

Mitigating the Effects of Hudbay's Copper World Mine: Community Action Scenarios

PA527 Community Engagement Project
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Presentation Outline

- Intro and Background
 - Goals of this project
 - Background on Copper World
 - Background on Hudbay
 - Various Actors
- Scenario 1 - Ethical Considerations
- Scenario 2 - Stopping the mine through legal action
- Scenario 3 - Mitigation
- Conclusion and Recommendations



Our Task

- Work with an organization to help solve a local problem
- Identify key participants and their motivations
- Develop scenarios to help guide the organization's actions
 - Incorporate elements of ethics and leadership



Background of Copper World Complex

- ❖ Large-scale open-pit copper mining project, located in the Santa Rita Mountains, 28 miles southeast of Tucson.
- ❖ Formally emerged in 2021 and is located primarily on private/state land.
 - Approved Mined Land Reclamation Plan in October 2021
 - Approved Aquifer Protection Permit in August 2024
 - Approved Air Quality Permit in January 2025
- ❖ \$1.7 billion project
- ❖ Anticipated to produce 85,000 tons of copper annually over a 20 year mine life period.
- ❖ Legal appeals from environmental groups and local stakeholders continue to challenge the State's decision to approve the permits.
 - Concerns about water use, air quality standards, absence of federal oversight.



Background of Hudbay Minerals, Inc.

- ❖ Canadian-based copper mining company
- ❖ Has been in operation all around the world for almost a century
- ❖ Three Active Mining Operations:
 - Two in Canada
 - One in Peru
- ❖ Two Prospective Mining Operations:
 - One in United States (Copper World)
 - One in Peru
- ❖ Previous Human Rights Violation Cases
 - Choc v. Hudbay 2010
 - Caal v. Hudbay 2011



Advocacy Groups

❖ Great Old Broads for Wilderness:

- National, women-led grassroots organization focused on protecting and preserving America's public lands and wilderness areas.
- Operate through chapters or "Broadbands" and empower volunteers to monitor land use, participate in restoration projects, and influence environmental policy decisions at local, state, and federal levels.

❖ Save the Scenic Santa Ritas:

- Grassroots environmental organization that protects the ecological, cultural, and recreational integrity of the Santa Rita Mountains in southern Arizona.
- Composed of local residents, environmental advocates, and community leaders who collaborate to raise public awareness, promote sustainable land use, and engage in legal and policy advocacy to prevent mining-related degradation.



Advocacy Groups

❖ Sierra Club:

- Various chapters around the country engage in environmental initiatives such as climate change mitigation, clean energy promotion, wildlife conservation, and protection of public lands.
- Active opponent of mining projects that threaten ecologically sensitive areas, including the Copper World project.

❖ Farmers Investment Company:

- 6,600 acre pecan farm operation in the Santa Cruz Valley, near Sahuarita, combined with their other two farms in the southwestern part of the United States, they are one of the largest pecan producers in the world.
- Active opponent to the Copper World project due to the proposed mine's proximity to the company's pecan orchards.

Government Actors



Unincorporated communities:

- Green Valley
- Vail
- Corona de Tucson

Scenario 1: Ethical Best Practices

Ethical Issues in Resource Extraction

Why Ethics Matter in Resource Extraction

- Mining projects promise economic growth, but often at the cost of long-term harm
- Environmental degradation and water insecurity threaten public health
- Indigenous communities are disproportionately impacted

Ethics provides a sustainable and just approach to decision-making

Ethical lens = long-term well-being over short-term profit

General Best Ethical Practices

Key Strategies for Ethical Mitigation

- Environmental Justice: All communities deserve protection, regardless of race or income (Bullard, 2005)
- Free, Prior, and Informed Consent (FPIC): Indigenous nations must have true decision-making power (UN, 2007)
- Independent Environmental Impact Assessments: Conducted by third parties, not industry (Hilson, 2002)
- Post-operation Land Reclamation: Legally binding plans to restore ecosystems
- Long-term Public Health Monitoring: Water testing, health surveys, and transparency (Zhang et al., 2015)

Government's Ethical Responsibility



The Role of Regulatory Bodies like ADEQ

- Go beyond legal compliance, act with moral and ethical integrity (Wenar, 2008)
- Ensure early and consistent engagement with affected communities
- Maintain transparency around risks and decisions
- Ethical leadership builds trust and accountability in project planning and regulation

Toward Ethical, Inclusive Governance



Embedding Ethics into Mining Policy

- Use ethics as a foundation, not an afterthought
- Ethical frameworks help resolve conflicts, reduce harm, and support sustainability
- Copper World is one case but lessons are applicable globally
- Stakeholders must lead with justice, consent, accountability, and long-term thinking

**Ethics guide us towards a more
just and sustainable future for all
communities.**

Scenario 2:

Stop the Mine through Legal Action

Successfully Stopping Mines Through Litigation & Advocacy



Examples of Successfully Stopping Mines

Balco Smelter (India):

- Surrounded by rural & tribal communities
- Pollution led to widespread illness and crop failure
- Public pressure + legal enforcement forced scaled-back operations

Twin Metals (USA):

- Proposed near Boundary Waters wilderness, MN
- High risk of acid mine drainage
- Indigenous and environmental coalition led resistance
- 2023: U.S. revoked leases, imposed 20-year moratorium

Hudbay's Flin Flon Smelter Closure



Example of Shutting Down a Hudbay Operation

Flin Flon Smelter (Canada):

- Operated for 80 years; major source of air pollution
- Emitted sulfur dioxide, lead, mercury, arsenic
- 2007: Canada passed stricter air quality laws (85% SO₂ cut)
- Hudbay closed facility in 2010, citing high compliance costs
- Result of enforceable regulation + community pressure



Current Legal Actions

- Right-of-way
 - Appeal Arizona State Land Department
 - Misrepresentation of the number of tailings
- Air Quality Permit
 - Class of permit should be more strict
 - Dust mitigation plan



Practicality of Litigation

- Delays rather than stops
 - Recent Copper World litigation
- Minimal discretion for issuing permits
- Establish guard rails to prevent environmental and human harm

Scenario 3: Mitigation



Mitigation through Community Engagement

A way to mitigate the negative impacts of mining is to establish an effective strategy for community engagement in the development of these projects. We propose the following approach:

1. Establishment of a Community Advisory Board
2. Development of a Social Impact Assessment (SIA)



Community Advisory Boards

CABs are independent, community-driven groups that facilitate dialogue between stakeholders and project developers.

Inclusive
representation

- Tribal nations
- Local residents
- Environmental orgs
- Health experts
- Business owners

Independent

- Community appointed
- No influence from company
- Neutral facilitators

Transparent

- Open meetings
- Public reports
- Accountability mechanisms

Decision-making
influence

- Able to:
- Gather input
 - Make recommendations
 - Influence policy

Santa Cruz County Advisory Panel and the South32 Hermosa Project

- 12 miles northeast of Nogales, Arizona
- South32, Australian-owned company bought the project in 2018
- Engaged the Advisory Panel in 2021
- Panel present during permitting process
- Still some federal permits and regulations left to review
- Panel is currently active



Evaluating the Santa Cruz Advisory Panel

CRITERIA	
Inclusive Representation	Green
Independent	Yellow
Transparent	Green
Decision-making influence	Red



Environmental groups, local government, education, public health, agriculture and business



It was initiated and facilitated by the company. No establishment of third-party technical assistance.



Meetings are open, materials are published on website, participation is encouraged



No mechanisms to influence decision making or project outcomes



Establishing an effective CAB in the Copper World Mining Project

1. The CAB should be formed by community members or a neutral third party (not Hudbay).
2. Include voices from Tribal nations (Tohono O'odham, Pascua Yaqui), Residents of Sahuarita, Green Valley, Vail, Corona de Tucson, Environmental and health advocates, Agricultural stakeholders (e.g., FICO)
3. Secure funding for the CAB to hire independent experts to develop a social and environmental impact assessment
4. Give the CAB Formal Influence in Oversight and Permitting
 - a. Recognize the CAB as a stakeholder in permitting processes.
 - b. Empower the CAB to submit official recommendations and request permit reviews.
5. Use the CAB to support a legal agreement between community and Hudbay.



Understanding Social Impact Assessment (SIA) in Mining

- SIA is a continuous process to analyze, monitor, and manage social effects of mining projects across their entire lifecycle
 - SIA spans from exploration to closure
- Core Activities
 - Understand social context and stakeholder concerns
 - Predict and assess social risks and responses
 - Develop mitigation and benefit strategies
 - Monitor and adapt through project phases
- **Goal: Ensure that mining creates shared value and that local voices shape project outcomes**

SIA as a Lifelong Companion to the Mining Process



The value of SIA for Communities and Projects

- Creates a broader social lens
- Uses participation as power
- Reduces risks
- Boosts overall legitimacy
- Supports adaptive management





Conclusion

- Mining is complicated: many stakeholders and moving parts
- Ethics and long-term thinking must be central to any decisions for an actor
- Legal remedies are possible but limited in scope
- Comprehensive community engagement via SIAs and CABs give the best chances for successful mitigation of negative impacts