SO2 EEM Program Phase III Consultation - Public Comment Tracking Table

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Name	Organization	First Nation / Public	Date	Forum	General comments/questions	Topic	Reference: SO2 EEM Plan / Presentation / Topic	Page / Slide #	Rio Tinto Response
Ken Maitland	Kitimat First United Church	Public	29-Jun-22	KPAC Meeting	Asked if there were more details to share about the upcoming vegetation monitoring program including lichen species being monitored, how vegetation is being monitored, and the type of interaction being examined between vegetation and soil.	Terrestrial Ecosystems	June 29 KPAC Summary of Draft 2021 EEM Report Presentation, Terrestrial Ecosystems	N/A	Noted it will take multiple field seasons before patterns emerge. Stated that the proposed 6-year rotating panel will provide two sets of data points for each of the site. Added that vegetation monitored in 2021 exhibited no signs of visible damage due to SO2.
Ken Maitland	Kitimat First United Church	Public	29-Jun-22	KPAC Meeting	Expressed concern around the proposed 6-year rotating panel. Noted there is risk of damage occurring to vegetation during this timeframe. Expressed interest in an annual program.	Terrestrial Ecosystems	June 29 KPAC Summary of Draft 2021 EEM Report Presentation, Terrestrial Ecosystems	N/A	Explained that the Project Team will be able to observe visible damage from SO2 and fluoride, and that a closer look is not needed if specific visible symptoms are not present. If visible symptoms are found, there is likely to be a direct SO2 effect. Indirect SO2 effects are examined through soil analysis (which takes longer than visual observations). Visual observations will be reported on an annual basis. Vegetation monitoring program was designed to develop a plant biodiversity baseline to better identify trends/changes overtime caused by the effects of acidification (i.e., SO2).
Steve Stannus	KTCAC	Public	29-Jun-22	KPAC Meeting	Inquired about the locations of V23 and V22 passive monitoring sites.	Atmosphere and Human Health; Monitoring	June 29 KPAC Summary of Draft 2021 EEM Report Presentation, Atmosphere and Human Health	Slide 17	Confirmed the sites referenced are located near the water tower, by Terrace and along the highway.
Ken Maitland	Kitimat First United Church	Public	29-Jun-22	KPAC Meeting	Stated the slides around the Comprehensive Review (CR) Addendum are confusing without background information and suggested it is important to understand the change to modelling due to a correction in wind data. Suggested Rio Tinto should consider adding a slide or two to preface the data error and why reporting changes occurred as a result of this error.	Atmosphere and Human Health; Methodology	June 29 KPAC Summary of Draft 2021 EEM Report Presentation, Atmosphere and Human Health	Slide 5	Thanked Ken for the suggestion and provided background context around the changes to modelling due to a correction in wind data. Confirmed to drafting a slide showing the percent change with and without the corrected data.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if network optimization in 2022 referred solely to SO2 emissions.	Atmosphere and Human Health; Network Optimization	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slides 13-15	Confirmed it is not solely for SO2, but also includes other parameters such as pH.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if they will have an opportunity to visit the Lakelse Lake site and if the monitoring information at this site is related to other sites.	Atmosphere and Human Health; Monitoring	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slides 11-15	Noted monitoring information at the Lakelse Lake site is related to other sites in that that monitoring from a few lakes will inform predictions about similar lakes in the area. Tour of the Lakelse Lake soil monitoring plot and deposition monitoring station was held on July 8th with Trent University.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if the network review study is a parallel study for the KAG review in relation to network optimization and when this work will be completed and ready for review.	Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slides 13-15	Confirmed network optimization is reliant on Rio Tinto emissions and the KAG would have an opportunity to review this information. Noted the meteorological data error had delayed reporting and confirmed to share the report after it has been received. The error was due to the misalignment of the wind direction sensors. Added that the data error was corrected, the models were re-run, and the overall results saw very little change in the outcome of the Comprehensive Review.
Cheryl Brown	Lakelse Lake Watershed Society	Public	07-Jul-22	Meeting	Asked how the age of trees factored into samples sites regarding cyanolichen. Noted there are old growth trees greater than 250 years in age and second growth trees in the study area.	Terrestrial Ecosystems	July 7 Synopsis of Phase III Plan Presentation, Terrestrial Ecosystems	Slide 24	Confirmed terrestrial monitoring sites were first sampled in 2016 were determined based on locations with old growth trees as they are likely to have more cyanolichen. Added that the detailed plan for the terrestrial ecosystems component talks about the selection specific site-selection criteria.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Asked how the labour dispute and smelter restart will affect the monitoring data and if this data is reflecting actual emission levels.	Smelter Operations; Atmosphere and Human Health; Monitoring	July 7 Synopsis of Phase III Plan Presentation, Aquatic Ecosystems	Slide 30	Confirmed a reduction in emissions had been observed in the data from the labour dispute. Added that despite the labour dispute, SO2 emissions from the smelter have decreased over time. Field monitoring data is reflective of effects of actual emissions.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Expressed concern that acute and chronic monitoring would be showing different data and something needs to be done to rationalize that.	Monitoring; Methodology	July 7 Synopsis of Phase III Plan Presentation, Aquatic Ecosystems	Slide 30	Noted some receptors (e.g., lakes) react immediately to SO2, but others have a lag. Explained a cautious approached has been taken to not overstate SO2 effects from the smelter due to the labour dispute and will continue to monitor SO2 effects, especially given time lags.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Suggested Rio Tinto should be prepared to speak further to the difference between acute and chronic monitoring.	Monitoring; Methodology	July 7 Synopsis of Phase III Plan Presentation, Aquatic Ecosystems	Slide 30	Rio Tinto agreed to speak further to the difference between acute and chronic monitoring at a later date.

Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Asked about monitoring rainfall pH. Noted the Kitimat Liquified Natural Gas (LNG) plant was getting non-compliance warnings because of low-pH rainfall.	Atmosphere and Human Health; Monitoring; LNG Canada	July 7 Synopsis of Phase III Plan Presentation, Climate Change	Slide 31	Precipitation pH is monitored at the two precipitation chemistry stations. pH data is reported out in both the Atmosphere and Human Health chapter of the SO2 EEM annual report and the smelter's annual environment report for the P2-00001 Multimedia Waste Discharge permit.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if there are supply chain issues with calcined coke.	Mitigation - Examples of facility based mitigation	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Explained the time to adjust the supply of calcined coke has increased. For example, an approximate 16-month period would be required to obtain a contract with an independent calcined coke provider. Rio Tinto will look at the supply chain carefully when analyzing options for facility-based mitigations.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if that review is included in the implementation timeline for facility-based mitigations.	Mitigation	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Confirmed implementation timelines are forecasts that do not include such review.
Cheryl Brown	Lakelse Lake Watershed Society	Public	07-Jul-22	Meeting	Noted the potential delay in mitigation actions is surprising. Asked how responsiveness will be addressed if there are health impacts that need to be mitigated quickly. Expressed concern for SO2 cumulative effects and said developing a methodology that is responsive to exceedances in SO2 effects would be helpful.	Mitigation; Human Health Pathway; Cumulative Effects	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Confirmed discussions started last December with LNG Canada, the Ministry of Environment, and the Oil and Gas Commission. They agreed that Rio Tinto would pause until LNG Canada goes through their studies and permitting requirements to see what their potential SO2 effects are. Added that there will be many discussions about cumulative effects and how industry, the Ministry of Environment, the Oil and Gas commission, and First Nation communities work together to develop a framework for SO2 management this year and next. Expressed the importance to have these discussions. Confirmed if there was a current exceedance of a human health KPI, it would be directly from the smelter and therefore Rio Tinto would be responsible for addressing compliance and mitigation requirements. Confirmed Rio Tinto's desire to work in a timely manner and develop a framework that is responsive to exceedances in SO2 effects.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Human health monitoring cycles are 3 years in length and acute emissions today are not being addressed. New human health KPIs are required to address acute emissions. The existing three-year monitoring cycle speaks to chronic effects. People will be looking at information from monitoring stations, seeing a spike and expecting something must be done, but not understanding all of the background factors affecting human health impacts. Noted Rio Tinto is relying on three-year average which looks at chronic SO2 effects and there is a confusion between chronic and acute effects. Suggested Rio Tinto explain these terms to everyone. Stated the presentation was excellent, but not enough people understand what was presented. Noted a pulp mill was shutdown in response to emission concerns and people don’t get the same sense of action for the smelter.	Human Health Pathway; Monitoring; Methodology;	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Noted KPIs are set using the objectives that Environment and Climate Change Canada has established to protect human health. A commitment has been added to Chapter 3 of the SO2 EEM Phase III plan to either retain an air quality health expert to present on air quality objective setting for health protection or to co-sponsor an external organization to provide a session on air quality and health.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Recalled a three-year study or report on human health outcomes and asked for Rio Tinto to provide a refresher on how those results were calculated.	Reporting; Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slide 12	Explained Rio Tinto analyzed the 99th percentile of hourly SO2 concentrations. Noted the fourth worst day in each, during the three consecutive monitoring years, was found at the residential monitoring locations. Acknowledged that Rio Tinto is required to keep SO2 concentrations below 70 parts per billion (a threshold established by the Ministry of Environment). If this threshold is exceeded, Rio Tinto has three months to submit a mitigation action plan for implementation.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked why these results are not calculated and reported on annually versus every three years.	Reporting; Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slide 12	Confirmed SO2 concentrations are calculated each year and included in the annual report. Rio Tinto to share the 2021 annual report. Confirmed human health KPIs had been reported on every year since 2017.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if the S02 concentrations and human health KPI information is in the annual report.	Reporting; Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slide 12	Confirmed human health KPI information is available in the annual report.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	Expressed concern for reporting timelines. Suggested reporting is not timely if an exceedance does occur.	Reporting; Mitigation	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Confirmed if an exceedance is discovered, a three-month mitigation timeline is triggered. Added that mitigation efforts would begin promptly and reporting would continue at the same time.
Ken Maitland	Kitimat First United Church	Public	07-Jul-22	Meeting	It would be helpful to add Rio Tinto’s commitment to begin responding to SO2 exceedances once identified versus waiting to respond after the final report is prepared.	Reporting; Mitigation	July 7 Synopsis of Phase III Plan Presentation, Mitigation - Examples of facility based mitigation	Slide 36	Confirmed Rio Tinto's commitment to begin responding to SO2 exceedances once determined by the BC ENV Director.

Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Acknowledged lots of work is being done in regard to soil and water monitoring close to the smelter, but not air quality monitoring pertaining to human health close to the smelter or on the westside of Kitimat. Asked how Rio Tinto will incorporate the Industrial Avenue monitoring station, if required by the Ministry of Environment.	Monitoring; Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slide 13	Rio Tinto will incorporate an attainment station into the EEM Program, if required by Ministry of Environment.
Elisabeth Stannus	KAG	Public	07-Jul-22	Meeting	Asked if an attainment station data would be included in Rio Tinto's reporting.	Monitoring; Atmosphere and Human Health	July 7 Synopsis of Phase III Plan Presentation, Atmosphere and Human Health	Slide 13	Confirmed data from an attainment station would be included into the calculations for the human health KPIs.
Rob Goffinet	KHAG	Public	07-Jul-22	Meeting	Shared that civilians are interested, not just in Rio Tinto, but any emitter in town. Asked Rio Tinto to fill in community members about how LNG Canada will be regulated, studied, and in compliance similar to the smelter or point participants in the direction of LNG Canada (LNGC) contacts whom they can follow up with. Suggested the Ministry of Environment could set up and invite a representative from the Oil and Gas Commission (OGC) to join a future Rio Tinto session. Suggested the Kitimat Airshed also be included in that session because many members are interested in knowing how LNG Canada will be regulated.	Third Party Industrial Projects; Cumulative Effects	July 7 Synopsis of Phase III Plan Presentation, SO2 Cumulative Effects	Slide 39	Rio Tinto will be interested in participating in sessions organized by LNGC, BC ENV or the OGC.
Rob Goffinet	KHAG	Public	12-Aug-22	Meeting	Asked what the reasoning was for discontinuing or relocating Haul Road and what the dialogue was about for going back and forth about the service station site.	Atmosphere and Human Health; Monitoring; Methodology	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	The two components of monitoring at the Haul Road station are atmospheric concentrations of SO2, Particulate Matter 2.5 (PM2.5), and hydrogen chloride, as well as meteorology including temperature, windspeed, and wind direction. Haul Road also has a precipitation chemistry station that sends data to two laboratories for analysis. Results show the amount of acidic and basic deposition around the station. In the comprehensive review, Trent University found that measuring the deposition at Haul Road does not provide any beneficial information in terms of understanding the ecological effects of the deposition from the smelter. Atmospheric dispersion modelling does not rely on deposition monitoring at Haul Road. Rio Tinto needs to look at the value of long-term historical monitoring data at the station and issues around changes to industrial development in the Valley. Rio Tinto would like to understand these issues better and then have a discussion with the Ministry of Environment (BC ENV) on the benefits of continuing or relocating the precipitation chemistry station. Comments were made that relocating the precipitation monitoring station closer to Coho flats would be beneficial and there is interest in exploring that. Regarding the question about communications around the Haul Road station, BC ENV has issued a consultation review of an earlier decision for having the Haul Road station as an attainment station for human health KPI. This means air quality objectives would apply at the service center and it would become part of the SO2 EEM Program. Rio Tinto has responded to the BC ENV's invitation for consultation and has concerns about the time period for reviewing the data as the smelter has been in an unsteady state since the station has been set up. Preference is that data is collected during normal operations. BC ENV has sent back some clarification requests which Rio Tinto will respond to on August 15.
Steve Stannus	KTCAC	Public	12-Aug-22	Meeting	Asked about the passive monitoring component and what Rio Tinto's objectives are in looking at sampling locations on the east side of the Kitimat Valley.	Atmosphere and Human Health; Monitoring; Methodology	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	Part of the reasoning goes back to when Rio Tinto found wind direction data errors. There was a shift in the direction of the plume to the east of the Valley. One of the questions/comments raised by First Nations was that should Rio Tinto look at opportunities to sample from the east side of the Valley, which Rio Tinto is considering. BC ENV also raised comments about opportunities to do sampling along the Douglas channel. Rio Tinto recognizes there is a gap in data due to the challenge of accessing sites along the channel. Rio Tinto is looking for sites that meet the criteria along the channel and are in the path of the plume.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Asked how the results of the network optimization would align with KAG's network review and when to expect the network optimization study to be completed.	Atmosphere and Human Health; Network Optimization	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	The network optimization studies are independent of the KAG's review with the objective of understanding the network relevance in terms of emissions from the Rio Tinto smelter. Unfortunately, the network optimization final report is taking longer to produce due to issues with the discovery of the meteorological data errors. The report would then feed into the KAG's network review study to be able to holistically understand if there need to be changes to the network to meet the defined objectives of the KAG's study. Rio Tinto expected the reports last week, but unfortunately does not have it yet. Rio Tinto to share the Network Optimization Study when completed.

Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Asked if the (KAG) network review would inform the environmental monitoring program in the future.	Network Optimization; Atmosphere and Human Health	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	Correct. The SO2 EMP Plan looks at monitoring the effects of SO2 from the Rio Tinto smelter but also the combined emissions from the LNG projects. When the network review studies are completed, Rio Tinto will have a holistic understanding of the appropriateness of station locations, and if there is a need for relocation, then there will be a process to identify/incorporate those changes into the SO2 EEM Program.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Sought clarification around SO2 cumulative emissions. Asked if Rio Tinto is referring to cumulative SO2 emissions or overall emissions including other sources.	Cumulative Effects; Pathway to Mitigation	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	The SO2 program strictly examines SO2. When Rio Tinto references cumulative effects, they are referring to the combined Rio Tinto smelter, LNG Canada, and other LNG project planned for the Kitimat Valley.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Asked how Rio Tinto would determine sources of SO2.	Cumulative Effects; Pathway to Mitigation	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	In a hypothetical scenario where an exceedance of aquatic KPI was recorded, Rio Tinto would determine how much SO2 emissions contributed to emissions, work backwards from the exceedance to the deposition, look at permitted sources of emissions, and assign a proportion of responsibility to the effect. If Rio Tinto is responsible for 99% of emissions that caused the exceedance, then Rio Tinto would be 99% responsible for proportionally reducing the amount of emissions by 99% that caused the exceedance.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Expressed interest in learning more about how the determination of SO2 sources from combined emissions would work. Understood that there is discussion of a proportional reaction, but would be interested in other scenarios, not just in the event of KPI exceedance. Asked if information on this was in the report.	Cumulative Effects; Pathway to Mitigation	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	Confirmed this information is in the report.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Expressed interest in the Haul Road data as it has a wealth of information. Asked why Haul Road had never been mentioned as an informative indicator for human health. Understood it is fence-lined so it would not be considered a KPI according to regulatory policy.	Methodology; Monitoring; Atmosphere and Human Health	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	The Haul Road data is used for dispersion modelling and understanding fence-line concentrations of SO2. The Haul Road Stations' SO2 hourly concentration frequencies are presented in Chapter 2 with all the Kitimat air monitoring stations. This allows the comparisons of fence line SO2 levels.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Recalled information about mitigation agreements in the SO2 EEM Plan (V3), specifically the potential of a service center being installed. Noted this center was originally planned for October 2019 and was installed in April 2020. Suggested that the discrepancy be noted, as it the SO2 EEM Plan implies it was put in October 2019.	Methodology; Monitoring; Atmosphere and Human Health	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	Foot note added to indicate that data reporting started on May 12, 2020.
Ken Maitland	Kitimat First United Church	Public	12-Aug-22	Meeting	Expressed that, in terms of climate change, annual reporting does not add anything to the discussion. Suggested Rio Tinto be more specific with their reporting, like collecting weather data showing number of days above or below the average for the month. If there are extremes, like heat in the winter or cold in the summer, the average would not change. Suggested setting up a reporting system that captures extremes in temperature, wind, severity of storms, in terms of monthly averages to add sophistication to the climate change analysis.	Climate Change; Reporting; Methodology	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	Table 21 in Section 7 of the SO2 EEM Phase III plan has been adjusted to include: - Precipitation patterns (cumulative and storm depths) - Precipitation pH (weekly and annual average) - Air temperature against historical normals (seasonal, extremes and annual averages)
Emily Toews	KTCAC	Public	12-Aug-22	Meeting	Asked if the climate change component would include new Ministry of Environment guidelines as made available.	Climate Change; Reporting; Methodology	August 12 Follow-Up Sessions: SO2 EEM Phase III Consultation Presentation, Changes to SO2 EEM Plan	Slide 5	The intent of adding climate change to the SO2 EEM program is to understand the effects of climate change on SO2 monitoring results. BC ENV's regulatory/guideline changes are beyond the SO2 EEM Program. Rio Tinto does have a climate change program, Director of Climate Change, and looks at regulations and opportunities to reduce greenhouse gas emissions.
Elisabeth Stannus	KAG	Public	12-Aug-22	Meeting	Asked if the Human health KPI attainment status annual report could be shared with the KAG or if it was part of the annual environmental report issued each year. Sought clarification around this report's timeline.	Atmosphere and Human Health; Reporting	July 7 Synopsis of Phase III Plan Presentation [Review], Atmosphere and Human Health	Slide 12	The human health KPI report can be sent to the KAG and Shawn will follow up with her on the report when he returns to Kitimat.
Steve Stannus	KTCAC	Public	12-Aug-22	Meeting	Asked about the elevation of the far east passive air monitoring station near Lakelse Lake and when the stations in the north were initiated. Expressed interest in seeing how elevation affects the outcomes of SO2 data at new locations.	Atmosphere and Human Health; Monitoring	July 7 Synopsis of Phase III Plan Presentation [Review], Atmosphere and Human Health	Slide 13	The new locations on the map are approximation but ESSA has a spreadsheet with precise location data. The approximation is only for the new sites and all previous stations are precisely mapped with their coordinates. The sites up in the north show very low concentrations of SO2 even prior to the labour dispute and reduction in emissions and were initiated in 2021. Rio Tinto to send location and elevation information for the far east passive air monitoring station near Lakelse Lake to Steve.

Emily Toews	KTCAC	Public	12-Aug-22	Meeting	Recalled a mention of an atmospheric baseline that was very conservative. Asked if the person creating the conservative number is working in reflection to the productivity of Rio Tinto at that time.	Atmosphere and Human Health; Monitoring; Methodology	July 7 Synopsis of Phase III Plan Presentation [Review], Atmosphere and Human Health	Slide 15	The word conservative, as used, means that the models tend to overpredict SO2 concentrations rather than underpredict. Emissions from a given year were run through a CALPUF models to produce hourly predictions of SO2. The highest concentrations of SO2 for each day were used to see which was the fourth worst day. The model uses the actual estimated emissions from the smelter in each year.
Ken Maitland	Kitimat First United Church	Public	12-Aug-22	Meeting	Noted the terrestrial ecosystem component is important because of proposed LNG Canada operations that will be a major climate change influencer. Added that climate change will impact all the systems that will be monitored. Suggested a solid baseline will be helpful.	Terrestrial Ecosystems; Third Party Industrial Projects; Climate Change; Baselines	July 7 Synopsis of Phase III Plan Presentation [Review], Terrestrial Ecosystems	Slide 16	Agreed. The lowest class of levels of deposition will be most helpful in discriminating smelter effects. Additional control sites will also be added in the Kemano area. In terms of the LNG plants, ozone produced would have different effects than SO2 which might require field crews to look at different kinds of effects on plants.
Ken Maitland	Kitimat First United Church	Public	12-Aug-22	Meeting	Noted no mention of rainfall pH monitoring. Shared concerns that if rainfall pH is not monitored, downstream effects could be masked as change in rainfall pH would not be accounted for.	Atmosphere and Human Health; Climate Change; Monitoring	July 7 Synopsis of Phase III Plan Presentation [Review], Climate Change	Slide 31	Confirmed Rio Tinto already monitors and reports on rainfall pH, but will add specific mention of rainfall pH monitoring to the SO2 EEM Plan.
Emily Toews	KTCAC	Public	12-Aug-22	Meeting	Understood different types of cokes can be used at the smelter. Asked if Rio Tinto could purchase a better coke that produces less of an impact in the interim while waiting for different emission reduction technologies to become available/if data shows emissions need to be reduce.	Pathways to Mitigation; Smelter Operations;	July 7 Synopsis of Phase III Plan Presentation [Review], Mitigation - Examples of facility-based mitigation	Slide 36	Rio Tinto sets a target in sulphur content in the coke, and the global procurement group then tries to match the sulphur specification for Kitimat. If Rio Tinto sees negative trends in the effects of emissions that could lead to exceedance, Rio Tinto would carefully look at the coke supply.
Rob Goffinet	KHAG	Public	12-Aug-22	Meeting	Shared interest in understanding where Coho Flats is, what it looks like, and possibly having a tour of the site.	Terrestrial Ecosystems; Monitoring	July 7 Synopsis of Phase III Plan Presentation [Review]	Slide 39	Rio Tinto to arrange a tour of the Coho flats site as a future activity.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	NH supports that a cumulative effects approach is used when monitoring and managing SO2 (from various sources) in Kitimat.	Determination of Causal Relationship to BC. Works; Cumulative Effects	SO2 EEM Phase III Plan, Version 2, Section 8	N/A	Comment noted.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	Further emissions reductions to address a future KPI exceedance will only be made after all other SO2 emitters have proportionally reduced their SO2 emissions to in response to the first KPI exceedance. – Can you expand on this or provide more rationale? If, proportionally, it's determined that a subsequent KPI exceedance is due (even in part) to Rio Tinto operations, then Rio Tinto should be responsible for proportionally managing exceedances attributed to their project.	Atmosphere and Human Health	SO2 EEM Phase III Plan, Version 2, Section 9.2.2	Page 57	This section applies to the Terrestrial and Aquatic Ecosystems components. SO2 cumulative effects has been added to the SO2 EEM Phase III as a shared responsibility. Proportional emissions reductions for Terrestrial and aquatic ecosystems should be completed by all contributors before further emissions reductions are required by a single party.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	The addition of a climate change section is positive .	Climate Change	SO2 EEM Phase III Plan, Version 2, Section 7	N/A	Comment noted.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	The total SO2 permit reduction for the Permittee under this clause will not exceed 15 Mg/day. – Can you explain what this means?	Human Health Pathway	SO2 EEM Phase III Plan, Version 2, Section 3.3	Page 15	Emissions reductions will not go below the SO2 emission limit in the P2-00001 Multimedia Permit before it was amended to 42 t/d for the modernized smelter in 2013.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	The combined total amount of facility-based SO2 emissions for Rio Tinto will not exceed 15 Mg/d and the 2013 unamended P2-00001 Multimedia Permit limit of 27 Mg/d. – Can you explain what this means?	Pathways to Mitigation	SO2 EEM Phase III Plan, Version 2, Section 9.2.2	Page 57	Emissions reductions will not go below the SO2 emission limit in the P2-00001 Multimedia Permit before it was amended to 42 t/d for the modernized smelter in 2013.
Paul Tait	Northern Health Authority	Public	15-Sep-22	Email	Section 3 Human Health: NH asks that if the health KPI is exceeded that the management strategy also include timely and appropriate public education and recommendations for limiting health risk due to SO2 exposure. NH asks to be notified regarding health KPI exceedance and included in consultations regarding appropriate public education.	Atmosphere and Human Health	SO2 EEM Phase III Plan, Version 2, Section 3	N/A	Section 3.3 has been modified with the following: "The mitigation action plan will include public education and recommendations for limiting health risks. Health communications and recommendations will be developed in consultation with the BC Northern Health Authority."