



# Mining Industry Update

April 12, 2018





- ✓ Why and Where Do We Mine?
- ✓ Mining's Benefits for Alaska and Alaskans
- ✓ Environmental safeguards
  - Perception vs. reality
- ✓ Stand for Alaska: Know the Facts
  - Protecting communities, jobs and the economy



# Why do we mine?

If you have turned on a light, entered a building, driven on a road, made a phone call, used a computer, or visited a doctor, then mining is an important part of your life.



# Alaska metals could be in your phone

## ELECTRONICS

### MICRO-ELECTRICAL

Copper, gold, silver, and tungsten are used for electrical connections within the phone. Which metal is chosen depends on the need. For example, while silver is the most conductive metal, gold never tarnishes.



**GOLD**



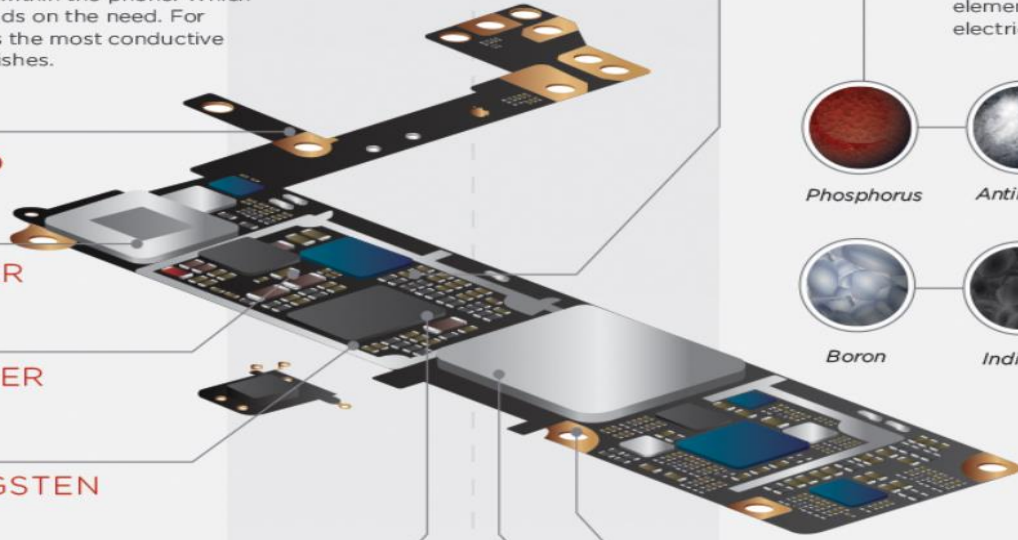
**SILVER**



**COPPER**



**TUNGSTEN**



## PROCESSOR CHIP



**SILICON**

The phone's processor is mainly made from silicon, but it is bombarded by various elements to give it superior electrical properties.



*Phosphorus*



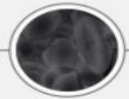
*Antimony*



*Arsenic*



*Boron*



*Indium*



*Gallium*

335 tons steel

700 lbs rare earths

molybdenum

3 tons aluminum

zinc

4.7 tons copper





## Mining Activity in Alaska



# Benefits to Alaska: jobs

- 4,400 direct jobs
- 9,000 total direct and indirect jobs
- \$700 million total payroll
- Average annual wage of \$108,600
- Residents of 55+ communities
- \$580 million in contracts for 600+ Alaska businesses

# Benefits to Alaska Native Corporations



- 7(i) and 7(j) royalty sharing:
  - \$1.5 billion to NANA (1982-2017), of which \$1 billion shared
  - \$2 million to Calista in 2016
- Jobs for shareholders:
  - Red Dog 55%
  - Upper Kobuk Minerals Projects 59%
- Business partnerships





# 2017 Local and State Government Revenue



- \$34 million to local governments (largest taxpayers in Juneau, Fairbanks and Northwest Arctic)
- \$61 million to state government
- \$49 million in other state government-related revenue

# Alaska Permanent Fund

**Corpus:** 25-50% of lease rentals and royalties from mines on state land is deposited into Permanent Fund

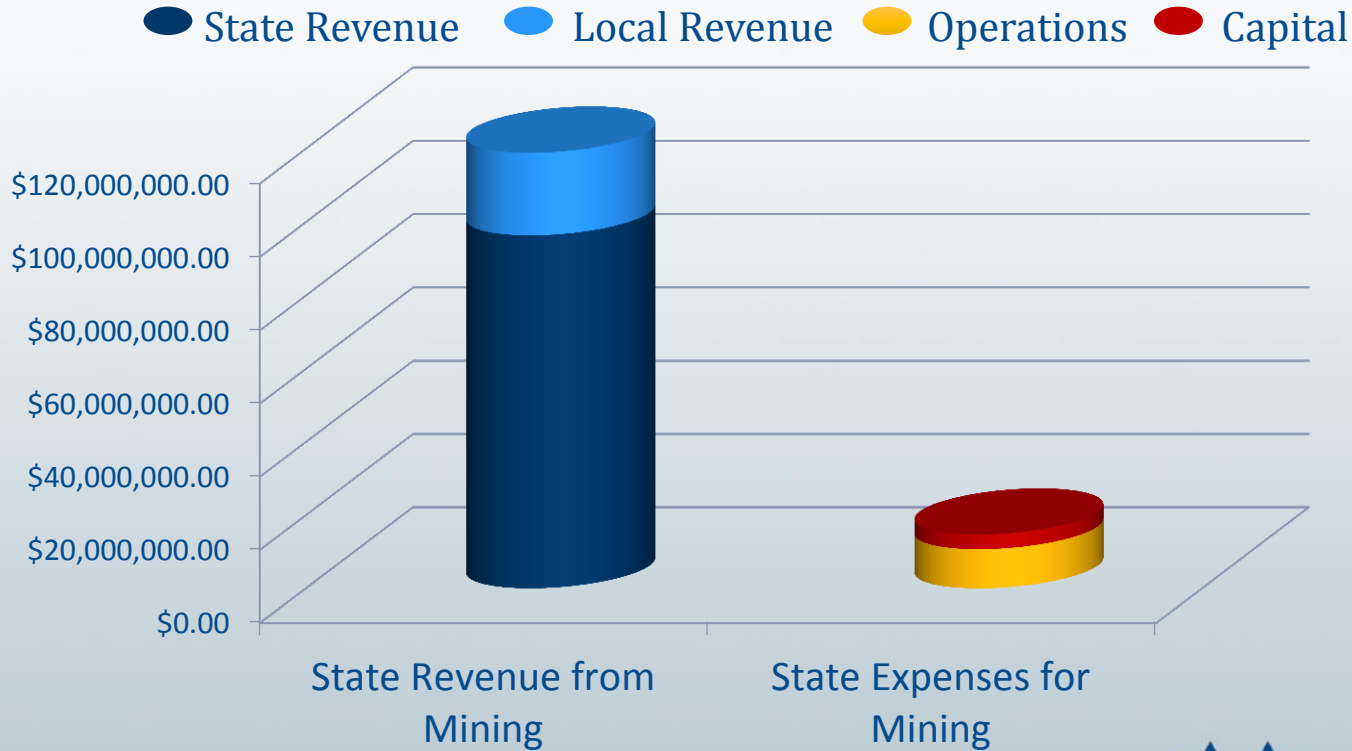
## **Investments:**

- 479 investments in global metals mining and fabricating
- \$516.6 million value
- Includes \$23.5 million of stock in companies operating mines in AK, >\$7 million of stock in companies with exploration projects in AK

Source: [www.apfc.org](http://www.apfc.org), 02/12/2017



# State Revenue vs. State Costs



*“Fiscal Effects of Commercial Fishing, Mining, & Tourism. What does Alaska receive in revenue? What does it spend?”*

Bob Loeffler and Steve Colt, Institute of Social and Economic Research, UAA, 2016





# Mining Pays its Way

- Companies pay exploration, development and construction costs
- This often includes access and infrastructure, unlike in Lower 48
- Reimbursable Service Agreements
- Financial assurance for reclamation and closure



# AIDEA'S Return on Investment

- Mission: encourage AK economic growth
- \$265 million investment in the Red Dog port and road
- \$465 million in payments from Red Dog (12/2017)
- 6.5% annual interest on loan agreement
- Annual dividend to State General Fund
- Contract goes to 2040



Council of

Alaska Producers

Sources: [www.aidea.org](http://www.aidea.org), AIDEA email 2018-02-08



# Alaska's World Class Regulatory System

- Rigorous permitting system
  - air, land, water, fish and wildlife
- Strict operational oversight
- Closure/Reclamation
- Financial Assurance

# No Single Permit to Mine: there are many permits & authorizations

Mine permitting is a mixture of State, Federal and local permitting requirements.

## STATE

Each project is unique.

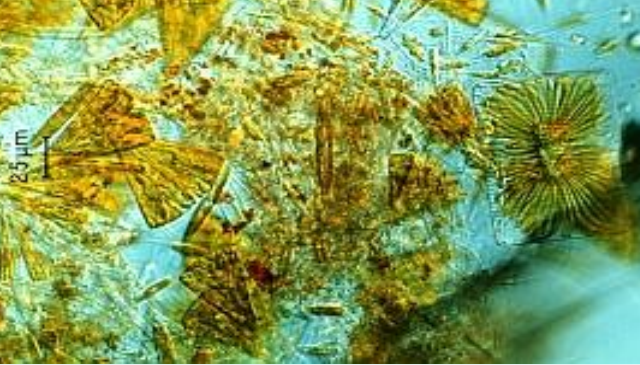
## FEDERAL

- Plan of Operations (DNR)
- Reclamation and Bonding (DNR)
- Waste Management Permits and Bonding (ADEC)
- CWA Section 402 APDES Water Discharge Permit
- Certification of ACOE Permits (ADEC)
- Sewage Treatment System Approval (ADEC)
- Air Quality Permits (ADEC)
- Fish Habitat and Fishway Permits (ADF&G)
- Water Rights (DNR)
- Right of Way/Access (DNR/DOT)
- Tidelands Leases (DNR)
- Dam Safety Certification (DNR)
- Cultural Resource Protection (DNR)
- Monitoring Plan (Surface/Groundwater/Wildlife) (DNR/DEC/DFG)

- US EPA Air Quality Permit review
- US EPA Safe Drinking Water Act (UIC Permit)
- US ACOE S. 404 Dredge and Fill Permit
- US ACOE S. 10 Rivers and Harbors Act
- US ACOE S. 106 Historical & Cultural Resources Protection
- NMFS Threatened & Endangered Species Act Consultation
- NMFS Marine Mammal Protection Act
- NMFS Essential Fish Habitat
- NMFS Fish and Wildlife Coordination Act
- USFWS Threatened & Endangered Species Act Consultation
- USFWS Bald Eagle Protection Act Clearance
- USFWS Migratory Bird Protection
- USFWS Fish & Wildlife Coordination Act

These are only some of the permits required!





# Alaska's Permit System is Unique

- Stringent application of a national water quality system
- Robust monitoring system
- 3<sup>rd</sup> party compliance audits of both:
  - company methodology and results
  - regulatory agency oversight







True North (Fairbanks)



Poker Flats (Healy)

## Reclamation and Closure

- Alaska law (AS 27.19) requires that a mine site must be returned to a stable condition compatible with the post-mining land use
- Plan & financial assurance must be approved by DNR Commissioner *before* operations begin
- Financial assurance applies to all companies
- Reviewed every 5 years or earlier if necessary





# Potential

*Are the right policies in place to encourage development and production of critical and strategic minerals in Alaska?*

A scenic landscape featuring a large, calm lake in the center, surrounded by rolling hills and mountains. The sky is blue with scattered white clouds. In the foreground, there are green and yellowish-brown bushes. Overlaid on the scene is a large, orange outline of the state of Alaska. Inside the outline, the words "STAND FOR ALASKA" are written in a bold, blue, distressed font. The outline of Alaska has small hand-like shapes at its base, giving it the appearance of a person standing on the landscape.

**STAND FOR  
ALASKA**

**PROTECTING ALASKA'S  
COMMUNITIES, JOBS & WAY OF LIFE**

An aerial photograph of a residential area, possibly a golf course community, featuring several houses, a clubhouse, and a golf course. A winding river flows through the landscape, surrounded by dense forest. The image is overlaid with a large red 'RESTRICTED' stamp and the text 'PRIVATE PROPERTY RIGHTS' in white.

**PRIVATE PROPERTY RIGHTS**

**RESTRICTED**



**STAND FOR  
ALASKA**

# 250+ ALASKA BUSINESSES AND ORGANIZATIONS

# TAKEAWAY

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This ballot measure is a radical overhaul of regulations with serious unintended consequences.



# WHAT DOES THIS MEAN FOR ALASKA?

- Job loss: oil and mining
- Economy will slow
- Future opportunities would disappear: AKLNG
- Projects will be decided in the courts
- **Upend the balance between economy and environment**





11.16.17

**“There will not be another significant project built in rural Alaska if this initiative passes.”**

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**AARON SCHUTT**  
President & CEO,  
Doyon, Limited

RESOURCE



# THE MYTHS

- ~~Alaska does not adequately protect our fish habitat.~~  
**NOT TRUE.**
- ~~We have not increased fish habitat protections in 60 years.~~ **NOT TRUE.**
- ~~We don't use science to guide permitting.~~  
**NOT TRUE.**
- ~~There's no opportunity for public input.~~  
**NOT TRUE.**
- ~~This won't impact existing projects.~~  
**NOT TRUE.**





Text **STAND** to **64600**  
to join our coalition



@StandforAlaska



/StandforAlaska

Paid for by Stand for Alaska, 200 West 34th Avenue, PMB 1219, Anchorage, AK 99503. Marleanna Hall, chair, Aaron Schutt, co-chair, Jaeleen Kookesh, co-chair, and Joey Merrick, co-chair, approved this message. Top contributors are ConocoPhillips Alaska, Anchorage, Alaska, Hecla Mining Company Juneau, Alaska, and Kinross Fort Knox, Fairbanks, Alaska.