

Project Name: Pebble Project EIS
Date: November 19, 2019
Time: 8:30am-5pm
Location: The Megan Room, 6591 A Street, Anchorage
Subject: Cooperating Agency Technical Meetings, Day 2
Introduction: Safety, housekeeping, Opening remarks

Attendees and Affiliation:	
AECOM and subcontractors	Bill Craig, Elizabeth Bella, Jessica Evans, Jon Isaacs, Allison Payne, Dan Delaney, Sasha Forland, Nancy Darigo, Cara Wright, Lindsey Flagstad, Arika Mercer, Tom Damiana, Tara Bellion
ACHP	No attendees
BSEE	John McCall
Curyung Tribal Council	No attendees
EPA	Molly Vaughn, Matt LaCroix, Palmer Hough, Jay McAlpine, Patty McGrath, Sue Detwiler, Michael Kravitz, Don Clabaugh
LPB (Jade North)	Bob Loeffler
Nondalton Tribal Council (represented by NARF)	Wesley Furlong
NPS	Sharon Kim, Kerensa King, Paul Burger, Mark Sturm, Deb Cooper, Brooke Merrill, Kelsey Griffin
State of Alaska (SoA)	Kyle Moselle, Gary Mendivil, Ted Otis, Josh Brekken, Brock Tabor, Jessie Jack, Mark Smith, Jason Brune
USACE	Shane McCoy, Katie McCafferty, Sheila Newman, Heather Markway, Emily Vullo, Jennifer Moyer, Jason Berkner, William James, Birdie Budnik, Lt. Colonel Bloedel
USCG	David Seris
USFWS	Douglass Cooper, Catherine Yeargan, Melissa Burns, Jennie Spegon
PHMSA	Robert Guisinger

Agenda/Discussion:
<p>Morning Session – Air Quality</p> <p>USACE – review of yesterday's notes; discussion of whether to evaluate a larger dam failure (e.g. Lynker study)</p> <p>Mine site and port area impacts SOC: <i>Air Quality – Ambient Air Boundary (Row 11)</i> Summary of comment: location of ambient air boundary was arbitrary. AECOM – explained that ambient air boundary set at limit of public access (i.e. mine site safety zone) and as this first point of public exposure, it is considered an appropriate location at which to monitor air quality EPA – recommend that the mine site safety zone be better defined in the EIS; how established and enforced; receptor boundary is in correct spot and matches what the company will be able to enforce. Action Item: Define how the mine site safety zone was established and how it will be enforced in Chapter 2 of the EIS. Include figure showing the boundary. Description and figure included in RFI 58. May need follow-up RFI with PLP to clarify enforcement.</p> <p>SOC: <i>Air Quality – Source Emissions and Impacts not Described (Row 21)</i> Summary of comment: that certain air emissions were not analyzed. AECOM explained that the emissions cited were analyzed, but perhaps not easy to find in the document. Action Item: AECOM to review PDEIS with eye toward making sure air emission RFIs and air emissions analyzed are clearly referenced and identified in the EIS.</p> <p>Modeling/emissions inventories SOC: <i>Air Quality – Air Emissions not Quantified (Row 8)</i> Summary of comment: suggestion to include more types and sources of greenhouse gasses.</p>

AECOM - while direct emissions of greenhouse gasses from mine operation and closure were included, it is not possible, reasonable, or useful to include everything (example – non-project ship traffic distant from the project). Noted also that some of greenhouse gasses were analyzed under cumulative impacts and thus are not listed under the individual alternatives. No change has been made to the EIS in response to this SOC

SOC: Air Quality – Air Emissions Updates (Row 9)

AECOM – per request in the comment, emissions inventory has been updated in accordance with MOVES model, emissions went down as a result of this update.

SOC: Air Quality – CAA Title I Only Modeling (Row 14)

Summary of comment: how was level of modeling selected, concern that modeling was not granular enough. AECOM explained that level of model selected in consideration of baseline ambient air conditions, applicable regulations, and ability to meet standards; feel that modeling meets need, no changes made to EIS in response to this comment.

ADEC – concerned that assertions about modeled emissions were misrepresented as below standard, when in fact many of these emission sources (e.g. mobile emissions) are not required to be monitored.

EPA – questioned if it is appropriate to use state monitoring requirements as a screening tool for types of emissions to be monitored. Specific concern regarding high annual NO_x modeled at port components.

EPA – noted that it is not valid to screen out emission sources when conducting a cumulative analysis; appreciated the inclusion of fugitive emissions. Also cautioned against considering project component emissions as the only emission sources in local airsheds when conducting a cumulative analysis. Explained that while SoA can require NO_x monitoring under certain conditions, and with high annual NO_x modeled, it would be appropriate to model 1-hour NO_x emissions at the ports.

AECOM – responded that they felt comfortable with screening criteria employed, and the separation of project components in cumulative effects of emissions. Regarding modeling of NO_x, model is not sensitive enough to detect 1-hour emissions, would essentially violate model assumptions, thereby requiring new modeling parameters and considerably more iterations of model runs.

ADEC – noted that the request to monitor 1-hour NO_x is unusual and typically evaluated on a case-by-case basis, thus cannot at this point say whether monitoring would be required.

BSEE – as pipe laying would require vessel support, recommended considering modeling air quality for vessels operating on the outer continental shelf (OCS) during construction

USACE – would probably be a stretch to require for USACE's public interest review. Anything else in the conversation to consider?

EPA – clarified that their primary concern behind NO_x modeling was idling of vessels while in port, which could possibly be mitigated.

USACE – could this be addressed through mitigation rather than additional modeling?

EPA - Yes

Action Item – check which mitigation measures PLP has committed to regarding air quality at the ports.

SOC: Air Quality – Modeling Methodology (Row 20)

Summary of comment: that models were not conservative enough.

AECOM feels that additional conservancy would decrease model representation.

EPA – corrected that comment is directed towards on the assumptions made for EPA's open pit modeling of emissions at mine site rather than the conservatism of those assumptions. Concerned that current approach could underestimate impacts; suggestion would be to apply a more realistic approach to simulate actual conditions.

EPA – overarching comment on EIS is that when models are used it is important for the public to understand the accuracy/certainties.

Action Item – describing what the basic modeling assumptions are and add general statement explaining uncertainty and accuracy associated with EPA open pit model, making reference to the document that contains the evaluation of the model (air mod implementation guide).

AQRV impacts to sensitive areas including Tuxedni Wilderness Area

SOC: Air Quality – AQRVs at Tuxedni Wilderness Area (Row 12)

Summary of comment: concern was that analysis was not sufficient for Tuxedni and Denali Wilderness areas.

AECOM explained that emission levels (informed by Q/D screening approach) at those distances did not merit

further analysis of impacts.

SOC: Air Quality – Class I Area Impacts (Row 15)

Summary of comment: concern was that Class I increment impacts not predicted for Tuxedni Wilderness area.

AECOM explained that again, Q/D screening approach informed decision not to analyze for Class 1 impacts.

EPA – commented that it was not clear how much of text made it in to EIS to clarify the use of the Q/D screening approach

AECOM – realized there was some confusion regarding distances applied; only revised language to clarify distances being used. Q/D approach is addressed in RFI 009 and some details incorporated into the EIS Appendix K.

EPA – noted Appendix K included more detail for Denali than it did for Tuxedni; recommendation to pull information on Tuxedni into the Appendix to balance discussions

AECOM – More about the fact that there are numbers to compare at Denali vs data available for Tuxedni.

Action Item: Clarify in EIS that disparate level of analysis between Denali and Tuxedni relates to the greater availability of air quality monitoring data at Denali relative to Tuxedni.

USFWS is responsible for Air Quality at Tuxedni, and as such would support the suggested clarification in EIS

ADEC – Are emission sources outside of project area considered in assessment of air quality at Tuxedni?

AECOM – does not believe that individual sources in Cook Inlet could aggregate to cause significant direct or cumulative impacts.

EPA – suggested identifying which emissions were present before and after the collection of baseline air quality data.

AECOM – voiced concern regarding the difficulty in capturing incremental sources accurately

Action Item: For the PFEIS, summarize why a cumulative Class I increment analysis was not conducted at Tuxedni and update the SOC response as appropriate; keep the discussion at a level that is value added to the public.

AQ impacts of alternative and variants

SOC: Air Quality – Alternatives Modeling (Row 10)

Summary of comment: request to apply air quality modeling to each Alternative.

AECOM explained that there is no major difference expected among alternatives with respect to emissions. For this reason, modeling was not applied outside of Alternative 1; discussion of differences among alternatives has been augmented to address differences in meteorology and topography among port locations.

EPA – main outstanding question is the ports and whether or not the modeling done for Amakdedori is representative of Diamond port?

AECOM – Modeling has been completed and the differences between the sites is enough to conclude that impacts at Diamond Point would be higher. Not able to say how much higher but the project would be required to comply with standards.

SOC: Air Quality – BBNC Issues with the Analysis Approach (Row 13)

Summary of comment: requests efforts to make the document more readable, questions the use of proxies for modeling of air impacts, questions the use of state requirements as a mechanism to screen out types of emissions analyzed.

Consensus that issues have been properly addressed.

Fugitive Dust and Dust Deposition

EPA – agency appreciates and is aware of conceptual FDCP but has not had a chance to review

SOC: Soils – Copper in Dust (Row 483)

Summary of comment: concern that Cu was not included in original deposition modeling.

AECOM explained that Cu has now been included in the analysis

SOC: Soils – Dispersion Model for Deposition (Row 484)

Summary of comment: request to provide additional explanation on selection of particle size and mass distribution.

AECOM explained that this data gap was satisfied by RFIs 009b and 141.

EPA – not clear how much information from the RFIs been incorporated into the EIS

Action Item – AECOM to check that the selection of particle size and mass distribution are supported by reference to RFIs 009b and 141 in Appendix K.

SOC: Water and Sediment Quality – Fugitive Dust Impacts (Row 666)

Summary of comment: concerns the additive effects of fugitive dust deposition and effluent discharges to surface water.

AECOM explained that they have modeled the mixing of fugitive dust and mine effluent using Frying Pan Lake as a proxy, information will be applied to other surface water bodies in the analysis area. Technical memo expected to be available sometime next week.

EPA – appreciates additional analysis and it interested in looking at analysis and the assumptions made about it.

SOC: Water and Sediment Quality – Fugitive Dust Mitigation and Planning (row 667)

USACE – requested an overview of Fugitive Dust Control Plan (FDCP)

AECOM – largely includes best management practices such as vehicle washing, low travel speeds, cleaning containers at port prior to transport back to mine site, etc. The most substantive mitigation is that vehicles will be dedicated to mine site, transportation corridor or ports (i.e. no tracking of mud from mine site on the transportation corridor).

EPA – did the plan talk about tailings management?

AECOM – yes; referred group to RFI 134.

NPS – does FDCP include measures to help mitigation potential dust into the benthic environment into the inlet; associated with loading concentrate containers.

AECOM – directed video provided in RFI 009c showing the proposed loading operations. USACE also sent link to meeting attendees from Day 1.

SOC: Vegetation – Fugitive Dust (Row 641)

Summary of comment: comment requests justification of the use of a 330-foot buffer distance

AECOM – explained that the distance is informed by literature (Prudhoe Bay Haul Road, Red Dog) which showed logarithmic decrease in volume of dust deposition with distance from the road – for Prudhoe not detectable past 330 ft; heavy metal deposition detected in moss 42 km away from road at Red Dog, however due to dust mitigation measures adopted by PLP, contaminant dust not expected to be an issue outside of mine site.

EPA – how was buffer applied around Mine Site? A figure showing how the buffer is being applied and how the model is being used would be helpful.

Action Item: Confirm that the buffer applied for dust at the Mine Site is clearly articulated in EIS; consider including a figure that illustrates the relative extents of the buffer and modeled extents of dust deposition.

EPA – directed group to Ambler Road EIS for application of buffers for dust.

SOA – Ambler Road DEIS coming out on Friday

Afternoon Session – General Topics

Cumulative Effects Analysis

SOC: Cumulative Effects Analysis – RFFAs (Row 144)

Summary of comment: – to include additional reasonable foreseeable future actions (RFFA)

AECOM – explained that more detail and explanation relating to the expanded mine site scenario has been provided by reviewing: documents applicable to the NEPA process, court cases relevant to project, identification of existing mine holdings in area, review of large projects nearing completion of permitting; also evaluated if infrastructure would facilitate expansion or follow on mining projects.

Action Item – AECOM to list changes made regarding expanded mine scenario in SoC response

SOC: Cumulative Effects Analysis – Expanded Mine Scenario Description (Row 112)

Summary of comment: request for addition of detail on the expanded mine development scenario such that impacts can be evaluated.

AECOM – explained that this data gap satisfied in part by RFIs, effort made to make discussion as quantitative as possible, revised use of spatiotemporal terms.

USFWS – what percentage was used for expansion?

AECOM – scenario based on developing 55% of the known mineral resource over 78-year period; assumes same expansion scenario regardless of final selection of EIS alternative.

SOC: Cumulative Effects Analysis – Contradicts Past Conclusions (Row 101)

Summary of comment: agencies should avoid contradicting past agency findings, avoid implication that project is permissible.

AECOM - explained that cumulative effects are based on RFI 62

NTC – issue alluded to in comment is moot now that 404c proposed determination of impact to special aquatic resource, has been withdrawn, notes the drastically different conclusions drawn from EPA (Bristol Bay Watershed Assessment) and USACE (EIS, evaluation of impacts to the environment); also, that response to SoC is explanatory but is unlikely to appease public concern.

EPA – watershed assessment was a risk assessment of a hypothetical project, whereas NEPA process evaluates a specific project; EPA has not reached a determination if this is a project they would elevate on the 404 side.

Previous watershed assessment has no bearing on EPA's current permit decision making process. EPA – voiced general concern that the assumptions and analytical framework is different in watershed assessment and the EIS. Suggest identifying specific areas where BBWA addresses something different than the EIS and point that out. Address why there appears to be difference in each subject area (i.e., cumulative effects). Not always different facts but different assumptions.

Action Item: Revisit response to SOC Cumulative Effects Analysis – Contradicts Past Conclusions; USACE to work with EPA on specific language to use.

SOA – applicant involved in an iterative process, currently proposed project now differs from that previously evaluated.

SOC: Cumulative Effects Analysis – Compounding Factors Not Considered (Row 99)

Summary of comment: fails to evaluate compounding effect of individual stressors, effects not extrapolated to ecosystem processes or the landscape scale.

AECOM – explained that these were evaluated in various sections of EIS and also as cumulative effects.

NPS – concerned that is no treatment of the accumulation of toxins in surface water over time, noting that this a system with low gradient streams and abundant wetlands, thus ripe for the accumulation of contaminants

AECOM – looked at likelihood and magnitude of contaminants that enter the human environment and implications to other resources such as human health. Was this a comment on the DEIS? Trying to understand specific comment and what quantification is being requested.

Action Item: Contaminants in system. Need to take a closer look at this and the specific comments regarding contaminant loads on the DEIS prior to responding.

ADEC – cautions analyzing merely because data is available, noted the importance of comparing modeled levels to the maximum levels/concentrations the EPA and State set for water quality criteria for the protection of human health

EPA – was there any discrete effort to model the chronic effect of exposure to toxins or the bioaccumulation of toxins?

LPB – highlighted long-term biomonitoring efforts at Red Dog, Greens Creek, Pogo as reference, might help determine whether this sort of analysis would be helpful for Pebble

ADFG – offered that the state has four years of water quality, fish, macroinvertebrate monitoring data available for Pebble. At Greens Creek, Pogo Mine, and Red Dog biomonitoring has been occurring since 1989 in benthic environment and for fish. Good to look at the existing data; available on ADNR website.

SOC Climate Change – Cumulative Effects (row 57)

NPS – question on how treatment of climate change has changed between DEIS and PFEIS

AECOM – plans to clarify language in climate change SOC responses to reflect current guidance

SOC: Cumulative Effects Analysis – Impact Metrics and Details (Row 115)

Summary of comment: suggests a more quantitative approach to cumulative effects.

AECOM – explained that this is being done to the extent possible, specifically by the inclusion of GIS analysis and definition, consistent use of terminology such as temporary, permanent, secondary etc.

USFWS – recommends quantifying cumulative effect through a table presenting various development scenarios by affected resource summarized by affected acreage

Action Item – consider a subsequent work session on appropriate ways to quantify cumulative effects by ecosystem process and at landscape level.

NPS – suggests expansion of invasive species discussion to all taxa, specifically inclusion of monitoring and rapid response

AECOM – discussion has been expanded, satisfied by Invasive Species Management Plan, RFI 133

USACE - Roundtable for any other concerns or questions on cumulative effects

Alternatives

SOC: Proposed Action and Alternatives – Reasonable Range of Alternatives (Row 395)

AECOM – explained that alternatives have been presented and screened in Appendix B; RFI 121 addressed the practicality of combining the southern section of Alternative 1 with the northern portion of Alternative 2, which became the applicants preferred alternative

LPB – did statements by landowners for other alternatives make those alternatives not reasonable for the EIS?

USACE – does not address property rights issues, and although alternatives 2 and 3 could be considered non-practicable due to land ownership issues, these alternatives have been retained in the range of alternatives.

EPA – brought up previous comments about liner under the bulk TSF being evaluated as an alternative; lack of seepage collection system details made it difficult to confirm complete containment; realize this is addressed in RFI 109 series but need more time to review RFI responses. As they could not confirm 100% capture of groundwater, not prepared to decide on need of liner to contain contaminants; discussion deferred to tomorrow
EPA – requested discussion of mine site optimization in EIS, specifically what has driven the optimization proposed by the applicant?

AECOM – rationale for mine site optimization will be addressed in Chapter 5, mitigation, which is the applicant's demonstration of avoidance and minimization of adverse impact; response from RFI regarding Main WMP siting will be incorporated into Appendix B of the EIS.

SOC: Proposed Action and Alternatives – EIS Appendix B (Row 384)

Summary of comment: requests evaluation of additional transportation corridors

AECOM – explained that these are presented in Appendix B, discussion of concentrate pipeline necessary at Iniskin Bay to negotiate the steep topography that is prohibitive for heavy trucks.

EPA – concerned that the record does not reflect full consideration and dismissal of alternatives, requested additional discussion in the EIS. Seemed like there were contradictions between App B for proposed project and expanded scenario. Rationale in Appendix B is limited; record didn't demonstrate that there aren't additional alternatives for some components (example alternatives for Main WMP)

EPA – noted the efficiency of using existing infrastructure under an expanded mine site development scenario.

USACE – noted that the applicant would be subject to a separate NEPA process under the expanded mine scenario.

LPB – did letter from Pedro Bay apply to 78 year scenario?

AECOM – No change to 78 year scenario based on Pedro Bay letter

SOC: Proposed Action and Alternatives – Failure to address mine as proposed (ROW 386)

AECOM – noted that it is a natural for the applicant's project to change in response to operational and environmental optimization through the course of NEPA process

SOC: Proposed Action and Alternatives – Concentrate Container Wash Water (ROW 379)

SOC: Proposed Action and Alternatives – Concentrate Pipeline Water Discharge (ROW 380)

AECOM – explained that more information has been provided, however preference is to deal with the discharge of concentrate wash water during the State permitting process, PLP has committed to trucking water back to mine site for treatment if necessary.

EPA – Trying to point out that because this is processed water it cannot be discharged; if you cannot legally discharge the water then why is it being considered?

USACE: noted that this is directly in the SOA's authority and would like to hear from them on this.

EPA has seen RFIs on this and disputes them.

BIN: agreed to postpone discussion of concentrate wash water discharge until state representatives can weigh in

NEPA document versus ROD, LEDPA, special conditions/mitigation

SOC: Clean Water Act Compliance – USACE Has Not Determined Water Dependency (ROW 51)

Summary of comment: that EIS failed to make a determination of water dependency for the activity proposed

(CWA 404b1 guidance).

USACE – explained that it is their preference is to address this in the Record of Decision (ROD) as it is a confusing subject for the public.

ADEC – cites several recent oil and gas EISs that dispense with water dependency in a short paragraph under purpose and need, recommends doing so for Pebble

USACE: This is not a water dependent activity. What is the value of having this discussion upfront in the EIS when general population is not concerned about this determination? Can add the statement but it doesn't have context. What does it mean to the general public?

EPA – If the draft 404(b)(1) will be an appendix to the FEIS then that seems like the best place for it.

SOC: Clean Water Act Compliance – USACE Did Not Determine LEDPA in DEIS (row 50)

Summary of comment: the EIS failed to identify the LEDPA in the EIS,

USACE – explained that the LEDPA must be identified in the ROD, has added clarifying language

LPB – suggests that identification of LEDPA in the EIS lends transparency to the process, providing this information sooner is invariably better

EPA – suggests that explaining the regulatory framework of the analysis in the EIS could lend clarity.

ADEC – specifically requested inclusion of LEDPA and water dependency in PFEIS

USACE – Ultimately the LEDPA decision needs to be included in the ROD. Caveat: just because there is a LEDPA doesn't mean it is permissible.

EPA – water dependency is typically discussed in relation to alternatives; regarding LEDPA – what is the harm in explaining to the public the regulatory process?

USACE: Can add discussion of water dependency but also describe when the decision is timely

SOA: advocates for putting water dependency and LEDPA determinations in the PFEIS. Including the state in those discussions can add value.

SOC: Clean Water Act Compliance – DEIS Did not Address Significant Degradation (Row 43)

USACE – explained that this is another requirement of 404(b)(1) guidance. Issue of when this conversation is appropriate.

EPA: Some EISs have too much of this information for the public but more recent EIS have appendices with a page or two with information on federal regulatory processes, which provides better balance.

EPA: Statements like 'an EIS is not a decision document' are misleading; RODs rely on EIS analyses and evaluation of alternatives. Deferral of determination of water dependency and LEDPA to ROD could be misinterpreted as a dismissal of public process

EPA: Do we need this information for the PIR or the 404(b)(1) guidelines?

EPA suggested a short explanation of regulatory framework be included as an appendix and referenced in Purpose and Need

Bonding

SOC: Bonding or Financial Assurance – Financial Surety Estimate Needed (ROW 33)

AECOM - at this time there is no intent to ask applicant for an estimate of the financial assurance amount.

USACE – explained that this falls under state purview. ADEC statutory requirements for a public notice. Matter of policy DNR jointly notices the reclamation plan as part of DEC's public notice process. ADEC solicits comments as part of the public notice and has the option of holding a public hearing.

LPB – would like to hear from ADEC

AECOM – noted that SoC responses on bonding were sent to SoA for review; directs group to SoA factsheet for large mine permitting

BSEE – contributed that BOEM would require applicant to set fee bonding (\$300K) prior to the ROW issuance from BSEE.

EPA – explained that bonding information is often included in EISs especially those with long-term water treatment obligations, this helps evaluation of closure and monitoring in addition to promoting public understanding, EPA does not feel that their concerns have been met. Offered to provide example text for a bonding agreement.

USACE: reiterated that the response does not address EPA's concerns. The regulatory framework is not enough.

SOA: state's position is that NEPA does not require disclosure of a cost estimate and that state's process allows strong confidence that bonding would be appropriate.

ADEC – reiterated the points made yesterday relating deferral to state authority: 1. this runs the risk of setting an expectation for public and other stakeholders 2. as well as holding the state to a federal decision. Notes that this project differs from other, recent large mining projects in the absence of a federal land management agency that would have financial assurance requirements. Confirmed that a public notice including cost estimates would be required for a reclamation plan. Cost estimation can but is not required to follow state guidance. Comments would be solicited during the public notice period. Notes that submission of bonding in the EIS stage is often driven by the applicant to better defend feasibility of the project.

Action Item – Bonding SOC slated for further discussion

Mitigation and Monitoring

SOC: Mitigation or Monitoring Measures – Compensatory Mitigation (Row 318)

USACE explained that they are required to identify the LEDPA, noted that compensatory mitigation would only be provided for a permissible project and that LEDPA is not necessarily permissible. USACE is expecting more opportunities for compensatory mitigation to be recommended by the applicant before the end of the year.

USFWS – how can impact be evaluated without a CMP?

USACE – while mitigation is part of the NEPA process, compensatory mitigation is external to the NEPA process; as further clarification, avoidance and minimization of adverse impact falls under NEPA, however compensatory mitigation addresses unavoidable adverse impact outside of NEPA

AECOM – noted adopted and suggested mitigation measures are provided in Ch 5 and Appendix M, respectively; Would BSEE or USCG require compensatory mitigation?

USCG does not require compensatory mitigation

BSEE – would need to check

EPA – will there be public notice and opportunity for comment on a future CMP? Notes that this would be a good mechanism to be responsive to the comment

USACE all options are on the table, but specific path forward has not been determined; will consider the suggestion.

Action Item – EPA and USFWS both request further discussion with USACE on Compensatory Mitigation

SOC: Mitigation or Monitoring Measures – Compensatory Mitigation Approach (Row 319)

LPB – interested in out-of-kind mitigation involving water quality improvements in villages (e.g., improvements to existing sewer lagoons)

USACE – what is meaningful compensatory mitigation for a project like this is still being discussed. Specifically, out of kind compensatory mitigation is being considered in accordance with the 2018 Memorandum of Agreement (MOA) between the EPA and Army (that provides guidance regarding flexibilities that exist in the mitigation requirements for Clean Water Act Section 404 permits, which among other flexibilities would allow out-of-kind compensatory mitigation).

USACE – has LPB put their comment regarding preference for out of kind compensatory mitigation in writing? noted that Nondalton is not interested in out-of-kind compensatory mitigation.

LPB – would need to check their comments

USACE - lots of things need to happen before we can have an intelligent conversation on mitigation.

EPA – What additional information is necessary to have a meaningful conversation about compensatory mitigation?

USACE – corrected that discussion of compensatory mitigation would be putting the cart before the horse.

Things need to happen in context and sequence

EPA – explained that as they need to remain focused on both NEPA and subsequent 404 permitting, they would appreciate a schedule for future discussion of compensatory mitigation. Common concern from agencies is when 404 processes will happen and when agencies will be engaged.

USACE – Nondalton recently asked for overarching schedule; may be a useful tool

Action Item – USACE will provide an overarching schedule that includes the steps in the 404 process; targeting mid-December.

General topic - Mitigation and Monitoring Methods

SOC: Mitigation or Monitoring Measures – Request for proposed management plans (Row 327)

EPA) – requests to see a draft of the Monitoring and Adaptive Management Plan (RFI 135) as they cannot determine if adaptive management and monitoring referred to throughout the EIS would be effective without a written plan (e.g., fish section).
 AECOM – noted that the AMMP has not been received from the applicant
 USFWS – Reclamation and Closure Plan addressed monitoring, but is limited to vegetation, USFWS has requested 21 plans most of which have not yet been developed
 AECOM – noted list of plans at end of SOC response, and that the revised CMP and Monitoring and Adaptive Management Plan have been requested but not yet received.
 Action Item: USACE to check and see what RFIs for management plans are still pending and when responses are expected.
 ADEC – would have liked to see more detail in directional drilling plan
 ADFG – do we have sufficient information to evaluate impact so that we can design appropriate mitigation?
 USCG – notes that Vessel Management Plan and other plans would be required, enforced by inspection.
 NPS – looking forward to reviewing RFI 135 Monitoring and Adaptive Management Plan to see if it addresses their comments regarding monitoring
 General sentiment that it is difficult for agencies to evaluate impact of the actions without considering mitigation.
 BSEE – looking into whether or not they would require compensatory mitigation of the applicant when do they need to get back to USACE?
 USACE - by end of week would be good.
 EPA – appreciative of inclusion of independent tailings dam review board in applicant-committed mitigation

Listening session and close

Action Items	
Topic	Actions
Air – Ambient Air Boundary	Define, in Chapter 2 of the EIS, how the mine site safety zone was established and how access will be enforced. Include figure showing the boundary. Description and figure included in RFI 58. May need to request a follow-up RFI to clarify enforcement.
Air Quality – Source Emissions	AECOM to review PDEIS to ensure air emission RFIs and air emissions analyzed for are clearly identified.
SOC: Air Quality – Modeling	Follow-up on specific measures adopted by the applicant to address air quality concerns associated with idling of vessels at the port in-lieu of additional modeling.
Air Quality – Modeling Methodology	Make sure EIS discloses basic modeling assumptions; add a general statement describing the uncertainty and accuracy associated with the EPA open pit air quality model, with reference made to the air modeling implementation guide.
Air Quality – Class I Area Impacts	Clarify in EIS that disparate level of analysis between Denali and Tuxedni relates to the greater availability of air quality monitoring data at Denali relative to Tuxedni.
Air Quality – Class I Area Impacts	For the PFEIS, summarize why a cumulative Class I increment analysis was not conducted for the Tuxedni Wilderness area and update the SOC response as appropriate. Keep the discussion at a level that is value added to the public.
Soils – Dispersion Model for Deposition	Confirm that specific references to the RFIs 141 and 009b have been incorporated into the EIS to support the selection of particle size and mass distribution used for dispersion modeling (Appendix K).
Vegetation – Fugitive Dust	Confirm that the buffer applied for the indirect effects of dust deposition at the Mine Site is clearly articulated in EIS; consider including a figure that illustrates the relative extents of the buffer and modeled extents of dust deposition.
Cumulative Effects Analysis – RFFAs	SOC Cumulative Effects Analysis – RFFAs: discuss changes made to EIS in the SOC response.
Cumulative Effects Analysis – Contradicts Past Conclusions	Revisit response to SOC; USACE to work with EPA on specific language to use.
Cumulative Effects – Ecosystem Level	Consider a subsequent work session on appropriate ways to quantify cumulative effects by ecosystem process and at the landscape level.

Cumulative effects – invasive species	Verify that the EIS has been expanded to include discussion of all taxa for invasive species and that information from PLP's ISMP has been incorporated to address concerns on monitoring and EDRR.
Bonding	Further discussion regarding a bonding estimate is needed.
Compensatory Mitigation	Further discussion on compensatory mitigation is needed.
Mitigation	USACE will provide an overarching schedule that includes the steps in the 404 process; targeting mid-December.
Mitigation	USACE to check and see what RFIs for management plans are still pending and when responses are expected.

Additional Notes

Parking Lot Items:

- Contaminants in system (cumulative effects)
- APDES – Concentrate container wash water