

Proposed Northwest Territories (NWT) Air Regulatory Framework
What We Heard Document

Reviewer/Organization	Comment	Environment and Natural Resources (ENR) Response
General		
<ul style="list-style-type: none"> • De Beers • Environmental Monitoring Advisory Board • Mr. Kevin O'Reilly, MLA Frame Lake • Dominion Diamond • Rio Tinto (Diavik) • Gwich'in Tribal Council • Independent Environmental Monitoring Agency • Lutsel K'e Dene First Nation • Avalon 	<p>Consider building the air regulatory process into the existing land and water regulatory system.</p>	<p>ENR is working with Indigenous Governments and Organizations (IGOs), the Land and Water Boards (LWBs) of the Mackenzie Valley and the Inuvialuit Water Board (IWB) to evaluate the potential of integrating the air permitting process into the existing land and water regulatory processes.</p>
<ul style="list-style-type: none"> • DeBeers 	<p>Harmonize monitoring requirements with the existing land and water regulatory systems.</p>	<p>ENR expects that air monitoring requirements will be harmonized with the existing land and water monitoring requirements.</p>
<ul style="list-style-type: none"> • De Beers 	<p>Guiding Principle #1: Goal is atmospheric emission prevention.</p> <p>This goal should be redefined to consider that impacts are necessary to allow for sustainable growth in the NWT.</p>	<p>Pollution prevention does not imply elimination. Economic activity can and should proceed in concert with efforts to prevent and reduce air emissions.</p>
<ul style="list-style-type: none"> • Ecology North 	<p>Include carbon dioxide, methane, nitrous oxide and other greenhouse gases as pollutants to be regulated.</p>	<p>The intention is that the regulated parameters will include those listed in Appendix F of the framework: carbon monoxide (CO), fine particulate matter (PM_{2.5}), total suspended particulate (TSP), ground level ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), ammonia (NH₃), hydrogen sulphide (H₂S), benzene, toluene, ethylbenzene and xylenes.</p> <p>There are no plans to regulate carbon dioxide, methane, nitrous oxide and other greenhouse gases under this framework. However, ENR is currently developing a Climate Change Strategic Framework to determine how best to prevent, track and reduce greenhouse gas emissions in the NWT.</p> <p>Other parameters could be regulated as required based upon the specific circumstances of a development and a review of the air assessment submitted by the applicant.</p>
<ul style="list-style-type: none"> • Ecology North 	<p>Broaden the definition of air pollution beyond just point sources and include a greater variety of pollutants.</p>	<p>The Air Regulatory Framework already covers more than point sources. ENR will continue to participate in the ongoing development of the Canada-wide Air Quality Management System including participation in various working groups reviewing contaminants of concern. This, as well as continuous review of other jurisdictions, will inform any future changes or additions to the contaminants identified in the Air Regulatory Framework.</p>

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<ul style="list-style-type: none"> • Ecology North • Mr. Kevin O'Reilly, MLA Frame Lake 	All air regulatory documentation should be available publicly, possibly through the use of public registries, unless there is a requirement for confidentiality.	ENR expects that the air regulatory process will be subject to the same public registry approach that is currently used by the Boards, including provisions for the submission of confidential information.
<ul style="list-style-type: none"> • Environment and Climate Change Canada (ECCC) 	Negotiate an equivalency agreement with the federal government under the <i>Canadian Environmental Protection Act</i> (CEPA) to reduce regulatory overlap.	ENR is willing to discuss this matter further with ECCC, but at this time does not see the need for an equivalency agreement.
<ul style="list-style-type: none"> • Gwich'in Tribal Council • Inuvialuit Regional Corporation 	More consultation is required with aboriginal governments as this initiative advances through the legislative process.	ENR will be conducting additional consultation concerning the development of the Air Regulatory Framework. The timing, nature and content of consultation largely depends upon the progress and substance of ENR's regulatory integration discussions with the land and water boards.
<ul style="list-style-type: none"> • Inuvialuit Regional Corporation • Rowe's Construction 	More engagement is required with potentially affected businesses.	ENR is aware and understanding of the challenges that businesses face in the NWT and will take those concerns into account as it moves forward with this process. It is for that reason that ENR engaged widely in 2016 on the proposed Air Regulatory Framework and is closely reviewing and considering all comments that were received as this process moves forward. NWT businesses and business associations will continue to have opportunities to make their concerns known through ENR's public engagement efforts as this project progresses.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	Provide clearer rationales for the air permit and air registration thresholds.	The rationale for each air regulatory category, and thresholds within each category, will be further developed and clarified as this process moves forward.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake • Avalon 	Provide staff and costing estimates for implementing the air regulatory framework.	If the air permit process is incorporated into the existing land and water regulatory processes, cost and staffing estimates for implementing the air regulatory system will be a component of the regulatory integration discussions. If the air permit process is maintained under the <i>Environmental Protection Act</i> (EPA), needs will be determined, but existing staff will take on some responsibilities.
<ul style="list-style-type: none"> • Avalon 	Guidance documents must be provided for the air regulatory process.	Guidance documents will be developed as part of the Air Regulatory Framework. Parties will be provided with the opportunity to comment on draft guidelines prior to their final approval.
<ul style="list-style-type: none"> • Avalon • Tlicho Government 	Public engagement and consultation for the air permits should be consistent with that required for water licenses and/or land use permits.	ENR expects that the air regulatory process will be subject to the same public engagement and consultation approaches that are currently used by the Boards for processing and managing land and water regulatory authorizations.

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<ul style="list-style-type: none"> Fort Chipewyan Metis Local 125 	Include traditional knowledge holders in the setting of criteria.	The sources for each of the proposed criteria limits are identified in the Air Regulatory Framework. ENR will continue to participate in the ongoing development of the Canada-wide Air Quality Management System including participation in various working groups reviewing contaminant limits. This, as well as continuous review of other jurisdictions, will inform any future changes or additions to the contaminant limits identified in the Air Regulatory Framework. ENR will engage with IGO's and stakeholders at the time of any proposed changes to the contaminant limits.
<ul style="list-style-type: none"> Fort Chipewyan Metis Local 125 	Emissions during maintenance, shut-down and start-up periods should be included in the air emission regulatory process and monitored under an air permit.	If an air permit is required based on the type of activity, then all phases of equipment operations will be covered by the air permit.
Best Available Technology Economically Achievable (BATEA)		
<ul style="list-style-type: none"> Fort Chipewyan Metis Local 125 Dominion Diamond 	Provide clarity on how "economically achievable" will be determined.	ENR will examine the matter in more detail during the development of the air regulations using best practices in other jurisdictions to guide our approach.
<ul style="list-style-type: none"> Dominion Diamond 	BATEA should focus on major pieces of equipment to reduce the administrative burden on permit holders.	BATEA requirements would not be restricted to just major pieces of equipment. All emitting equipment listed in Schedule C will be subject to BATEA if it is part of a project that requires an air permit under Schedule B.
<ul style="list-style-type: none"> Dominion Diamond 	ENR needs to clarify if BATEA will apply to contracted equipment.	All emitting equipment, including contracted equipment, listed in Schedule C will be subject to BATEA requirements if it is part of a project that requires an air permit under Schedule B.
<ul style="list-style-type: none"> Rio Tinto (Diavik) 	Instead of BATEA, ENR should set performance standards with which operators are then required to comply.	While the development of source performance standards for specific types of equipment may be part of the air regulatory system, just setting performance standards with no BATEA requirement would not be consistent with the Canadian Council of Ministers of the Environment (CCME) principles of Continuous Improvement and Keeping Clean Areas Clean. BATEA protocol is a tool to create continual progress in lowering air emissions through the adoption of more advanced control technology.
<ul style="list-style-type: none"> Rio Tinto (Diavik) De Beers Northland Utilities Limited Avalon 	ENR should prepare and provide a BATEA guidance document that may include a list of "preferred" equipment types or features, as well as a screening process to assist proponents in this process.	While there will be a guidance document on how to implement BATEA requirements ENR does not intend to include lists of BATEA equipment. Equipment selection will remain at the operator's discretion. Adherence to BATEA requirements would be demonstrated by the proponent in the air permit application. If the Minister has reasonable grounds to believe that BATEA requirements are not being implemented, ENR may require the permittee to submit a report for the specified equipment showing how it meets the BATEA requirements.
<ul style="list-style-type: none"> De Beers Avalon 	Adherence to the principles of BATEA should be on a voluntary basis.	To ensure effective regulatory approaches, these principles cannot be voluntary.

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<ul style="list-style-type: none"> Imperial Oil 	BATEA-based requirements should be restricted to stressed airsheds (i.e. non-attainment areas). Only air quality standards would apply in attainment areas.	Having no BATEA requirement in attainment areas would not be consistent with the CCME principles of Continuous Improvement and Keeping Clean Areas Clean. BATEA is a tool to create continual progress in lowering air emissions through the adoption of more advanced control technology which is the goal in both attainment and non-attainment areas.
<ul style="list-style-type: none"> Inuvialuit Regional Corporation Northland Utilities Limited Northwest Territories Power Corporation 	The application of BATEA in the NWT needs to take into account the difficulty and expense of acquiring the latest technologies for northern operations, particularly for companies that are headquartered in the NWT.	ENR is aware of and understands the challenges that businesses face in the NWT. Technology that is considered BATEA elsewhere might not be considered BATEA in the NWT due to cost, reliability or other factors. Adherence to BATEA requirements would be demonstrated by the proponent in the air permit application. If the Minister has reasonable grounds to believe that BATEA requirements are not being implemented, ENR may require the permittee to submit a report for the specified equipment showing how it meets the BATEA requirements.
<ul style="list-style-type: none"> Northland Utilities Limited Paramount Resources Northwest Territories Power Corporation 	A reasonable, flexible approach is required for applying BATEA to existing equipment. Transition plans should be used to implement BATEA at appropriate times in the life cycle of existing equipment.	BATEA requirements will not automatically force operators to change existing equipment. Existing equipment will have 3 years to come into compliance with BATEA requirements. ENR will engage further with stakeholders on the compliance term.
<ul style="list-style-type: none"> Paramount Resources 	ENR's air regulatory process is not aligned with ECC's Multi-Sector Air Pollutants Regulations.	ENR is advancing the NWT Air Regulatory Framework independent of the Multi-Sector Air Pollutants Regulations. Currently, ENR intends to have air quality regulations in place in 2018. However, these regulations will not include the broader air permit process, which includes BATEA requirements, as it is subject to the current discussions between ENR and the LWBs.
<ul style="list-style-type: none"> Avalon 	BATEA should not apply when air quality standards can be met without BATEA. Air quality standards should be periodically reviewed to assess their adequacy and modified as needed.	All emitting equipment listed in Schedule C will be subject to BATEA requirements if it is part of a project that requires an air permit under Schedule B. Air quality standards will be reviewed on a periodic basis to ensure that they are consistent with other jurisdictions and reflect the latest research into environmental impacts and the performance of new control technologies.
Best Operating Practices (BOP's)		
<ul style="list-style-type: none"> Dominion Diamond Rio Tinto (Diavik) 	ENR should clarify how BOPs will be developed and regulated.	Each applicant will be expected to include mitigation measures (i.e. BOPs) in its permit application that describe what the applicant will do to avoid or minimize the generation of air emissions. These mitigation measures will be incorporated into the air permit as legally-required commitments of the developer.

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<ul style="list-style-type: none"> De Beers 	Remove the requirement to have BOPs for a mobile fleet (i.e. trucks). BOPs should only be required for equipment that must be operated manually and can impact emissions (i.e. incinerators).	Mobile sources of air emissions can be a significant contributor to the overall emissions of an operation and therefore will be subject to BOPs.
<ul style="list-style-type: none"> Avalon 	BOPs must be managed by industry and cannot be regulated.	Mitigation measures (i.e. BOPs) are a normal part of regulatory systems and can be proposed by the proponent or required by the regulator.
Air Zone Management		
<ul style="list-style-type: none"> Avalon 	Clarify ENR's intentions on air zone management.	The air regulations will create the authority to develop and manage air zones in the NWT in the future. Air zones are an area-based management tool that considers groups of operations in a given geographic area, instead of individual emitters. Air zone management is a key component of the Air Quality Management System (AQMS) that is being implemented across Canada. Under the AQMS, air zones are the basis for monitoring, reporting and taking action on air quality. ENR intends to develop an Air Zone Management Framework by 2020 to provide a basis for the implementation of air management based on air zones.
<ul style="list-style-type: none"> Dominion Diamond Rio Tinto (Diavik) Tlicho Government 	More details and consultations are required on the concept of developing and managing air zones.	When ENR has developed the Air Zone Management Framework, engagement and consultation will occur as to the factors to consider in triggering the creation of an air zone, defining the area of the zone and the air zone management approach.
<ul style="list-style-type: none"> Fort Chipewyan Metis Local 125 Imperial Oil 	Air zone management must take into account both project-specific and cumulative emissions within the air zone.	ENR expects that both cumulative and project-specific emissions would be considered as part of air zone management.
Dust Deposition		
<ul style="list-style-type: none"> Mr. Kevin O'Reilly, MLA Frame Lake Lutsel K'e Dene First Nation Rio Tinto (Diavik) Environmental Monitoring Advisory Board Avalon 	The Air Regulatory Framework should address dust deposition issues.	ENR interprets the term 'dust' to be particulate matter (PM) from roads, granular stockpiles and other large non-point sources. Dust deposition standards have not been included in the framework at this time because there is a lack of scientific evidence on the effects of 'dust' in the northern environment that could support a quantified numeric limit. Research hasn't identified any other jurisdiction with an applicable 'dust' deposition limit. Air permits will however require dispersion modeling which will include area sources of PM, such as dust. ENR is undertaking a study to investigate dust fall to inform future decisions about dust fall standards.
Source Performance Standards		
<ul style="list-style-type: none"> Rio Tinto (Diavik) 	Incinerators should be allowed to burn wastes that the incinerator has been designed to burn.	All Incinerators must be fit for purpose and must comply with the incinerator emission standards. Proponents will be required to provide evidence to the regulator that emission standards are being met.

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<ul style="list-style-type: none"> Fort Chipewyan Metis Local 125 	<p>Air quality standards should not be established based upon the emissions levels that the equipment is designed to achieve.</p>	<p>The air quality standards to be applied are provided in Schedule F: Ambient Air Quality Limits. These standards will be updated as necessary to reflect the latest research into human health and environmental impacts of air emissions.</p>
Emission Fees		
<ul style="list-style-type: none"> Various Parties 	<p>Various Comments</p>	<p>While emissions fees were initially part of the air regulatory framework, they have since been removed. With the coming implementation of a carbon tax, also applying emissions fees on products of hydrocarbon combustion under the air permitting process would be duplicative and not required. Emissions fees on other parameters, such as mercury or arsenic, will be contemplated during discussions occurring currently on future EPA amendments.</p>
Air Registration		
<ul style="list-style-type: none"> Various Parties 	<p>Various Comments</p>	<p>The air registration process is being removed from the Air Regulatory Framework. ENR will be contacting air emitters directly to gather the information instead of relying on a registration process. ENR's authority to request such information will be clarified in the air regulations.</p> <p>The information that will be requested from each air emitter will depend upon the nature of the operation. ENR is aware and understands the challenges that businesses face in the NWT and will take those concerns into account as it moves forward with this process by not unduly requesting information from businesses.</p> <p>Data collected during this process will be used by the regulator only.</p>
Air Permit		
<ul style="list-style-type: none"> Indigenous and Northern Affairs Canada (INAC) - Contaminants and Remediation Directorate (CARD) 	<p>ENR needs to clarify the air permit thresholds for mining and the air permit closure process.</p>	<p>Air permits will be required by mines from construction through to remediation. ENR expects the air permit closure process to be handled in a similar manner as that for water licenses and land use permits issued to mines.</p>
<ul style="list-style-type: none"> Dominion Diamond De Beers Imperial Oil Northland Utilities Limited Avalon 	<p>Air permits should be allowed to be issued for longer than 5 years.</p>	<p>ENR expects that the lengths of these regulatory instruments to be harmonized where possible and reasonable. This matter will be addressed in the regulatory integration discussions.</p>
<ul style="list-style-type: none"> Lutsel K'e Dene First Nation 	<p>Air permits should be issued for 3 years as 5 years is too long.</p>	<p>ENR expects that the lengths of these regulatory instruments to be harmonized where possible and reasonable. This matter will be addressed in the regulatory integration discussions.</p>

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<ul style="list-style-type: none"> • Dominion Diamond • Independent Environmental Monitoring Agency • Mr. Kevin O'Reilly, MLA Frame Lake 	There should be a public review period during the review of an air permit application.	ENR expects that the process used for reviewing an air permit application will be harmonized with the current process used by the LWBs for water licenses and land use permits, including opportunities for public participation and consultation/engagement.
<ul style="list-style-type: none"> • Dominion Diamond 	Air permit inspections should be conducted by inspectors already assigned to the mine/company.	It is ENR's intention that existing inspectors would be given additional responsibility to inspect under air permits.
<ul style="list-style-type: none"> • Independent Environmental Monitoring Agency 	ENR should develop air quality monitoring guidelines with monitoring plans being required under the air permits.	Air quality monitoring guidelines and plans will be part of the air regulatory system. Parties will be able to comment further on what should be required in the monitoring plans during the development of the guidelines.
<ul style="list-style-type: none"> • Imperial Oil • Avalon 	Modeling work undertaken for environmental assessments should be able to be used for air permit applications.	ENR agrees that previous air quality work such as in an environmental assessment might be able to be used in the process of obtaining and managing an air permit. It will be up to the applicant to make the case that the previous modeling work is still relevant and complete any additional work that might be required.
<ul style="list-style-type: none"> • Inuvialuit Regional Corporation 	Timelines should reflect permitting requirements in the Inuvialuit Settlement Area.	ENR expects that air permit timelines would be harmonized with the respective water license and/or land use permit timelines where possible and reasonable.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	An air permit should not be able to be issued during the environmental impact assessment process.	ENR expects the interaction between the air regulatory process and the environmental assessment (EA) process will be the same as is currently the case for the water regulatory process and the EA process.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	Scope should be better defined as well as how much of a change in scope would trigger a new application instead of an amendment.	ENR expects that regulatory bodies will use similar tests and judgment to assess if changes in scope require the need for a new air permit as is their current practice under the water licensing and land use permitting processes.
<ul style="list-style-type: none"> • Paramount Resources 	Will flare stacks require an air permit?	Sites with flares would require an air permit as per Schedule B Item #2 of the framework.
<ul style="list-style-type: none"> • Paramount Resources 	How will old facilities be handled?	ENR expects existing operations to apply for the air permit within 6 months of the effective date of the regulations. ENR is willing to enter into further discussions with stakeholders regarding appropriate compliance period.
<ul style="list-style-type: none"> • Northwest Territories Power Corporation (NTPC) 	The requirement for an electrical generation station requiring an air permit should be based on actual generation, not installed capacity.	Regulatory processes need to regulate on the basis of what operations are capable of emitting, not just what they typically emit. Regulating on the basis of actual generation would prevent NTPC from using its full installed capacity. The emissions from using that additional capacity would not be included in the air permit and would therefore be unavailable for use when and if needed.

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Air Quality Assessment		
<ul style="list-style-type: none"> • Dominion Diamond • Mr. Kevin O'Reilly, MLA Frame Lake 	ENR needs to clarify how the 1 km boundary for the air quality assessment would apply to an operation that spans multiple kilometers.	<p>As operations requiring air permits can range from simple stationary point sources to large mine sites with multiple stationary and mobile sources, ENR expects that the setting of the disturbed area boundaries will be done on a case-by-case basis with the boundaries set to match the context of the operation. The compliance monitoring locations will then be set back 1 km outside the disturbed area boundaries.</p> <p>For a more complex operation, ENR expects that decisions such as where the disturbed area boundary should be drawn around an operation, and so where the 1 km monitoring locations should be, will be a matter to be discussed during the review of the air permit application. The operator will be able to suggest where it thinks the limits should be applied, reviewers will be able to submit comments and the matter will ultimately be decided by the regulator in its decision on the air permit.</p>
<ul style="list-style-type: none"> • Avalon 	Eliminate the 1 km boundary.	ENR uses the Ambient Air Quality Standards applied 1 km from the disturbed area to ensure that the CCME principle of Keeping Clean Areas Clean is met.
<ul style="list-style-type: none"> • Rio Tinto (Diavik) • De Beers 	Established operations should not be required to conduct an air quality assessment.	ENR expects existing operations to apply for the air permit within 6 months of the effective date of the regulations with a 3-year period to be into compliance. To ease the burden on existing operations, an applicant would be able to use prior air work such as modeling as part of its air permit application. The applicant would, however, need to demonstrate that the previous work is still valid and useful.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	The setting of contaminant limits should be consistent across permits.	The ambient air quality standards will apply to all air permits however new standards for other parameters might be required for specific operations. These new standards could be based upon the location of the operation, the toxicity of a parameter and the nature and location of the receiving environment, among other factors. Consistency between permits will be a factor that is considered but is not always justifiable in setting contaminant limits.
Air Quality Monitoring		
<ul style="list-style-type: none"> • Dominion Diamond 	ENR should review/reduce the data capture minimum requirement percentage and confirm if its application is to all air emission monitoring systems, including both continuous and passive air monitoring systems.	While Newfoundland and Labrador's data capture requirement is 95% for opacity, Saskatchewan and Alberta require a minimum 90% data capture for continuous monitoring equipment. Based on the northern context, an 85% data capture rate is more achievable for the NWT.

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• De Beers	The 85% data capture requirement should be deleted and it could become a target with adaptive management applied if the target is not reached.	While Newfoundland and Labrador’s data capture requirement is 95% for opacity, Saskatchewan and Alberta require a minimum 90% data capture for continuous monitoring equipment. Based on the northern context, an 85% data capture rate is more achievable for the NWT.
• Dominion Diamond	ENR should explain the selection of the Newfoundland and Labrador Air Pollution Control Regulations for setting the data capture minimum and how it applies for the North as it is understood this is for opacity and not air quality.	Opacity is often used as an indicator of the degree of particulate matter emissions. In Newfoundland and Labrador the operator of an emission source may be required to monitor the opacity of emissions on a continuous basis. While Newfoundland and Labrador’s data capture requirement is 95% for continuous monitoring of opacity, Saskatchewan and Alberta require a minimum 90% data capture for continuous monitoring equipment. Based on the northern context, an 85% data capture rate is more achievable for the NWT.
• Dominion Diamond	ENR should remove Part 3 (a-m) and include this in the conditions of the Permit.	Developing the conditions that will be placed into an air permit is a matter that will eventually be addressed by the regulator. It is ENR’s view that the items listed in Part 3 would likely be best contained within a guideline for air quality monitoring plans. This would include a condition in the permit requiring a plan to be developed and filed with the regulator for approval that is in conformance with the guidelines.
• Rio Tinto (Diavik)	‘True’ ambient air quality monitoring is often not possible in remote locations due to power requirements for monitoring equipment. A method to account for this discrepancy in reporting should be established.	It will be the role of the proponent to ensure that its monitoring equipment is capable of functioning at the identified monitoring locations.
• Rio Tinto (Diavik) • Avalon	It would be preferable to include a process for an operator to request an exemption from the 85% data capture minimum for a specified period of time where justified by mechanical issues, unusual conditions or other reasons.	Conditions of an air permit are subject to review and change, including an exemption from application, upon the submission of a request by the permittee. It will be up to the permittee to make the case for the exemption and convince the regulator to grant it. A special process does not need to be developed.
• De Beers	ENR should update its definition of "emission source" to recognize that equipment that is purchased and operated according to manufacturer specifications should not require measured emission rates.	Equipment that is operated according to manufacturer specifications is still an emission source. ENR agrees that equipment that is operated according to manufacturer specifications might not require its emissions to be directly measured on a continuous or frequent basis. If that is the case then those emissions still need to be measured on a verification basis to confirm that the actual emissions match the expected emissions based on the manufacturer specifications so they can be reported and regulated. If the equipment is operated outside of its specifications and/or if there is reason to believe that the equipment might be emitting at a rate that is higher than designed, then more frequent direct measurements might be required.

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<ul style="list-style-type: none"> Independent Environmental Monitoring Agency Avalon 	ENR should distribute monitoring guidelines for review.	ENR expects that the development of guidance documents will be part of the Air Regulatory Framework and that a review process will occur prior to their final approval.
<ul style="list-style-type: none"> Independent Environmental Monitoring Agency 	There should be definitions for "receptor" and "sensitive receptor".	These terms will be defined during the development of the air regulations.
<ul style="list-style-type: none"> Lutsel K'e Dene First Nation 	Receptors should include vegetation, wildlife and fish.	These terms will be defined during the development of the air regulations.
<ul style="list-style-type: none"> Lutsel K'e Dene First Nation 	Air quality monitoring and reporting should continue during the closure phase of industrial developments.	Monitoring and reporting will continue as needed during any closures (temporary or permanent).
<ul style="list-style-type: none"> Mr. Kevin O'Reilly, MLA Frame Lake 	It should be clear that either all permits will require monitoring or there will be standards applied to determine when monitoring is required.	Air monitoring will be a requirement of all air permits. While consistency across plans will be the intent there will also be case-by-case evaluations and potentially some differences in what is required in the monitoring plans for each operation.
Reporting		
<ul style="list-style-type: none"> Dominion Diamond Rio Tinto (Diavik) 	Annual reports should be based on calendar year or some other set period rather than permit anniversaries.	If the air permit process is incorporated into the existing land and water regulatory processes, ENR expects that annual reports will be scheduled, reviewed and approved in a manner that is consistent with the annual reports for water license and land use permits. ENR has no issue with an annual report based on the calendar year.
<ul style="list-style-type: none"> De Beers 	ENR should make use of the outputs of the National Pollutants Release Inventory (NPRI) database already in effect for tracking and modeling pollutants in the NWT.	While the NPRI can be a useful tool for tracking total pollutant loads, it is not suitable for use as a regulatory tool. ENR expects that parties will make use of the NPRI database as appropriate to meet the requirements of the NWT air permit process.
<ul style="list-style-type: none"> Environmental Monitoring Advisory Board Mr. Kevin O'Reilly, MLA Frame Lake 	Other parties should be able to review and comment upon monitoring plans and reports submitted by permittees.	If the air permit process is incorporated into the existing land and water regulatory processes, the submission, review and approval of monitoring plans and reports will have the same level of public availability and involvement as water, wildlife and other monitoring plans and reports.
<ul style="list-style-type: none"> Rowe's Construction 	Tracking equipment idling hours will be an additional task for companies.	ENR appreciates the extra effort that will be required to track idling hours however doing so is important for calculating total air emissions from an operation and across the NWT.
<ul style="list-style-type: none"> Avalon 	Reporting requirements should be aligned with the NPRI to reduce costs.	ENR appreciates the extra effort in preparing reports for both the NWT regulatory process and the National Pollutant Release Inventory and will strive to align the two processes where practicable.

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Contaminant Limits		
<ul style="list-style-type: none"> • Dominion Diamond 	<p>The contaminant limits are based on strict human health limits from elsewhere and are not appropriate in the North. Limits should be based on risk. ENR should clarify how the contaminant limits were selected, how they apply to the North, and what gaps there are in developing limits for the North.</p>	<p>ENR is not considering developing risk based contaminant limits. The guiding principles supporting the development of air regulations include the CCME principles of Continuous Improvement and Keeping Clean Areas Clean in addition to the goal of atmospheric emission prevention. ENR will continue to participate in the ongoing development of the Canada-wide Air Quality Management System including participation in various working groups reviewing contaminant limits. This, as well as continuous review of other jurisdictions, will inform any future changes or additions to the contaminant limits identified in the Air Regulatory Framework.</p>
<ul style="list-style-type: none"> • Avalon 	<p>Establish all climate change requirements prior to promulgation.</p>	<p>Climate change requirements are not part of the Air Regulatory Framework.</p>
Science and Research		
<ul style="list-style-type: none"> • Dominion Diamond 	<p>The reference to scientific research in Part 1(c) should be adjusted to reflect a partnership between ENR and industrial sites.</p>	<p>ENR believes that the current language in Part 1(c) does not limit or preclude the use of existing or new partnerships between ENR and industry to conduct air quality research.</p>
Monetary Fines to be Added to the Summary Conviction Procedures Regulations		
<ul style="list-style-type: none"> • Dominion Diamond 	<p>ENR should provide rationale as to why it selected Quebec's Regulation Responding to Landfilling and Incineration of Residual Materials (RRLIRM) as the basis of fines as it relates to incinerators.</p>	<p>The fine structure outlined in the RRLIRM was chosen as a starting point for discussion of monetary penalties to be included in the proposed air regulations. The issue will be examined in more detail during the development of the air regulations.</p>
<ul style="list-style-type: none"> • Dominion Diamond • Ecowaste Solutions 	<p>ENR needs to clarify its definitions of "run" and "secondary chamber".</p>	<p>These terms will be defined during the development of the air regulations.</p>
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	<p>ENR needs to provide rationale for the amounts of the fines and how these amounts relate to risk.</p>	<p>The fine structure outlined in Quebec's Regulation Responding to Landfilling and Incineration of Residual Materials (RRLIRM) was chosen as a starting point for discussion of monetary penalties due to the comprehensive nature of the regulation. Monetary penalties are included in regulations to act as a deterrent to undesirable behaviors, therefore, the amounts set for particular fines need to be enough to make compliance with the regulations a more desirable option.</p>
<ul style="list-style-type: none"> • Avalon 	<p>Eliminate administrative penalties and use other means to deal with issues of non-compliance. If necessary, identify a process for exemptions.</p>	<p>Monetary fines have been included in the proposed air regulations as a tool to enforce compliance. They are intended to be used with discretion when all other options have been exhausted.</p>

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Schedule A: Activities that Require Registration		
<p>The air registration process is being deleted from the Air Regulatory Framework. ENR will be contacting air emitters to directly gather the information instead of relying on a registration process. ENR's authority to request such information will be clarified in the air regulations.</p> <p>The information that is requested from each air emitter will depend upon the nature of the operation. ENR is aware and understanding of the challenges that businesses face in the NWT and will take those concerns into account as it moves forward with this process by not unduly requesting information from businesses.</p> <p>Data collected during this process is not to be available publicly.</p>		
Schedule B: Activities that Require and Air Permit		
<ul style="list-style-type: none"> • Ecowaste Solutions 	Incinerators are not mentioned in the schedule. There should be a threshold of processing capacity in tonnes/day of daily incineration waste capacity that would trigger a permit.	Incinerators are not required to have air permits. They will, however, require registration in accordance with Schedule E.
<ul style="list-style-type: none"> • Rio Tinto (Diavik) 	The exclusion of mining projects in care and maintenance or reclamation phases should be specifically stated. Projects in a care and maintenance or early reclamation phase may still have significant nameplate capacity, but they would not be operating to their full potential.	All mining projects, in all phases, will require an air permit. Monitoring and reporting will continue as needed during any closures (temporary or permanent).
<ul style="list-style-type: none"> • Rio Tinto (Diavik) 	Use of the term 'any mining development' should be avoided and a clearer definition provided for the types of mining developments requiring an air permit, as permit requirements would be needlessly onerous for small-scale exploration phase projects.	Item 1 of Schedule B explicitly states that it applies to mining construction and operations. Exploration projects are not included.
<ul style="list-style-type: none"> • ECCC 	It is not clear what is meant by "not size-based" in reference to boilers.	ENR is proposing that the operation of any single boiler with a rated capacity of more than 1500 kW would require an air permit.
<ul style="list-style-type: none"> • Mr. Kevin O'Reilly, MLA Frame Lake 	Some public interest criteria should be added to ensure the responsible use of the Minister's discretion to require an activity to have an air permit.	The criteria that are selected for inclusion in the regulations will be reviewed during the consultation and engagement processes that will occur during the development of regulations. IGOs, industry and other parties will have the opportunity to review and comment upon the proposed criteria.
<ul style="list-style-type: none"> • Environmental Management Advisory Board 	Air monitoring should be required during the remediation phase of projects listed in Schedule B.	All mining projects, in all phases, will require an air permit. Monitoring and reporting will continue as needed during any closures (temporary or permanent).
<ul style="list-style-type: none"> • Inuvialuit Regional Corporation 	ENR should confirm that this list is exhaustive and that if an operation is not listed then it will not require an air permit.	ENR cannot confirm that the list of projects requiring an air permit is exhaustive. Item 7 grants the Minister the discretion to require other projects that are not listed to acquire an air permit.

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<ul style="list-style-type: none"> Inuvialuit Regional Corporation 	ENR should confirm what information would be made available on the public registry and consider the potential economic impacts of information disclosure.	If the air permit process is incorporated into the existing land and water regulatory processes, ENR expects that the air permit process will be subject to the same public registry approach that is currently used by the Boards for processing and managing water licenses and land use permits. This means that all information will be publicly available on the Boards' public registries unless a request has been made and approved for information to be filed confidentially.
Schedule D: Air Permit Emissions Fees		
While emissions fees were initially part of the air regulatory framework, they have since been removed. With the coming implementation of a carbon tax, also applying emissions fees on products of hydrocarbon combustion under the air permitting process would be duplicative and not required. Emissions fees on other parameters, such as mercury or arsenic, will be contemplated during discussions occurring currently on future EPA amendments.		
Schedule E: Incinerator Emissions Standards		
<ul style="list-style-type: none"> Rio Tinto (Diavik) 	ENR should add camp population thresholds as it is easier to calculate and plan.	ENR agrees that camp population thresholds could be an option and will review this matter further.
<ul style="list-style-type: none"> Rio Tinto (Diavik) De Beers 	In the event of a failed stack test while operating according to manufacturer's specifications, there should be an exemption clause to allow operation to continue.	It is the operator's responsibility to maintain compliance at all times. A failed stack test under any conditions, including while operating at manufacturer's specifications, is a noncompliance situation and must be dealt with accordingly. A permittee can apply to the regulator for relief from a permit condition at any time. The regulator would then make a decision based on information provided by the permittee.
<ul style="list-style-type: none"> Rio Tinto (Diavik) 	The framework is inconsistent on the use of continuous emission monitoring (CEM). CEM should not be required.	ENR recognizes the costs and technical issues with installing and using CEM. It is accepted that CEM would likely only be required for the new installation of large incinerators however that decision will be made on a case-by-case basis. ENR accepts that intermittent CEM (ICEM) is a viable option for use instead of CEM in many situations. The incinerator emission standards will be written in such a manner that CEM or ICEM could be used, as determined appropriate by the regulator.
<ul style="list-style-type: none"> Ecowaste Solutions 	Incinerators should be allowed to burn sewage when the incinerator has been designed for it and air quality standards can be met.	All incinerators must be fit for purpose and must comply with the incinerator emission standards. Proponents will be required to provide evidence to the regulator that emission standards are being met.
<ul style="list-style-type: none"> Ecowaste Solutions 	ENR needs to define what constitutes the secondary chamber. Retention time will then determine the chamber size and configuration.	These terms will be defined during the development of the air regulations.

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<ul style="list-style-type: none"> • Ecowaste Solutions 	<p>There should be a threshold capacity for requiring CEM.</p>	<p>ENR recognizes the costs and technical issues with installing and using CEM. It is accepted that CEM would likely only be required for the new installation of large incinerators however that decision will be made on a case-by-case basis. ENR accepts that intermittent CEM (ICEM) is a viable option for use instead of CEM in many situations. The incinerator emission standards will be written in such a manner that CEM or ICEM could be used, as determined appropriate by the regulator.</p>
<ul style="list-style-type: none"> • Ketek Group 	<p>1000 degrees C is not required. 850 degrees C is sufficient to destroy dioxins if the design turbulence factor is effective.</p>	<p>A proponent can request approval for a temperature requirement that is different than 1000 degrees C. It will be up to the proponent to provide evidence to the regulator that another operating temperature is acceptable.</p>
<ul style="list-style-type: none"> • Dominion Diamond 	<p>In the event of a stack test failure, ENR should clarify if all parameters would need to be re-tested or only those that failed.</p>	<p>All parameters would have to be retested if the operating conditions were adjusted to try to get the out-of-compliance parameters back into compliance. Changing operating conditions could change the results for the parameters that were previously compliant.</p>
<ul style="list-style-type: none"> • Dominion Diamond • De Beers • Avalon 	<p>There should be an exemption clause for incinerators already in operation so that CEM is not required.</p>	<p>ENR recognizes the costs and technical issues with installing and using CEM. It is accepted that CEM would likely only be required for the new installation of large incinerators however that decision will be made on a case-by-case basis. ENR accepts that intermittent CEM (ICEM) is a viable option for use instead of CEM in many situations. The incinerator emission standards will be written in such a manner that CEM or ICEM could be used, as determined appropriate by the regulator.</p>
<ul style="list-style-type: none"> • Dominion Diamond 	<p>ENR needs to clarify if a spike in parameters during normal operations, in accordance with manufacturer's specifications, is considered a failure and if ENR requires notification.</p>	<p>It is the operator's responsibility to maintain compliance at all times. A spike in parameters under any conditions, including while operating at manufacturer's specifications, is a noncompliance situation and must be dealt with accordingly. A permittee can apply to the regulator for relief from a permit condition at any time. The regulator would then make a decision based on information provided by the permittee.</p>
<ul style="list-style-type: none"> • De Beers • Avalon 	<p>Equipment should be operated consistent with the manufacturer's design. No minimum temperature should be required.</p>	<p>The temperature required for CEM is 1000 degrees C. It will be up to the proponent to provide evidence to the regulator that another operating temperature is acceptable.</p>
<ul style="list-style-type: none"> • De Beers 	<p>Identify the minimum temperature required for CEM.</p>	<p>The temperature required for CEM is 1000 degrees C. It will be up to the proponent to provide evidence to the regulator that another operating temperature is acceptable.</p>
<ul style="list-style-type: none"> • De Beers 	<p>The type of waste incinerated should be as allowed under the approved waste management plans.</p>	<p>ENR will ensure that all permits are issued in a coordinated, non-contradictory fashion.</p>
<ul style="list-style-type: none"> • The Hill Group 	<p>Allowing lodges to dispose of their waste onsite is the most practical method currently available. Our cost is \$3.00 per pound for air freight from the lodge not including any additional cost of disposal. This would be a large financial burden for an industry that struggles to be viable when all the other large fixed costs are included in our operating budget.</p>	<p>All incinerators must be fit for purpose and must comply with the incinerator emission standards. Proponents will be required to provide evidence to the regulator that emission standards are being met.</p>

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Schedule F: Ambient Air Quality Limits		
<ul style="list-style-type: none"> De Beers 	ENR should provide input to ECCC for the upcoming climate change strategy work. Establishing limits at this time in the development of the NWT is premature and the scientific evidence is not conclusive on the impact of industry on the northern ecosystem.	Conclusive evidence of impacts is not required to justify the establishment of air quality standards. Regulatory processes and standards exist to manage existing impacts and also to prevent impacts from occurring. ENR and the Boards will consult with and involve ECCC in the development of the NWT air regulatory process as appropriate.
<ul style="list-style-type: none"> Environmental Monitoring Advisory Board 	PM ₁₀ should be included in the list of parameters.	PM ₁₀ is a component of dust. ENR is undertaking a study to investigate dust fall to inform future decisions about dust fall standards.
<ul style="list-style-type: none"> Environmental Monitoring Advisory Board 	Carbon dioxide and other GHGs should be included.	GHGs will be addressed in the Climate Change Strategic Framework.
<ul style="list-style-type: none"> Gwich'in Tribal Council 	Methane emissions from land-use, land-use change and melting permafrost remains unregulated and without systematic data collecting in the NWT. The GTC encourages the GNWT to take action on this important issue.	GHGs, including methane, will be addressed in the Climate Change Strategic Framework.
Open Burning, Unauthorized Releases and Nuisance Emissions		
<ul style="list-style-type: none"> Ecowaste Solutions 	There should be a section on the prevention of accidental landfill fires through proper landfill management practices. Accidental landfill fires are a significant source of nuisance emissions.	The prevention of accidental landfill fires is best addressed in the existing regulatory authorizations for landfills through operational conditions in the permit. ENR will not be including a section on the prevention of accidental landfill fires in the Air Regulations.
<ul style="list-style-type: none"> Ecowaste Solutions 	There should be guidance on measures to reduce GHG emissions from landfills.	GHGs will be addressed in the Climate Change Strategic Framework.
<ul style="list-style-type: none"> ECCC 	The proposed framework allows for the open burning of clean wood, clean paper, and clean paperboard. This should be accompanied by information that recognizes that such activities can still result in a hazardous mixture of cancer-causing compounds and other toxic substances when open-burned.	ENR will follow up with ECCC to discuss methods for that information to be conveyed to the public.
<ul style="list-style-type: none"> ECCC 	Composting should be considered as an alternative management option for clean wood (i.e., if mulched), clean paper, and clean paperboard when reuse or recycling opportunities are not available.	ENR supports the composting of these materials instead of burning, however, burning will still be an allowable option for disposal.
<ul style="list-style-type: none"> Mr. Kevin O'Reilly, MLA Frame Lake 	Spill reports should be made available to the public within a reasonable time limit.	Spill Line reports are publicly available subject to the conditions of the <i>Access to Information and Protection of Privacy Act</i> .