



CELL PHONES

As a courtesy to the other participants:

1. Please either turn off your cell phone or place it in vibrating mode.
2. Please leave the classroom area if you must have a conversation.





“From millions of rocks to millions of dollar\$, a four pronged approach to starting an aggregate business”

National Transportation in Indian Country Conference

Big Sky, MT

September 2019

Division of Energy and Minerals Development



DIVISION OF ENERGY & MINERAL DEVELOPMENT

DIVISION OF ENERGY AND MINERAL DEVELOPMENT (DEMD)

The Division assists tribes with the environmentally responsible exploration, development and management of their energy and mineral resources to create sustainable economies for reservations, generate new jobs and economic self-sufficiency.





**Assistant Secretary – Indian Affairs
Tara Sweeney**



**Principal Deputy – Assistant Secretary
John Tahsuda**

**Director
Bureau of
Indian Affairs**

**Director
Bureau of Indian
Education**

**Deputy Assistant Secretary
Policy and Economic
Development**

**Deputy Assistant
Secretary
Management**

**Office of Indian Energy
and Economic Development**

**Office of Self-
Governance**

**Office of
Indian Gaming**

**Division of Energy and
Mineral Development**

**Division of Economic
Development**

**Division of Capital
Investment**

**We strive to provide the best possible
technical and economic advice to Indian
landowners seeking to manage and develop
their energy and mineral trust resources**



DIVISION OF ENERGY & MINERAL DEVELOPMENT

Indian Energy and Economic Development (IEED)

Three Divisions:

- Division of Energy and Mineral Development
- Division of Economic Development
- Division of Capitol Investment



Division of Energy and Mineral Development (DEMD)

Assists tribes with the exploration, development and management of their energy and mineral resources with the ultimate goal of creating jobs and sustainable tribal economies.



Division of Economic Development (DED)

Assists tribes in creating an environment for economic progress through training, business planning and expert consultation.



Raising Capital

How does a city/state raise capital?

Taxes

Bonds



Division of Capital Investment (DCI)

Manages the Indian Loan Guaranty Program to facilitate access to capital and loan financing for Native Americans.



Division of Energy and Mineral Development

- DEMD is the only national Governmental Agency that deals solely with energy and mineral development on Indian lands.
- Majority of DEMD staff has extensive prior industry experience, making them uniquely suited to facilitate communication between Tribes / allottees and industry.



Division of Energy and Mineral Development (DEMD)

Who we are and what we do:

- **We are hands-on and proactive**
- **Our goal is development – not merely assessment**
- **Provide technical, engineering and economic advice to Indian landowners seeking to manage and develop their energy and mineral resources**
- **Generate effective energy and mineral development strategies**



DEMD – What We Do

Division of Energy and Mineral Development

Minerals

- Construction aggregate projects
- Base and Precious metals
- Coal

Renewable Energy and Distributed Generation

- Wind
- Solar
- Biomass
- Hydro
- Natural Gas

Conventional Energy & Geothermal

- Geothermal
- Oil & Gas

Business Development

- Tribal Business Structures
- Financial Analysis
- Good Governance Practices

Our Staff: Geologists, Geophysicists, Mineral Economists, Mineral Marketers, Engineers, Business Development Specialists, Financial Analysts, and Policy Analysts



DEMD current projects

- Oil and gas projects in Colorado, Montana, North Dakota, South Dakota, New York, Oklahoma and Texas
- Coal projects in Montana, Colorado and Arizona
- Hydroelectric projects in Montana, Oklahoma, California and Washington
- Geothermal projects in California, Nevada and South Dakota
- Biomass projects in Washington, Wisconsin, Idaho, New York and Maine



- **Wind projects in California, South Dakota, Nebraska, Montana, Oklahoma, Nevada and more**
- **Solar projects in South Dakota, Arizona, South Carolina, and California**
- **Sand and gravel projects in Washington, California, North Dakota, South Dakota, New Mexico and Arizona, Oregon, Idaho, Minnesota, Montana, Arizona, Nevada, Alaska, Florida and Wisconsin.**
- **Building houses in New Mexico using high performance adobe (HPA)**



Question?

What mineable commodity generates the most money in sales in the United States.



Aggregate!

Sand

Gravel

Crushed Rock



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How does aggregate present an opportunity?

Aggregate is used for everything!

- Construction and maintenance of roads.
- Construction projects.
- Emergency preparedness.
- Economic development.



Road Construction and Maintenance

- 80% of reservation roads are unpaved gravel roads.
 - 83% of these roads are classified as “not acceptable.”
- Maintenance of the existing roads is vital.
- New road construction provides a safe reliable mode of travel.
- Native Americans have the highest per capita number of road deaths of any demographic group in the USA.



EMERGENCY PREPAREDNESS

1. Development of a resource *before* a disaster occurs.
2. Availability of a resource *during* a disaster.
3. Access to the resource *after* the disaster.

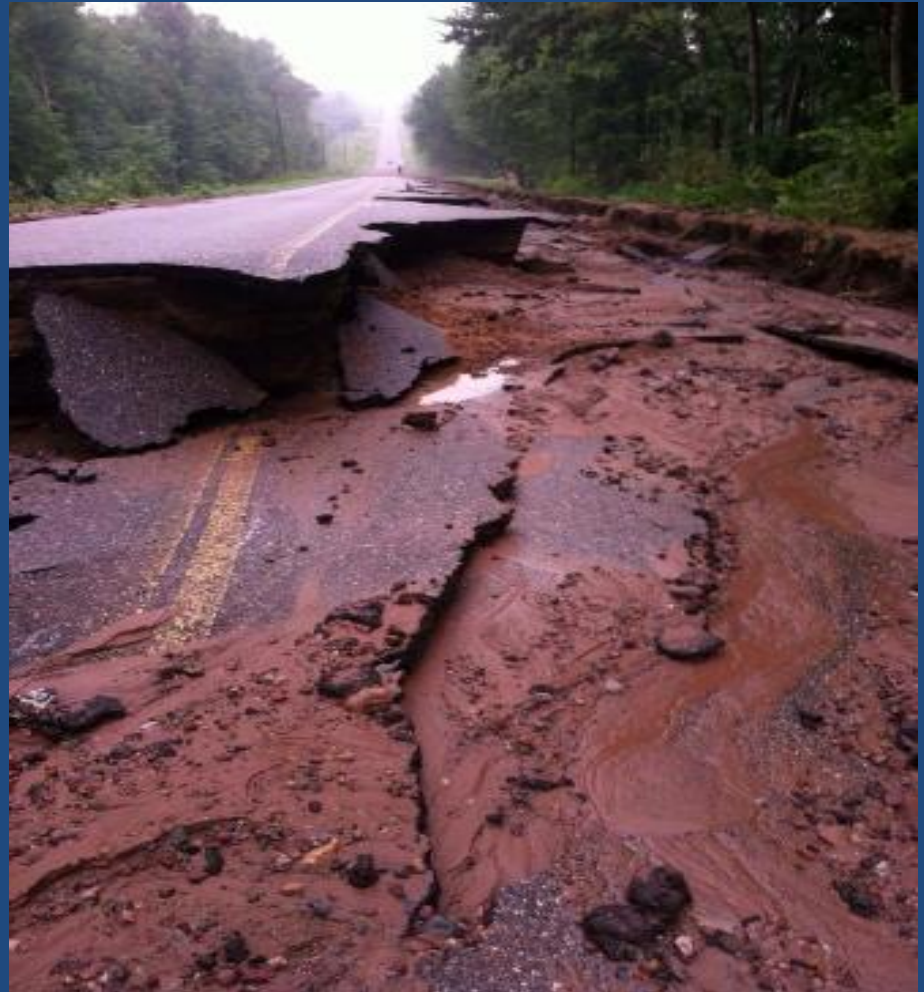


Construction Aggregate's role in Emergency Preparedness

- The development and availability of the primary raw material required to mitigate, prepare, respond, and recover buildings, infrastructure, roads, bridges, and homes.
- That raw material is Construction Aggregate



When FEMA arrives, that typically means a disaster has already happened!



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Road Construction and Maintenance

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Cochiti Pueblo Flooding 2011



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Santa Clara Pueblo Flooding 2013



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Spirit Lake Flooding



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TRIBAL ADVANTAGES: EXERCISING TRIBAL SOVEREIGNTY

- Inherent economic advantages
- The permitting process
- Environmental compliance process



Benefits of doing business on Tribal land

- A.** Tribe develops aggregate resources on Tribal lands
 - a. Tribe is operator
 - i. No outside lease
 - ii. No Federal action
 - b. Business contract with investor/operating company

*According to Bill Walker (Former BIA Southwest Regional Director) and Stephen Simpson (Office of the Solicitor-Washington, D.C.), if the Tribes develop their own resources, then, there is no Federal action that would trigger NEPA. Potentially, a tribe could develop an aggregate operation, drill a well, etc. with no Federal agency interaction or approvals required.

- B.** An operating company would design a mining and reclamation plan, drilling and completion plan (of a well), etc. and get to work.



Competitive Sand and Gravel Operation - Price Analysis - Washington State		
	Used Equipment Lease 5-Year Term	Used Equipment Purchase 7 Year Loan
Scenario	\$/T	\$/T
Case 2: Tribe Hires Contract Miner	\$8.97	\$10.31
	8.0 % *	8.0 % *
Case 3: 100% Tribally Owned and Operated	\$8.05	\$9.40
	8.0 % *	8.0 % *
Case 4: 100% Company Owned and Operated	\$11.45	\$13.15
	8.0 % *	8.0 % *
Margin: Case 4: 100% Company Owned minus Case 2: Tribe Hires Contract Miner	\$2.48	\$2.83
Margin: Case 4: 100% Company Owned minus Case 3: 100% Tribally Owned	\$3.40	\$3.75

* Company Owned - Profit/Total Cost

Washington Taxes:

1. NO INCOME TAX
2. SALES AND USE TAX: STATE 6.5%, LOCAL 8.7%.
3. PROPERTY TAX CALCULATION - PRESENT VALUE OF OPERATION TIMES \$11.45/\$1,000.
4. BUSINESS AND OCCUPATION TAX - \$4.48/\$1000 TIMES GROSS SALES.
5. NO SALES TAX ON MINING EQUIPMENT



Competitive Sand and Gravel Operation - Price Analysis - Idaho State

100,000 Ton per Year

Scenario	Used Equipment Lease 5-Year Term	Used Equipment Purchase 7 Year Loan
	\$/T	\$/T
Case 2: Tribe Hires Contract Miner	\$8.97	\$10.31
	8.0 % *	8.0 % *
Case 3: 100% Tribally Owned and Operated	\$8.05	\$9.40
	8.0 % *	8.0 % *
Case 4: 100% Company Owned and Operated	\$10.40	\$11.97
	8.0 % *	8.0 % *

Margin: Case 4: 100% Company Owned minus Case 2: Tribe Hires Contract Miner	\$1.43	\$1.66
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Margin: Case 4: 100% Company Owned minus Case 3: 100% Tribally Owned	\$2.35	\$2.58
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* Company Owned - Profit/Total Cost

Idaho Taxes:

1. INCOME TAX - 6.925%
2. SALES TAX: STATE 6.0%
3. PROPERTY TAX CALCULATION - NET VALUE OF SALES OF OPERATION TIMES 1.298%
4. NO SALES TAX ON MINING EQUIPMENT



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Competitive Sand and Gravel Operation - Price Analysis - Montana State

100,000 Tons per Year

	Used Equipment Lease 5-Year Term	Used Equipment Purchase 7 Year Loan
Scenario	\$/T	\$/T
Case 2: Tribe Hires Contract Miner	\$8.97	\$10.31
	8.0 % *	8.0 % *
Case 3: 100% Tribally Owned and Operated	\$8.05	\$9.40
	8.0 % *	8.0 % *
Case 4: 100% Company Owned and Operated	\$9.82	\$11.31
	8.0 % *	8.0 % *
Margin: Case 4: 100% Company Owned minus Case 2: Tribe Hires Contract Miner	\$0.85	\$1.00
Margin: Case 4: 100% Company Owned minus Case 3: 100% Tribally Owned	\$1.77	\$1.91
* Company Owned - Profit/Total Cost		
Montana Taxes:		
1. INCOME TAX - 6.925%		
2. SALES TAX: n/a		
3. PROPERTY TAX CALCULATION - Buildings times 1.89%, Mining 3%		
4. NO SALES TAX ON MINING EQUIPMENT		



AGGREGATE – CONSTRUCTION

Operation Example

- Off Reservation Operation
 - Average cost of aggregate nationwide is ~\$8.00/ton
 - Cost to transport is ~\$.20/mile
- Tribal operation
 - Estimated cost to produce aggregate on Reservation is ~\$5.00/ton (no taxes)
 - Minimum to no transportation costs

This assumes that:

- Both scenarios are new operations
- Production is 100,000 tons/year
- Capital costs ~\$1.3 million
- Buildings and equipment
- *Sales price and taxes varies by state



Aggregate – Construction Operation

Example cont.

- Off Reservation Operation
- (100,000 tons/yr.)
 - ~\$1.6 Million per year
 - ~\$9.3 Million over the course of 5 years
- Tribal Operation
- (100,000 tons/yr.)
 - ~\$500,000 per year
 - ~3.8 Million over the course of 5 years including capital costs

Total Tribal savings ~**\$5.5 Million** over the course of 5 years!

Road construction at 1,200 tons/mile
~83 miles/yr. → 415 miles over 5 yrs.

*Assume Tribe purchases aggregate from
40 miles away



Economic Development



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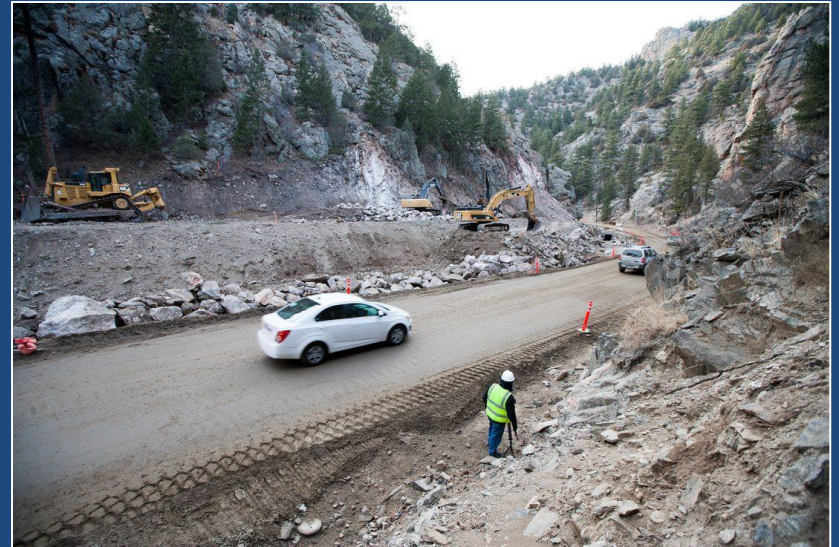
Economic Reality on Reservations

- Most construction projects on or near reservations rely on supplies of aggregate resources from non-Indian sources.
- This represents lost economic opportunities.



Cost Savings on Reservations

- Can be costly to import aggregate.
- Typical sales radius: 30 miles.
- Remote reservations have paid up to **THREE** times as much for materials than consumers in metropolitan areas.



TRIBAL ADVANTAGES: EXERCISING TRIBAL SOVEREIGNTY

- Inherent economic advantages
- The permitting process
- Environmental compliance process



PERMITTING

- Similar to the 638 process
- Tribe must demonstrate the capability to administer the permitting process
- Tribe must demonstrate the capability to administer environmental compliance
- BIA must still sign off on the permit
- Example: Fort Berthold



TRIBAL ADVANTAGES: EXERCISING TRIBAL SOVEREIGNTY

- Inherent economic advantages
- The permitting process
- Environmental compliance process



By replacing the traditional NEPA permitting functions with your own, you can “get down to business” much faster!



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ENVIRONMENTAL COMPLIANCE

- Similar to the 638 process
- Tribe must demonstrate the capability to adhere to various federal laws (NEPA, Clean Air, Clean water, etc.) and have tribal rules/regulations in place.
- EPA must still concur or approve the environmental compliance.
- Example: Pine Ridge



How can these opportunities be accomplished?

- Assistance from the Division of Energy and Mineral Development (DEMD!)



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Division of Energy and Mineral Development

DEMD can assist with the following:

- perform initial exploration;
- define potential targets for development;
- perform market analyses to establish production/demand for a given commodity;
- provide outreach and education to tribes concerning energy or mineral development issues;
- perform economic evaluation and analyses of the resource; and
- promote completed projects at industry conferences and to prospective partners or investors.



Questions?



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DEPARTMENT OF THE INTERIOR

Contact Us!

Dennis Bodenchuk
Branch Chief

720-407-0603
dennis.bodenchuk@bia.gov

Tammy Jacobs
Geologist

720-407-0658
tammy.jacobs@bia.gov

Duane Matt
Geologist

720-407-0605
duane.matt@bia.gov

David Hummer
Mining Engineer

720-407-0664
david.hummer@bia.gov

Chris Benson
Geologist

720-407-0652
christopher.benson@bia.gov



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Additional Information



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The “Typical” NEPA process



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Who Approves What?

“Standard Operating Procedures” of 9/23/13

- Bureau of Indian Affairs (BIA)
 - Mineral agreements
 - Exploration and mining permits
 - NEPA
- Bureau of Land Management (BLM)
 - Mine and reclamation plans
- U.S. Army Corps of Engineers (CE)
 - Mining permit (if there is water)



NEPA Categories

1. Categorical Exclusion (CatEx)

- a) Trenching
- b) Drilling (Depends on BIA Region)

2. Environmental Assessment (EA)

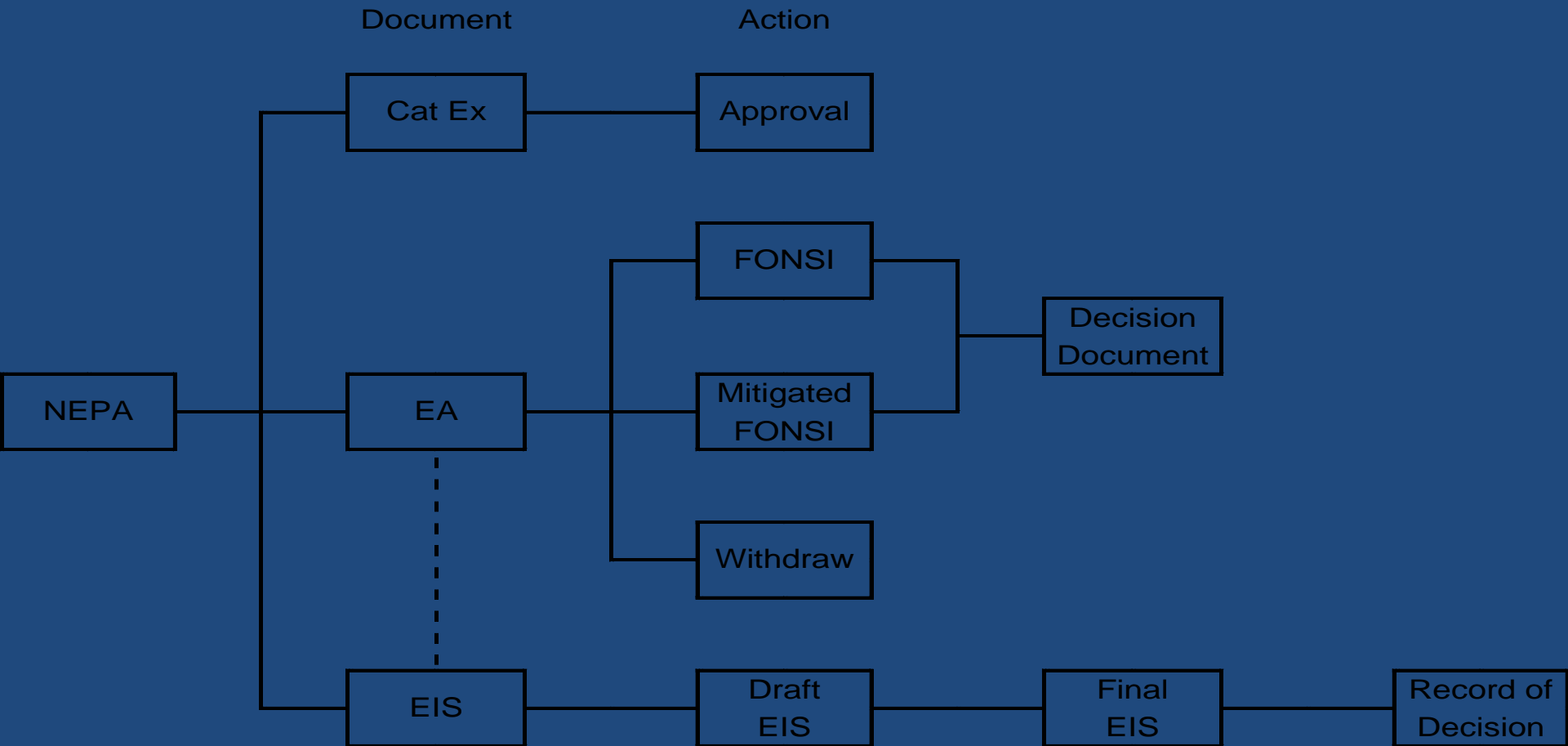
- a) Drilling (Depends on BIA Region)
- b) Mining – small or medium

3. Environmental Impact Statement (EIS)

- a) Mining – large



The NEPA Process



NEPA: National Environmental Policy Act
Cat Ex: Categorical Exclusion
EIS: Environmental Impact Statement

EA: Environmental Assessment
FONSI: Finding of No Significant Impact



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Comparisons of Sand/Gravel operations: Company owned vs Tribally owned/leased



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The Tribal Company

- Tribally-chartered corporation
- Section 17 federal corporation
- State corporation
- State Limited Liability Company (LLC)



Section 17 Corporation

- Federally-chartered (Section 17 of Indian Reorganization Act of 1934)
- Charter may be general (any legal activity) or specific, such as mineral only
- Board of directors can include non-tribal members



Section 17 Corporation

- Tribal Council may assign a lease to Corporation
 - Corporation may operate property itself
 - Corporation may sublease to a third party
 - Corporation may form joint venture with a third party
- Any lease assignment or agreement with a third party is subject to approval by Tribal Council and BIA



Agreement and Business Structures

- Lease
- Partnership
- Joint Venture
- 100% Tribally-owned operating company



Partnership

- Advantages
 - Simple business structure
 - Income and tax deductions flow directly to partners
- Disadvantages
 - Requires great personal trust
 - If structured as a General Partner with Limited Partner(s), the Limited Partner(s) will have no control
 - Liabilities flow back to the partners with no protection of personal assets – A corporate shield can be easily pierced

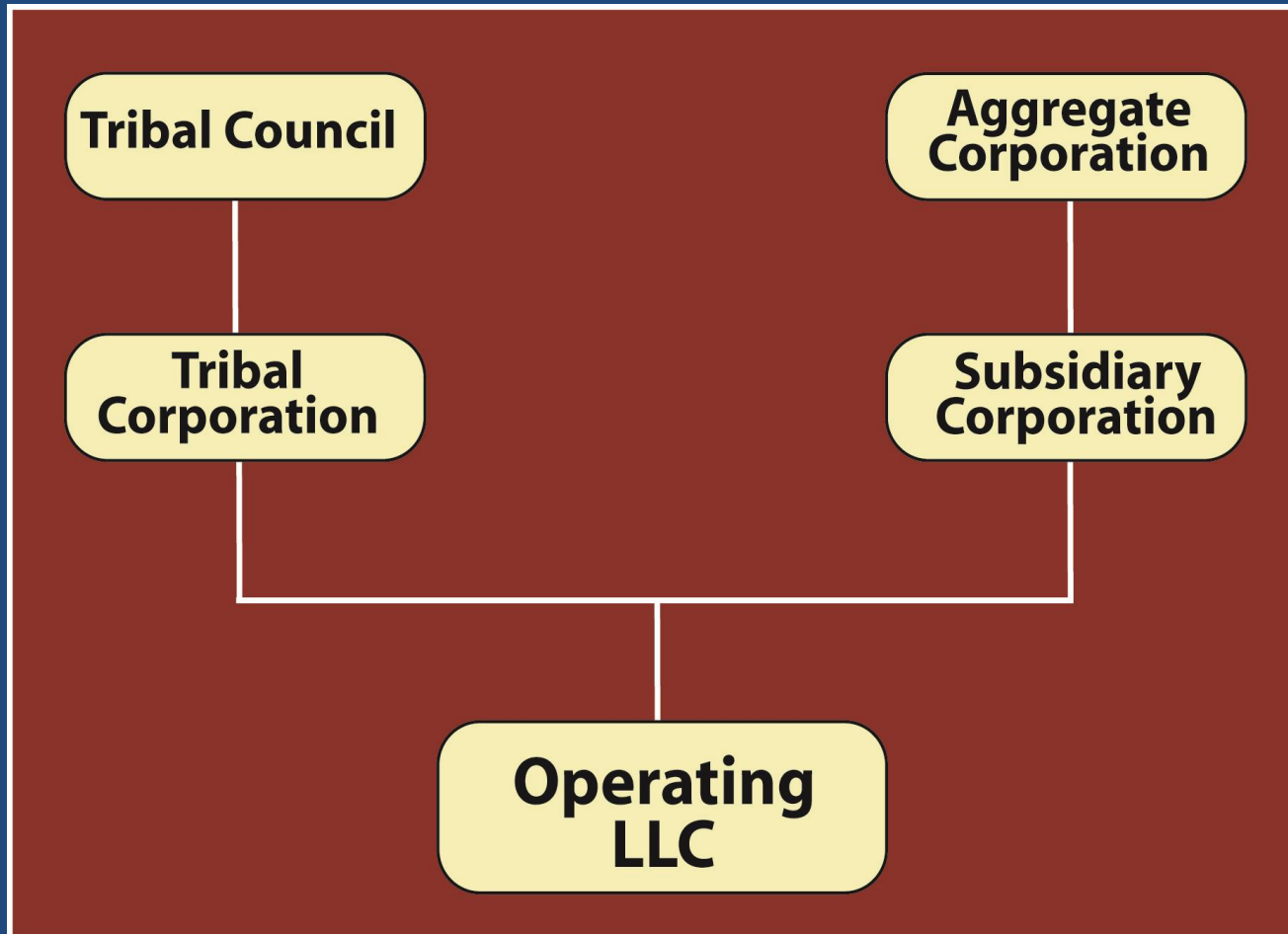


Joint Venture

- Tribe supplies mineral and surface rights and perhaps some capital
- Operating partner supplies capital and expertise
- Operating partner will want to retain at least 51% to maintain control (Note that operating partner will pay federal and state taxes while Tribe will not)



Joint Venture Separated Model



Joint Venture Working Interest

- Carried interest
 - Operating partner acts as bank to finance Tribe's portion
 - Tribe pays back loan from part of operating income only
 - No risk to Tribe if venture fails
- At risk interest
 - Tribe borrows money from outside financial organization and must repay funds from operating income, bonus, royalties, savings, or other sources (federal guaranteed loan program may be available)
- Granted interest
 - Tribe receives percentage of operation either at outset, after capital investment has been recovered, or at some other point



Lease

“A contract between a landowner and another, granting the latter the right to search for and produce oil or mineral substances upon payment of an agreed rental, bonus, and/or royalty.”

From: Dictionary of Mining, Mineral, and Related Terms, Second Edition



Potential Lease Income Sources

- **Royalty** (include protection from sales to intermediary)
 - Percentage of gross sales
 - \$ per ton or cubic yard with provision for escalation
 - In-kind
- **Minimum yearly** royalty (Discourages lessee from “sitting” on property)
- **Advance royalty payments**
 - Paid back over time from production royalties
- **Bonus (non-refundable)**
 - Paid upon signing agreement or,
 - Paid upon receiving all permits



Potential Lease Income Sources

- **Percentage of after tax net profit** (Note that lessee will attempt to reduce tax liabilities and payments to lessor by increasing deductible expenses such a corporate overhead, etc.)
- **Tribal severance tax**
- **Tribal Employment Rights Office (TERO) fees**
- **Tribal income tax**
- **Tribal property or other taxes**
- **Surface rental for other activities (business lease)**



100% Tribally-Owned Operation

- Advantages
 - No taxes
 - Federal contract preference and assistance
 - Disadvantaged Business Enterprise (DBE) program – Department of Transportation
 - Small Disadvantaged Business (SDB) program
 - 8(a) Business Development program
 - Equivalent state programs



100% Tribally-Owned Operation

- Disadvantages
 - Capital: Need money for exploration, market studies, permits, construction, equipment, infrastructure, working capital, etc.
 - Need expertise in:
 - Marketing
 - Mining and processing
 - Transportation
 - Reclamation
 - Accounting



Business Type	Advantages	Disadvantages
Lease (Royalty)	<p>No capital required</p> <p>No marketing or technical expertise required</p> <p>No financial risk since royalties are paid whether operation is profitable or not</p>	<p>Least income to Tribe (but can still be good)</p>
Partnership	<p>Simple to set up</p>	<p>Liabilities flow to partners</p> <p>May have to provide some capital and accept financial risk</p>
Joint Venture	<p>Can potentially provide more income to Tribe than a lease agreement</p>	<p>May have to provide some capital</p>
100% Tribal Entity (not state corporation)	<p>Usually greatest income to Tribe if profitable</p> <p>No federal taxes</p> <p>DBE advantage and other benefits</p>	<p>Tribe has to obtain capital</p> <p>Financial risk</p> <p>Marketing and technical expertise required</p>



Guaranteed Loan Program

- Program is for tribes and tribal members
- Business must be at least 51% Indian-owned
- Business does not have to be on reservation or an allotment
- Loan amount 80% maximum (at least 20% equity)
- 90% of loan guaranteed
- Fee can be included in loan amount

For details contact:

Division of Capital Investment
Office of Indian Energy and Economic Development



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