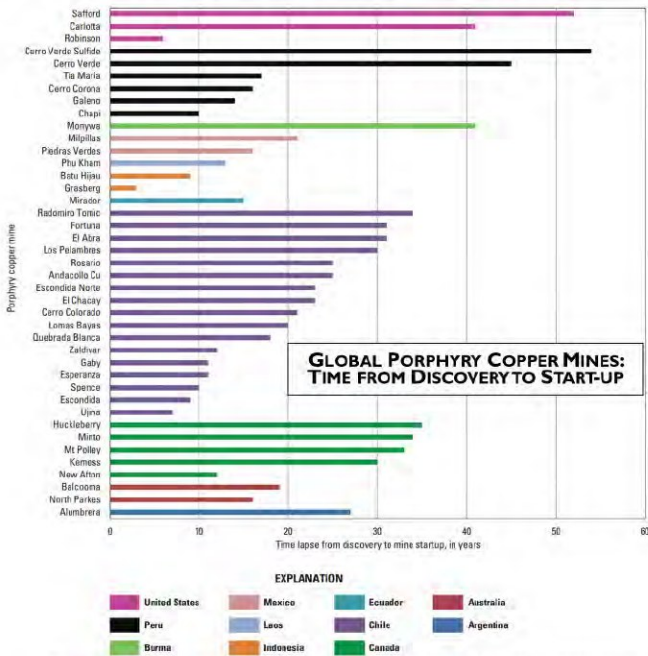


Table 12. Time required to obtain permits, construct, and commission recently opened metal mines in the United States.

[NYA, not yet achieved, production not yet begun or commercial operations not achieved; PGE, platinum group elements. Yes, long permitting and development delays because of litigation by government agencies and nongovernmental organizations]

Mine	Commodity	Permitting began	Permitting completed	Production began	Commercial operations began	Litigation reported
Alta Mesa, Texas	U	1999	2004	10/2005	1/2006	
Arizona I, Arizona	U	mid-2007	2009	NYA (11/2009)	NYA	Yes.
Ashdown, Nevada	Mo Au	2/2004	11/2006	12/2006	NYA	
Buckhorn, Washington	Au	1992	9/2006	10/2008	11/2008	Yes.
Cariota, Arizona	Cu	2/1992	6/2007	12/2008	1/2009	Yes.
Eagle, Michigan	Ni Cu Co PGE	4/2004	1/2010	NYA (9/2014)	NYA	Yes.
East Boulder, Montana	PGE	1995	1998	6/2001	1/2002	
Kensington, Alaska	Au	3/1988	6/2005	9/2010	NYA	Yes.
Leeville, Nevada	Au	7/1997	8/2002	10/2006	4th quarter 2006	
Lisbon Valley, Utah	Cu	2/1996	7/2004	1st quarter 2006	NYA	Yes.
Pend Oreille, Washington	Zn	1992	9/2000	1/2004	8/2004	
Phoenix, Nevada	Au	1/1999	1/2004	10/2006	4th quarter 2006	
Pogo, Alaska	Au	12/1997	4/2004	2/2006	4/2007	
Rock Creek, Alaska	Au	2003	8/2006	9/2008	NYA	Yes.
Rossi (Storm), Nevada	Au	1990	3Q/2006	3/2007	12/2007	
Safford, Arizona	Cu	4/1998	7/2006	4th quarter 2007	2nd half 2008	Yes.
Turquoise Ridge, Nevada	Au	9/1995	5/2003	2004	NYA	

US MINES PERMITTED BETWEEN 1998 AND 2010
PERMITTING AVG = 8 YRS; TIME TO PRODUCTION
AFTER PERMITTING = 3 YRS

Long, K.R., Van Gosen, B.S., Foley, N.K., and Cordier, Daniel, 2010, The principal rare earth elements deposits of the United States—A summary of domestic deposits and a global perspective: U.S. Geological Survey Scientific Investigations Report 2010–5220, 96 p. <http://pubs.usgs.gov/sir/2010/5220/>.

USGS Hammarstrom, J.M., Zientek, M.L., Parks, H.L., Dicken, C.L., and the U.S. Geological Survey Global Copper Mineral Resource Assessment Team, 2019, Assessment of undiscovered copper resources of the world, 2015: U.S. Geological Survey Scientific Investigations Report 2018–5160, 619 p., <https://doi.org/10.3133/sir20185160>.