28-GH1524\N.8
Bullock
3/1/13

AMENDMENT #1

By Representative Gara, Tarr, Josephson, Kreiss-Tomkins Kawasaki

OFFERED IN THE HOUSE

TO: CSHB 77(RES)

Page 20, following line 1:

Insert new bill sections to read:

"* **Sec. 35.** AS 46.15.080(a) is amended to read:

(a) **Except as provided in (c) of this section, the** [THE] commissioner shall issue a permit if the commissioner finds that

(1) rights of a prior appropriator will not be unduly affected;

(2) the proposed means of diversion or construction are adequate;

(3) **the proposed water withdrawal does not materially harm habitat for sport, commercial, or subsistence fish when compared to the water level that would be present if no water withdrawal were permitted;**

(4) the proposed use of water is beneficial; and

(5) [(4)] the proposed appropriation is in the public interest.

* **Sec. 36.** AS 46.15.080 is amended by adding a new subsection to read:

(c) The commissioner may issue a permit for the appropriation of the minimum amount of water necessary for oil and gas development if the commissioner makes the findings required in (a)(1), (2), (4), and (5) of this section and makes a written finding that there is no alternate source of water from which it is feasible to make an appropriation with less detriment to fish and fish habitat."

Renumber the following bill sections accordingly.

Page 22, line 15:

Delete "sec. 40"

Insert "sec. 42"

Page 22, line 17:
Delete "sec. 40"
Insert "sec. 42"

Page 22, line 20:
Delete "sec. 40"
Insert "sec. 42"

Page 23, line 13:
Delete "Section 45"
Insert "Section 47"

Page 23, line 14:
Delete "sec. 47"
Insert "sec. 49"

2006 Northern Dynasty Mines Water Rights Applications to ADNR

1cfs = 448.83117 gal/min, or 639,117 gal/day

Upper Talarik Creek:

From: Pebble Project, Application for Water Right, Upper Talarik Creek, Northern Dynasty Mines, Inc, July 7, 2006

AMOUNT OF WATER

"This application is for all of the water up gradient of the proposed downstream limit of water extraction (DL-3 on Figure UT-1). At the 95th percentile of calculated discharge, this amounts to an annual average appropriation above the proposed downstream limit of water extraction of approximately 29 cfs. The basis for this volume of water is discussed below in the document:

Flow Estimates for the Upper Talarik Creek. This 29 cfs volume figure will be better refined as NDM continues to gather data.

The nature (type) of water use is described in the document titled: Beneficial Uses for Appropriating Water that is located on the last page of this "Attachments" tab section. This information is also included behind Tab 5 "Project Description." The water would be used all year (365 days).

Based on the present project development schedule, the expected date for water use to begin is approximately June 2010. The expected date for water use to be fully developed (maximum amount) is approximately November 2012." (Attachments, p. 2)

29 cfs ≈ 18.7 million gal/day

South Fork Koktuli:

From: Pebble Project, Application for Water Right, South Fork Koktuli River, Northern Dynasty Mines, July 7, 2006

AMOUNT OF WATER

"This application is for all of the water up gradient of the proposed downstream limit of water extraction (DL-1 on Figure SFK-1). At the 95th percentile of calculated discharge, this amounts to an annual average appropriation above the proposed downstream limit of water extraction of approximately 51 cfs. The basis for this volume of water is discussed below in the document:

Flow Estimates for the South Fork Koktuli River. This 51 cfs volume figure will be better refined as NDM continues to gather data.

The nature (type) of water use is described in the document titled: Beneficial Uses for Appropriating Water that is located on the last page of this "Attachments" tab section. This information is also included behind Tab 5 "Project Description." The water would be used all year (365 days).

Based on the present project development schedule, the expected date for water use to begin is approximately June 2010. The expected date for water use to be fully developed (maximum amount) is approximately November 2012." (Attachments, p. 2)

51 cfs ≈ 33.0 million gal/day

North Fork Koktuli:

From: Pebble Project, Application for Water Right, North Fork Koktuli River, Northern Dynasty Mines, July 7, 2006

AMOUNT OF WATER

"This application is for all of the water up gradient of the proposed downstream limit of water extraction (DL-2 on Figure NFK-1). At the 95th percentile of calculated discharge, this amounts to an annual average appropriation above the proposed downstream limit of water extraction of approximately 34 cfs. The basis for this volume of water is discussed below in the document:

Flow Estimates for the North Fork Koktuli River. This 34 cfs volume figure will be better refined as NDM continues to gather data.

The nature (type) of water use is described in the document titled: Beneficial Uses for Appropriating Water that is located on the last page of this "Attachments" tab section. This information is also included behind Tab 5 "Project Description." The water would be used all year (365 days).

Based on the present project development schedule, the expected date for water use to begin is approximately June 2010. The expected date for water use to be fully developed (maximum amount) is approximately November 2012." (Attachments, p. 2)

34 cfs ≈ 22.0 million gal/day

Total Water Reservation/Withdrawal Request:

Upper Talarik Creek	18.7 million gal/day
South Fork Koktuli	33.0 million gal/day
North Fork Koktuli	22.0 million gal/day
	73.7 million gal/day

Upper Talarik only small part of larger habitat

Posted: Monday, July 18, 2005

By HAL SPENCE
Peninsula Clarion

While Upper Talarik Creek is salmon-spawning habitat, it is not as important to fisheries as other creeks and streams in the Iliamna Lake drainage system, according to an Alaska Department of Fish and Game biologist.

Craig Schwanke, assistant Alaska Sport Fish Division area management biologist in Dillingham, said that the Upper Talarik is a spawning site for sockeye salmon, along with some kings and cohoes, all of which reach the sea at Bristol Bay. But it is Lower Talarik Creek, about 10 miles to the east, that has become world famous for rainbow trout in the fall, he said.

Nevertheless, the Upper Talarik draws its share of sport fish enthusiasts in search of rainbows, too, Schwanke said.

Both creeks are but small parts of the whole Iliamna Lake drainage that historically has been one of the largest sockeye producers in the world, although in the past five years escapement numbers have been down, Schwanke noted.

Northern Dynasty Mines Inc. is conducting numerous data-collection projects in and around its proposed open pit mine north of Iliamna Lake in an effort to learn all it can about area streams, creeks and rivers, including the Upper Talarik.

The data will help establish reliable scientific and socioeconomic baselines about such things as fish and game habitats and water resources, and their use by residents and visitors.

For instance, consultants working for NDM have been talking to local villagers, lodge owners and fishing guides to better understand sport fish use, said NDM's Environmental Project Manager Ella Ede. Subsistence use is also part of that study, she said.

Meanwhile, other fieldwork involves collecting water samples to establish the presence of trace elements such as arsenic and heavy metals. That baseline data would be used when comparing water samples from future monitoring surveys to determine if mining operations were having any negative impact on groundwater, Ede said.

The only hope of area residents was the EPA, which under the Clean Water Act has authority to nix the mine. Chythlook's corporation and nine federally recognized tribes asked it to assess how a giant strip mine would affect salmon.

The assessment, 15 months in the making and released last May, lambastes the project, reporting that even if everything worked perfectly forever (an impossibility), there would be major damage to fish and wildlife. But it also reports that the failure of pipelines transporting toxic mining concentrate across 30 salmon rivers and along Alaska's biggest lake—Iliamna—can be "expected." Most of the EPA's data, unlike Pebble's, have been peer reviewed by independent scientists.

"It's a good document," says Tim Bristol, Trout Unlimited's Alaska Program director. "It was a huge public service, because all we had before were giant volumes of data from Pebble without context. People had been completely overwhelmed and bewildered, and that was Pebble's goal."

But no sooner had the EPA released its document than Pebble and its allies screamed about being denied "due process." They had been denied nothing. They hadn't been regulated; the EPA had merely reported facts they didn't want the public to know. Representative Darrell Issa (R-CA), then chair of the Committee on Oversight, went so far as to accuse the agency of trying "to preemptively veto permits." Alaska governor Sean Parnell accused it of "federal overreach." Pebble called the document "rushed," "premature," and "fundamentally flawed." And it ordered, controlled, and paid for reams of alleged science from consultants that supposedly give the lie to all the independent research cited by the EPA. In a failed effort to prove that the EPA had stolen material from Trout Unlimited and the Natural Resources Defense Council, Pebble even paid Ecofish Research to use "plagiarism software."

Pebble and its hired EPA trashers express a minority opinion. Of about 204,000 comments the EPA received from around the nation, 200,000 (98 percent) approve of the document.

What the EPA didn't look at, because it wasn't asked to, was damage to Bristol Bay's nature and quality. The area would be converted from a remote wildlife sanctuary to an industrial park complete with roads, power plants, power lines, sewage-treatment plants, a deepwater port, and, at its heart, a sprawling toxic-waste storage facility. Once all that was in place seven other mining companies, with combined leases that would dwarf Pebble's footprint, would flock in.

The flow of humans would harm fish and wildlife at least as much as the flow of poisons. Thomas Quinn of the University of Washington, a professor in the School of Aquatic and Fishery Sciences who has studied Bristol Bay salmon for 25 years, offers this: "The roads would drain sediments into streams. Erosion under culverts would block fish passage. The huge human presence would include legal and illegal fishing and major impacts on subsistence. The whole region would change radically. . . . At present you can catch nearly 50 percent of the salmon every year and the system will keep producing. It's a biological perpetual-motion machine, free money and free food forever. From that point of view, if you were to pick the worst place in the world for this kind of mine, it would be right where they've got it."

Pebble's assurances fail to convince, and not just because its studies are nonsensical and warmed over. Both partners—Anglo American and Northern Dynasty—have a history of breaking promises and making untruthful statements.

Because Upper Talarik Creek contains some of the most sensitive trout and salmon habitat in the region, Northern Dynasty promised to stay away from it. "Fish come first," it chanted. It then applied for permission to dry the creek up by draining it into the tailings impoundment. And it drilled test holes in the watershed, fouling groundwater with toxic drilling mud.

Pebble claims that it has yet to file a plan and that, therefore, no one should speculate on dangers. But in order to apply for Talarik Creek water rights, Northern Dynasty needed a plan, and it applied in 2006.

Unlike other states, Alaska protects streams only if it finds fish in them. And, conveniently for Pebble, it rarely looks. So for a while no one could refute Pebble when it proclaimed that streams around the mine site are essentially worthless to salmon because they "typically freeze solid during the winter."

But then Carol Ann Woody, a Ph.D. research scientist who left the U.S. Geological Survey in 2006 to start her own fisheries consulting business, procured funding from The Nature Conservancy and started her own survey. She told me this: "Pebble was making claims I knew weren't true. I've worked that area since 1991, and those streams do not freeze solid; I have photos in the dead of winter—sub-zero temperatures for weeks—where you see open, flowing water. It's groundwater, and that's essential salmon habitat."

Woody and her team have surveyed 105 streams in and around the proposed mine site, documenting salmon in 75 percent and trout, char, and other native fish in 98 percent. They've even found salmon directly on top of the deposit. "Pebble hates that there are fish there," says Trout Unlimited's Bristol. "They're trying to get Woody's findings thrown out."

"Good luck with that," says Woody. "We've got photos and GPS coordinates."

Anglo American has consistantly promised not to mine the deposit without regional support. In 2011 residents of Bristol Bay's Lake and Peninsula Borough, which covers the mine site, voted for a "Save Our Salmon" initiative. Pebble is challenging the vote in court. The Bristol Bay Native Corporation, the largest private landowner in the region, voted overwhelmingly to oppose the mine. Now 80 percent of all Bristol Bay residents are opposed. But Pebble presses on.

"Every time we go to London we tell Anglo American's chief executive, Cynthia Carroll, 'Hold to your promise,' " says Kim Williams of the Curyung tribe, who directs Nunamta Aulukestai (Yup'ik for "Caretakers of the Land"), a group of Bristol Bay village corporations, tribes, and a regional corporation. "What part of no is not convincing