

EPA's Role in Mining Activities – Winter 2022 RTOC Session

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Introductions and Overview

- Refresher on NEPA process for proposed mines (Jean Prijatel and Hugo Hoffman, ERB)
- Inspecting and addressing impacts from existing mines, including best practices and example(s) (John Tinger)
- Resource Conservation and Recovery ACT (RCRA) and Mining (John Schofield)
- EPA role in clean-up phase (Will Duncan, SEMD)

Refresher on NEPA process for proposed mines

Jean Prijatel & Hugo Hoffman

- NEPA process
- EPA's NEPA review considerations
- EPA's authority and jurisdiction for substantive environmental statutes
- Relationships with other agencies
- Resources

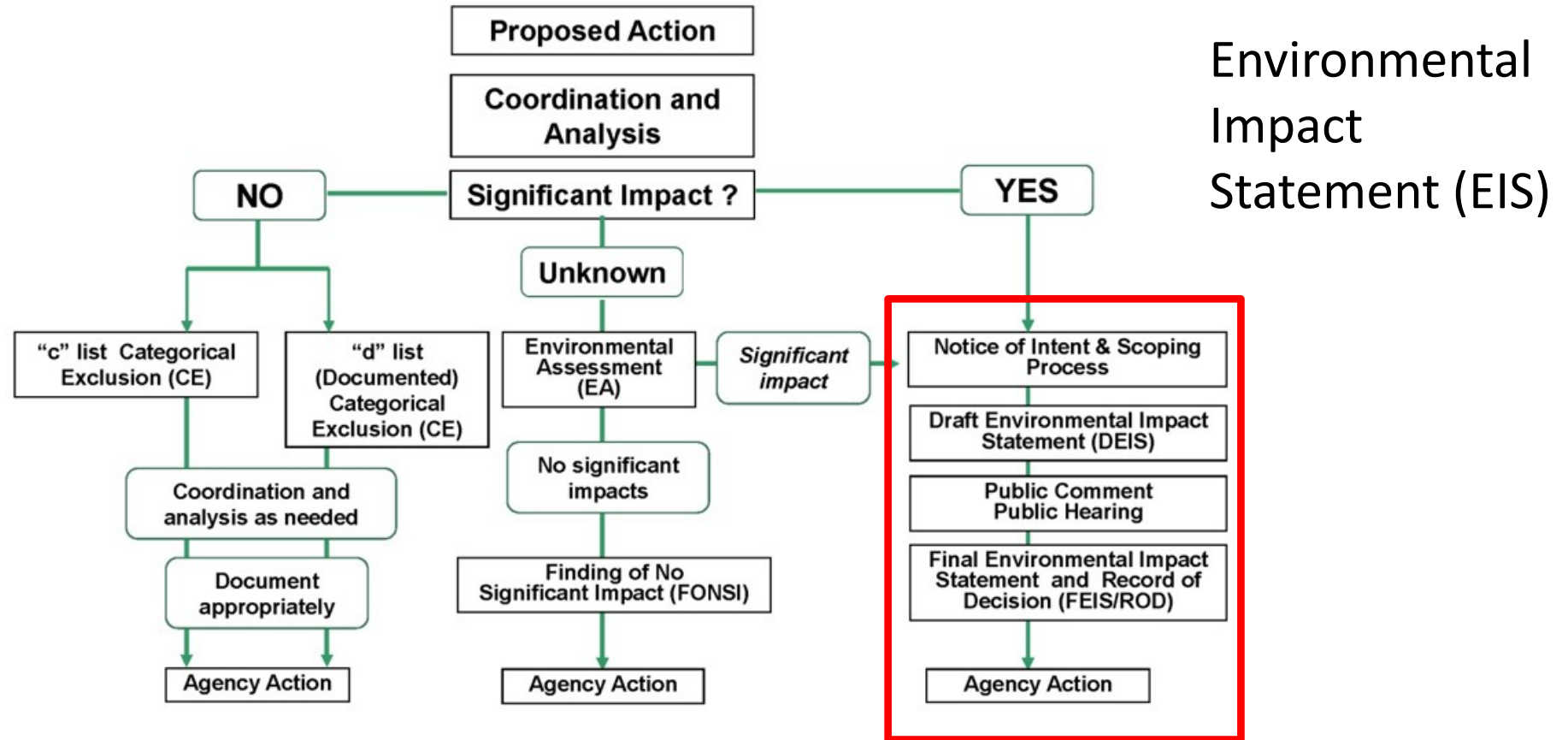
What is NEPA, the National Environmental Policy Act?

National policy for environmental responsibility.

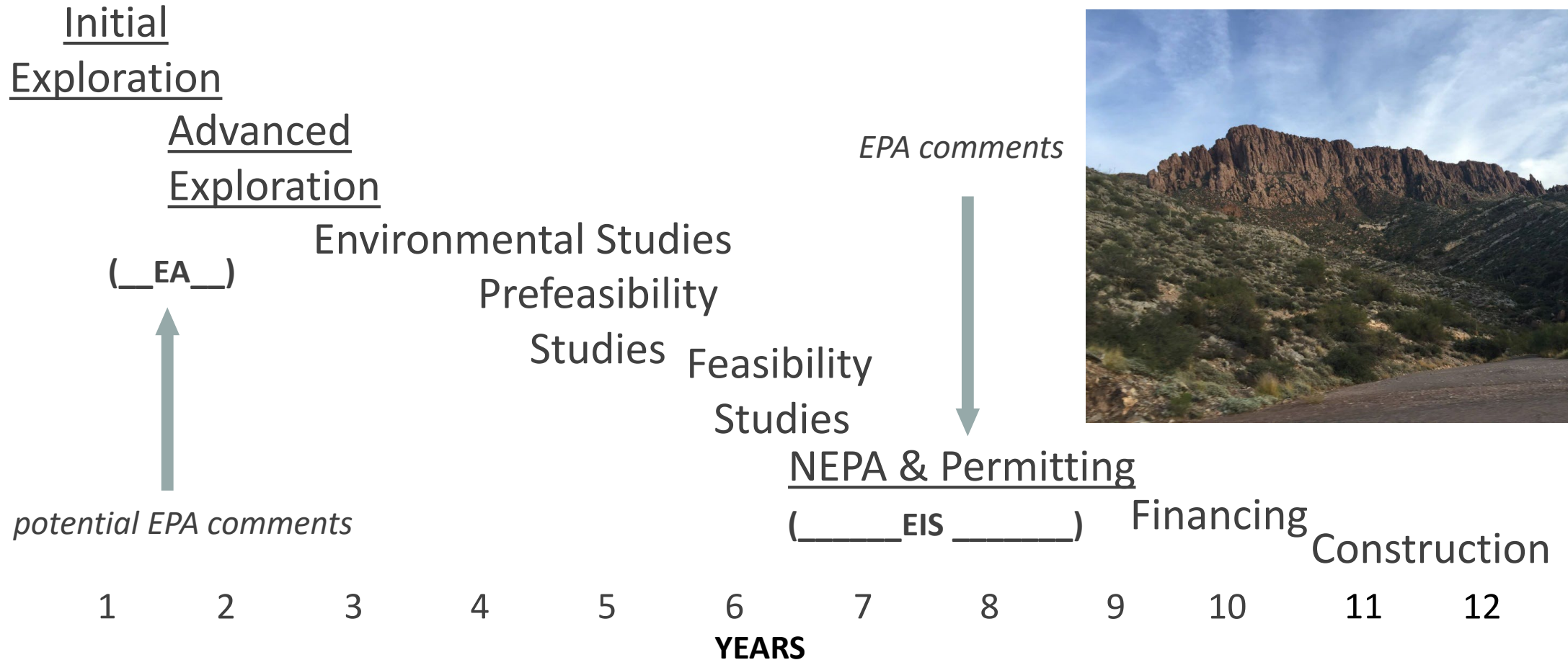
Purpose of NEPA: ensure that **Federal** agency decision makers understand and take into account environmental consequences.

Requires coordination with other federal agencies and public review of some documents.

Public NEPA Process



Mine Startup



Role of EPA

Interagency Collaboration



Document Review



Environmental Review Branch NEPA Mining Team

Jean Prijatel

Hugo Hoffman • Sarah Samples • Robin Truitt • Andy Zellinger

Mission:

Use our NEPA/309 authority to encourage environmentally responsible design, operation, closure and post-closure management of mining projects in Region 9.



Issue Areas of Greatest Concerns

- Geochemistry
 - Potential acid and non-acid contamination
- Surface and groundwater quality
 - Waste rock, tailings, heap leach runoff
 - Tailings and heap leach draindown solutions
- Water quantity
 - Groundwater drawdown – corresponding surface water dewatering
- Closure and post-closure management
 - Closure/post-closure design
 - Length of active management
- Tailings safety & risk
- Air quality
- Tribal/Cultural impacts



Context and Relationships

- New mines and expansions of existing mines
- 1872 Mining Law provides a right to mine
- Proponent driven projects
 - Size: 5-10+ sq. mi; many in large mining districts
 - Duration: operate for many decades; post-closure sometimes in perpetuity
- EPA relationships with agencies
 - Nevada Bureau of Land Management (BLM)
 - Decentralized district offices
 - Mining MOU
 - US Forest Service in Arizona
 - US Army Corps of Engineers for projects on private lands
 - State Resources & Permitting Agencies



EPA Authorities and Permits

National Environmental Policy Act (NEPA)

Clean Water Act

Safe Drinking Water

Clean Air Act

Resource Conservation and Recovery Act

Toxic Release Inventory

Comprehensive Environmental Response, Compensation, and Liability Act

How to participate in NEPA

- Engage with Federal Land Managers
- Tell EPA your concerns (cc EPA)
- Understand the authorities
- Align common interests

Resources

EPA's EIS database (eNEPA) - <https://cdxapps.epa.gov/cdx-enepa-ll/public/action/eis/search?d-446779-p=1&d-446779-o=2&search=&d-446779-s=5&commonSearch=openComment#results>

- Open comment periods
- Recent comments by EPA
- Archive EISs & EPA comments

Citizen's Guide to NEPA- https://ceq.doe.gov/get-involved/citizens_guide_to_nepa.html

EPA R10 Mining Sourcebook - <https://www.epa.gov/smartsectors/mining-source-book>

NEPA and Mining 101 (recorded webinar) -

https://clu-in.org/training/webinar/NEPAandMining101-1_051216/

Mine Sites Inspections & Water Quality Concerns

John Tinger will present his slides at this time.

Resource Conservation and Recovery Act

- Regulates the management of hazardous waste from cradle to grave
- October 12, 1980 - Congress amended the Solid Waste Disposal Act to exclude most mining and some fossil fuel combustion wastes from regulation
 - High volume, low toxicity
 - Wastes uniquely associated with the industry
- September 1, 1989 – EPA codifies the amended law (Bevill Exclusion)

Ore Processing

- EPA developed a regulatory bright-line between mining extraction and ore processing wastes.
- Ore processing wastes can be regulated under RCRA if characteristic hazardous wastes unless excluded.
 - Example: Slag from primary copper production

Typical RCRA-Regulated Wastes at Mining Operations

- Laboratory Wastes
- Used oil (equipment and vehicle maintenance)
- Spent cleaning solvents (equipment and vehicle maintenance)
- Universal wastes
 - Batteries
 - Fluorescent lamps
 - Non-empty aerosol cans
- Off-specification products that are not used for intended purpose (e.g., cyanide – mineral extraction)
- Tank clean-outs
- Off-specification vehicle fuel (if not used for intended purpose)

EPA's Role in Clean-Up Phase

- Active/Operating Mine: Superfund 's Role is limited
- Abandoned Mine: Superfund addresses cleanup at abandoned mines using three tools:
 - Enforcement
Agreements/Orders
Settlements
 - Removal
Emergency Response
Time Critical Removal Actions
 - Remedial
NPL Listing

Questions?

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