

AJ Mine Advisory Committee (AJMAC)

MINUTES

Wednesday, March 30, 2011
5:30 PM
Assembly Chambers

Committee Members: Donna Pierce (Chair), Kurt Fredriksson (Vice Chair), Rorie Watt (Liaison), Sam Smith, Maria Gladziszewski, Laurie Ferguson Craig, Gregg Erickson, Frank Bergstrom
Presenters: David Chambers

I. Call to Order

Pierce - Called meeting to order. This is the AJ Mine Advisory Committee of March 30, 2011. All members are present. The Mayor and Assembly Member Karen Crane are here – thank you for attending.

II. Agenda Review

Pierce – In the packet are some Small Mine Concept schematics, and the Economic Subcommittee report. Dave Chambers is here to give his presentation, and he will be available after the meeting to speak to anyone who would like to ask further questions. We will discuss the next stages, with the two meetings we have coming up. We have an outline to show you. Mr. Fredriksson asked for a copy of the NPDES permit, so it's in the packet, and we will have public testimony for 20 minutes at the end of this meeting.

Watt – Inadvertently omitted an index of news articles that Laurie submitted. It's on the website and is a good historical look on the AJ. It will be in the next packet.

III. Approval of Minutes

A. March 10, 2011 – Approved, with revisions.

IV. Items for Information

A. *Small Mine Concept Schematics*

Watt – We prepared the Small Mine Concept Schematics in the packet after Mr. Smith's presentation last meeting and the Economic Subcommittee. It's meant to graphically show the idea of the small mine concept. The idea of an underground mill and processes, including rock exiting the mine in various ways: rock products for civil construction work; easily separated gold that gets gravity separated; and a gold concentrate that gets shipped out of Juneau for further processing.

Erickson – It says 1,500 tons of rock products. Where does that come from?

Bergstrom – It's from the Echo Bay Small Mine Concept.

Smith – Most rock that is mined but not milled would be brought to the surface and would have value in Juneau and around SE Alaska, and maybe beyond. You wouldn't want to put the rock underground, it would reduce the space available underground for tailings.

Erickson – Doesn't want this to be considered a loophole to storing rock in the mountain.

Ferguson Craig – how many truck loads and what size trucks would be running in and out of the mine to haul 1,500 tons of waste rock.

Smith – I'd guess that there would be almost none on the public road system, depending on where the portal is. Truck sizes – 10 ton truck or bigger possibly.

Ferguson Craig – 150 truck loads a day is a possibility, and it will have a noise and storage impact, so it's something we need to consider.

Gladziszewski – Do we have calculations showing that there is room for 2,000 tons a day of storage inside the mountain?

Smith – Yes – study shows room for at least 15 million tons. Part would be existing spaces and spaces created by further mining. This could be a fairly conservative estimate.

Fredriksson – The information we have is all about what might be possible. A mine proponent would have to do all of the work to confirm the data.

Watt – The cross-section is meant to point out some of the salient geographical ideas that the small mine plan included. The idea was to, at the rock dump, drive a tunnel into the ore body for sea level access. Somewhere inside the sea level access would be the mill. Proceeds to point out the various features of the cross section.

Ferguson Craig – All of the Treadwell shafts are flooded, correct?

Watt – Yes, that is his understanding.

Smith – One of the shafts may not be flooded; there was one that stayed open for several years.

Ferguson Craig – To explain for people who might not know – in 1917 it collapsed because of their mining method and Treadwell flooded. Fortunately there was no loss of life. This basically caused the end of the Treadwell, because their mining methods took the support system out of the holes.

Watt – All of this information is meant to help show the mine in relation to the drinking water system. The water from the lower workings of the mine could come out the new lower adit.

Ferguson Craig – Can we get an AutoCAD 3-D version of this, showing the proximity to downtown and how everything relates to the mine?

Watt – Staff is working on this, but it's not complete yet.

Bergstrom – Suggests that the 1917 flood shouldn't be blamed on the mining method. They removed rock that shouldn't have been removed – it was more of a problem with the application of the method.

Fredriksson – The significance of this possible small mine concept is that it shows inner-workings that might drain to a new portal to be treated and then discharged into the channel.

Smith – Thinks that the drain tunnel should not be plugged, but that water can be kept separated between drainage and water used in the mine. Shutting off the drain tunnel would be easy for the city to handle but not easy for the mine to handle during high flow periods.

Ferguson Craig – We need to make sure we maintain the volume and quality of water flow into our water system.

B. Economic Sub-Committee Report

Fredriksson – Was Chair of the Sub-Committee; three meetings were held with Sam and Gregg assigned to the Sub-Committee, and Frank and Rorie also attended all meetings.

Watt – Two things came out of the Sub-Committee. First, Gregg drafted an introduction to the entire report, and second the Committee attempted to flush out the economic issues. We used the small mine concept and numbers from it – volumes of rock, royalties, ore grade, lease payments, and we tried to calculate that into what it would mean today. The stone issue, regarding selling it and how money is divided, is complicated, and is worth discussing more. We researched taxation on Kensington and Greens Creek and tried to use that to figure out the financial impact to the City budget.

Erickson – Used economic model to estimate indirect and secondary employment impacts. Estimated new jobs would not provide a huge impact on current employment in Juneau. A more significant increase in jobs would be in the government jobs. We also looked at the instability in the job market, since mining jobs are less stable, but the difference is not large and stability has increased recently.

Watt – Went through highlights of report.

Fredriksson – We recognize that this is one of many scenarios of what could happen with the mine, but we built this analysis based on the small mine concept, so we could work some numbers. There are many unknowns inherent in this, so everyone should remember that.

Erickson – Regarding the AJMAC report introduction, the case (small mine concept) we're evaluating is common to the other information we're including in the report, so it would make sense to put the basic description at the front of the report. Some people have come up to me and said we shouldn't be even looking at this, and it's a waste of time, and then there are others who might suggest we should just move ahead. I don't think the AJMAC members fall into either of these groups.

There were some people on the Sub-Committee that might have felt that we shouldn't be focusing on just one scenario, but I don't think that's the case. I think it will allow us to come up with a recommendation to proceed, from what I've heard. In doing that, the key is setting the sideboards. Regarding sideboards - we need to make sure concerns from the committee are considered for inclusion, and if they aren't included, we need to have a good reason for that.

Ferguson Craig – Did you consider the need for City staff to increase in order to perform necessary monitoring? There aren't federal staff to do this work anymore.

Erickson – Yes and no. No in that the economic model that produced 130 additional employees I used is based on past practices. Yes in that those kinds of jobs have been created in the past, so they can probably be included. Additional government jobs will be a wide range of jobs, so given the changing trends, it is hard to determine exactly. The government jobs mentioned in the report would be State and City jobs.

Ferguson Craig – If we had to hire experts at a fairly high salary, that would come out of our profit.

Erickson – The municipal budget would have to increase in order to manage the offering and development of the contract, and then its implementation.

Pierce – Regarding the royalties – did you use the royalty rates in the Echo Bay lease?

Watt – The Echo Bay small mine concept envisioned 780,000 ounces over 10 years @ \$1,400/ounce, then applied 2% of net smelter returns for the first 3½ years, then 3½% for remaining years. It probably should have been reduced for smelting and transport costs, so it might be about 8% too high, but it's just a gross calculation.

Pierce – So the 2% and 3 ½% came from the Echo Bay lease.

Watt – Yes.

Gladziszewski – What year is the Echo Bay lease that these royalty numbers were taken from?

Watt – 1984

Fredriksson – That return rate is an open issue that the Committee could advise the Assembly on.

Bergstrom – That rate should be the maximum that the market can support.

C. Presentation by David Chambers, Ph.D.

Chambers – He is a geophysicist by training; spent 15 years in the field, then spent another 20 years working in the non-profit sector. The Center for Science is a non-profit organization based in Bozeman, Montana. It provides technical advice primarily to public interest groups and governments on these issues.

Mining can be neatly divided into three components: economic, environmental, and social. The economic impacts from mining are almost totally positive. Almost all of the environmental impacts from a mine are negative. The social realm is a mixed bag, with some positive and some negative impacts. The area where these intersect is where we are interested in and how everything fits together. In his work history, he's tried to look at how environmentally responsible mining would work.

Industry standards come from several sources. [PowerPoint presentation elaborates] A critical thing with moving forward with standards that will really have an impact would be to work on getting multi-lateral involvement. There are still problems and controversy.

Responsible mining issues and criteria for the AJ Mine. [PowerPoint presentation elaborates] Regarding possible sideboards – how do you guarantee that they stay there? There's no obvious mechanism. The mining lease is not the mechanism to do that. It's a fundamental issue that needs to be addressed.

Strongly recommended against trying to use a net profits tax. Everyone who tries it fails. Keep it simple – stick with a net smelter royalty, which is an industry standard. The average royalty around the country is 4%. Variable numbers are more common in recent agreements. The challenge is determining what you are trying to do with this mine? If you are thinking short term, it's a lower net smelter return than thinking in the longer term – to increase Juneau's viability, i.e. increase Juneau's power supply capability. You'd want to increase the net smelter return and put some of it in reserves.

Erickson – The discharge permit that would be required at the portal or the little rock dump wouldn't require an EIS.

Chambers – Correct – the State now owns the authority and State law does not require an EIS.

Erickson – At what kind of slope would you recommend the net smelter return to start becoming variable. I'm familiar with a lower royalty early on when capital costs are high for the mine, but then it goes up.

Chambers – This is exceeding my pay grade, but there is a lot of information available about how royalties are structured, so you can get a lot of advice. It'd be good to research how other Alaska mines have them structured. The Red Dog mine is an interesting structure.

Ferguson Craig – Can you give us an example - what the Red Dog is using?

Chambers – It is a variable based on time, rather than price. It went to 4%. They're a land owner, so they're also receiving net proceeds tax. That's paying them 10's of millions of dollars right now. They didn't get any profit sharing until the physical plant was paid off. Once it was paid off they got 50% of the net profits. They got lucky because gold prices went through the roof and they were able to pay off the physical plant. For almost two decades they weren't getting anything from profit sharing.

Fredriksson – I'm interested in your comment about not being able to enforce sideboards through a lease.

Gladziszewski – And if the lease isn't the mechanism, what is?

Chambers – To use an example of underground tailings disposal. As part of your conditions of your lease with the mining company, the City Assembly includes underground tailings disposal. Ten years from now, the price of gold drops, and the mining company comes to the City and says they're going to have to lay off a couple hundred people, but if they can use Sheep Creek Valley instead, then they could keep going for a few more years. The Assembly that entered into the lease is a different body than the one considering this new proposal and could change the lease. You can't control what a future body is going to do with the lease. One possible option is to have an overseeing third-party commission or council, for instance a "Juneau Regional Advisory Council" that would need to sign off on any lease changes.

Gladziszewski – You don't think a permit can provide those assurances?

Chambers – No, because the permit can be changed at some later date if both parties agree.

Ferguson Craig – We have lost a number of the protections we had with A-J mine number 2, the Echo Bay version, and this is another version. So if we do not have the Federal Government to help us analyze, we don't have the experts they've provided in the past, nor any mechanism to ask them to pay for the kinds of studies we had last time to help us understand what was at risk.

Chambers – It's not that you lost the protections. It's just going to be more difficult to make this have the same level of evaluation that you had. Typically, mining companies pay for these evaluations – they fund the whole division in DNR. Money isn't the issue, but rather the need to have another set of eyes involved. There is an obligation on the part of the federal agencies to manage these processes, and that expertise doesn't exist at the City level and not even at the State level. If you try to pick it up at the City or State level, it will be challenging, since neither levels of staff have managed the process.

Ferguson Craig – NEPA allowed for more scrutiny and public participation. We're not going to have that same level of participation.

Chambers – There's a long list of what needs to be studied in an EIS that doesn't necessarily exist with a voluntary process. There's also an issue on how this participation works. Some of these conflicts won't be resolved until you get standards that are jointly developed.

Fredriksson – Appreciates that Mr. Chambers’ criteria apply to a different project than was proposed in the 1990’s. Maybe there won’t be as much of a need for the same level of environmental process, since the proposed project could be a lot smaller and have less impacts.

Chambers – That is a little more optimistic than he’d be. You don’t want to leave yourself open to criticism that you’ve missed something big. Limiting the scope helps, but it doesn’t settle all of the problems.

Fredriksson – The NEPA process is a defined process, and you suggested an equivalent public involvement process. Do you have any thoughts on that? Also, in consideration of the CBJ Large Mine Permit process.

Chambers – It’s not an easy answer. Last time there were a lot of Planning Commission meetings held. It was a pretty good vehicle. It was a good model.

Gladyszewski – I wasn’t on the Planning Commission at the time, but there were dozens and dozens of meetings. It’s not an EIS, but there were lots of people in the room and it’s something.

Chambers – There’s not going to be a clean process. In the end you hope everyone feels they got their say and they got a fair shake, even if they didn’t get what they wanted.

Erickson – You mentioned the Prince William Sound Advisory Council and the Cook Inlet organization. It’s my understanding that neither of those organizations has yes or no authority over change. They’re an independent set of eyes and can voice concerns. They don’t have any contractual veto power, I don’t think – is that correct?

Chambers – I am not sure about those two agencies and their powers. There are agreements such as the Stillwater Good Neighbor Agreement in Montana. It’s limited in scope, but it’s funded and has some teeth in it. Also there are other quasi-agencies in Canada that could provide some models. They would offer guidance.

Erickson – Your idea is intriguing, as a way of dealing with a political body some time in the future.

D. NPDES Permit

Fredriksson – I wanted to bring this into the record, since the City is responsible for the discharge into Gold Creek. It mentions monthly monitoring, but now that has been changed to annual monitoring.

E. Public Testimony

Larri Spengler – 4545 Thane Rd. President of Thane Neighborhood Association (TNA). The TNA would like to withdraw its March 26, 2011 letter. The committee process is very compressed which is hard on you and on the public. TNA has spent a lot of time coming up with specific recommendations to assist you in addressing neighborhood concerns, and we put that in the March 26 letter. We have since realized that they are premature, and we haven’t fully addressed conflicting concerns within our neighborhood and need to take more time to work that out within our membership. The March 8 letter is just historic information and is OK to keep in the record.

Margo Waring – 11380 N. Douglas Hwy. It had gone under her personal radar that this committee was actually looking at a proposal being put forward by members of the committee. She had thought it was a less specific endeavor. She has tried to catch up and has two concerns to share with the Committee. The first is about water quality and quantity. She appreciated Mr. Chambers’ statement that any proposal should be looking at no cyanide and that should be a bottom line thing. 25% of the City’s water supply comes through the existing mine works, and the well field that Juneau uses for water supply is quite shallow and easy to pollute. The last mine project, during its exploratory phases did put toxic products into our water supply, and the FBI report details

those things pretty well. We need to realize that Juneau does not have an alternative water supply. Given the extent to which accidents can and do happen, i.e. the awful situation in Japan, if any mining project is allowed to go forward, there should be a bond put forth that would be big enough to use to develop an alternative water supply. A decline in the productive capacity of the water supply or the quality could stop this community in its tracks. The economic downfall could be really harmful. The funds should come from the developers, not the citizens. Why would the City want to be party to a lease? What is the lasting community value? Suggests that you explore much higher royalty payments, in the 10-15% range.

Douglas Mertz – He's spent most of his professional life dealing with cleaning up disasters, and knowing what that can do to communities. It's critical that two things happen to avoid two disasters striking. First is showing a financial responsibility, i.e. bonding, insurance, similar mechanism so that when a problem happens, the money is eventually available. That could be years, but with the water supply we can't wait for that money to become available. With our water supply, we need to have a contingency plan that would make money available immediately to address the situation. That means a lot of up front money and financial responsibility. It's something that will hurt the project proponent, will hurt the community when they have to figure out how to do this, to develop other water sources. It's something we have to do if we don't want to face the ultimate crisis. There are lots of examples across the country where communities have been left with problems after the mine left. Second, develop good long term relations with the public. He's been the legislative monitor for the Prince William Sound Regional Advisory Council for about 12 years. He has a great admiration for what they do. They've become a model among their smaller counterparts in Alaska. They're a very good model for involving members of the public in day-to-day operations of the mine. It can be used as a citizen's council to perform the function of being an independent, enforceable voice. He's available to discuss the details of how we might form such an organization.

Paula Terrell – 5025 Thane Rd. Her major concern is that no matter what the conditions are in a potential lease, if things change, such as the tailings can't fit underground, if changes could go through a citizen's group. The formation of a citizen's group would provide some level of comfort about possible changes. Some changes could be very detrimental, in the viewpoint of the community. The community is one of the three components that is absolutely critical to be included and to have a say in the project. She urges the Committee to come up with specific recommendations and conditions.

Skip Gray – 4464 Mountainside Dr. To correct/add information from earlier in this meeting and in previous meetings about the amount of flow from the drainage tunnel into Gold Creek. 10% might be the average, but in the winter, during low flow, it contributes 25% to the flow of Gold Creek. Sam has talked about taking some of the water from Gold Creek and using it for processing, but in the winter time there is very little water to divert. According to City Engineers, there is only about 2 weeks of water in the city's aquifer. That's a problem. We can't afford to take any water from there during the winter months. There maybe water available during certain times, but not during winter months. There should be a zero loss of water. If anyone has any doubts about the connection between Gold Creek and our aquifer, Bob Madsen with Dept. of Environmental Conservation went up there in 1994 after the famous fish kill. At about 7am when much of Juneau was taking their showers, he watched the creek get dry to the point that there were fish flopping on the gravel. There's a very direct connection. The level can go down in a hurry. The FBI reports show that water levels were not well controlled by Echo Bay; there was major flooding in the areas they were working in, and they were washing pollutants into Gold Creek.

Gladziszewski – What bad water could get where?

Skip Gray – Echo Bay was allowing sewage, hydraulic fluids, sediments, drilling grease – all these different things to flow into Gold Creek. Perhaps if this had happened during the low flow times, it could have been sucked down into the aquifer.

Ferguson Craig – Where could we look for another water supply?

Skip Gray- Don't know, as we are now, this source is critical.

Break

F. Draft Report Discussion

Pierce – Rorie is writing the information part of the report in neutral voice. Rorie and I will provide an outline to you around the topic areas we've discussed. Everyone will send comments, suggested conditions, etc. to she and Rorie, and they will consolidate. At the April 7 meeting, we'll go through the language. It doesn't require the Committee to agree on everything but rather would provide a pretty clear indication on where there's agreement.

Watt – The outline includes the broad categories that have been discussed.

Gladyszewski – We will need to get comments back to you ASAP, given the April 7, and then there's public comments on April 21, so we will need to get together for another meeting after that.

Ferguson Craig – There are a number of topics on this outline. For example, looking back to work done in 1993 regarding noise levels. Is this the type of detail we need to provide?

Pierce – No. With the knowledge we have and in the limited timeframe we've been given, we need to answer the Assembly's charge. It is going to be very preliminary. The report will be qualified in what we say, acknowledging that.

Gladyszewski – People want very specific statements, but given the amount of time we've been given, what is the level of detail. The statements on the list provide by Dave Chambers seems to be more the scale of magnitude.

Committee is in agreement.

Pierce – We'll incorporate everyone's comments into the report where there are commonalities, and also we don't want to lose everyone's individual comments. Comments to be turned into Rorie by the morning of April 5.

Ferguson Craig – Fears they have drifted away from their mission of “under what circumstances if any,” but instead are evaluating a reduced version of an Echo Bay plan. She objects to the idea that this is a small mine. It's not a small mine, but only smaller than the one proposed before. Suggests not to call it Small Mine Concept, but rather call it AJ, perhaps AJ3, with AJ1 referring to the historic mine, and AJ2 referring the Echo Bay attempts. We need to think about this not being the only thing that will be looked at. This is not a mining plan, and someone might come in with a much different concept.

Smith – Agrees that the word “small” probably shouldn't be used either, because small is a relative term.

Fredriksson – If we fill in this outline, we might work towards coming up with another name. The outline doesn't refer to size or specifics.

V. Next Meeting Dates and Future Agenda Items

Next meetings:

- April 7 – Work Session

- April 21 – Public Testimony
- April 28 – Final Meeting, potentially

Agenda Items:

- John Hartle, City Attorney discussion of Large Mine Ordinance
- Draft Report Discussion

ADJOURNEMENT at 8:20 p.m.