Work Plan Application

Project Information	
Project Title:	Air Quality Monitoring in the Peace Athabasca Delta
Lead Applicant, Organization, or Community:	Lori Cyprien – Athabasca Chipewyan First Nation
Work Plan Identifier Number: If this is an on-going project please fill the identifier number for 24/25 fiscal by adjusting the last four digits: **Example:** D-1-2425 would become D-1-**2425**	A-PD-7-2425
Project Region(s):	Athabasca
Project Start Year: First year funding under the OSM program was received for this project (if applicable)	2023
Project End Year: Last year funding under the OSM program is requested **Example: 2024**	2026
Total 2024/25 Project Budget: From all sources for the 2024/25 fiscal year	$279,150.00
Requested OSM Program Funding: For the 2024/25 fiscal year	$264,150.00
Project Type:	Community Based Monitoring
Project Theme:	Air & Deposition
Anticipated Total Duration of Projects (Core and Focused Study (3 years))	Year 3
Current Year (choose one):	Focused Study -Select One-
	Core Monitoring Year 1 of 3

Contact Information

Lead Applicant/ Principal Investigator: Every work plan application requires one lead applicant. This lead is accountable for the entire work plan and all deliverables.	Lori Cyprien
Job Title:	Director of Rights and Lands
Organization:	Athabasca Chipewyan First Nation – Dene Lands and Resource Management
Address:	300 MacKenzie Blvd. Fort McMurray, AB T9H4C4
Phone:	780 762 5591
Email:	Lori.cyprien@acfn.com

Project Summary

In the space below, please provide a summary of the proposed project that includes a brief overview of the project drivers and objectives, the proposed approach/methodology, project deliverables, and how the project will deliver to the OSM Program objectives. The summary should be written in plain language and **should not exceed 300 words**.

The Athabasca Chipewyan First Nation (ACFN) with Mikisew Cree First Nation (MCFN) and with partner organization Wood Buffalo Environmental Association (WBEA) intend to continue their current successful Community Based Monitoring (CBM) integration with current OSM western science air monitoring. This is part of the Nation's long term strategy to more fully understand the impacts of oil sands development on their natural and cultural spaces. This project will be within the boundaries of the Oil Sands Monitoring Program regulation.
To do this effectively the proposed work builds off of the past four years:

Year one 2020-21 objectives and deliverables included training to calibrate and operate the Fort Chipewyan Air Monitoring Station in Fort Chipewyan. This involved three months of training for one ACFN and one MCFN member with WBEA staff in Fort McMurray. Following training, CBM staff job shadowed WBEA staff in the field for six months at which point the ACFN and MCFN CBM programs then absorbed full operation of the Fort Chipewyan station.

Year two involved further training, and building out a deck in Fort Chipewyan at the current air monitoring station (ongoing) and increasing the number of parameters through time integrated sampling (purchased and planned for install). Analysis began mid way through the fiscal after build out.

Year three and four involved continued maintenance and operations of the Ft Chipewyan air monitoring station. It also involved planning for the placement of remote field samplers (passive and denuders) in community sensitive regions; proposed in Quatre Fourches, and along the Athabasca River reserve of Jackfish for ACFN. Field visits by WBEA staff and subsequent planning meetings led to the selection of initial field site to be at Jackfish cemetery and also at the existing station in Ft Chip. This helps to create information required to assess potential impacts of oil sands operation and expansion. This work fills gaps in current robust WBEA monitoring, adding useful data to help understand changes and potential stressors, while building out important integration with Indigenous communities, and follows the EEM framework.

Moving forward the Nations will continue to build out the denuder and IER as well as provide the remote monthly servicing and monitoring work. This will include helicopter landing pad construction and some on reserve buildings to service the denuder and ier equipment. Staff will continue to service and calibrate the expanded monitoring station in Fort Chipewyan and continue the field based work (passive and denuder) monthly.
Improved trigger development and communications to the community will also become part of the next three years work, as is alignment with the wider Wood Buffalo National Park Action Plan monitoring objectives through their Delta Institute led Intergrtaed Research and Monitoring Plan.

1.0 Merits of the Work Plan

All work plans under the OSM Program must serve the mandate of the program by determining (1) if changes in indicators are occurring in the oil sands region and (2) if the changes are caused by oil sands development activities and (3) the contribution in the context of cumulative effects. In the space below please provide information on the following:

- Describe the key drivers for the project identifying linkages to Adaptive Monitoring framework particularly as it relates to surveillance, confirmation and limits of change (as per OC approved Key Questions).
- Explain the knowledge gap as it relates to the Adaptive Monitoring that is being addressed along with the context and scope of the problem as well as the Source - Pathway - Receptor Conceptual Models .
- Describe how the project meets the mandate of the OSM Program or areas of limited knowledge is the work being designed to answer with consideration for the TAC specific Scope of Work Document (attached) and the Key Questions (attached)?
- Discuss results of previous monitoring/studies/development and what has been achieved to date. Please identify potential linkages to relevant sections of the State of Environment Report.

Key drivers for the ACFN and MCFN are to better understand the air quality and (year three) depositional patterns in the Peace Athabasca Delta (PAD), traditional territories and on reserve lands, and the contribution from the oil sands.

The WBEA network does not currently include areas of natural and cultural importance to the Nations, however field installations in 2023-24 and beyond will include a remote station on ACFN reserve land. Time-integrated sampling is conducted at all community stations in the region now, including Fort Chipewyan due to ACFN involvement.

Sampling will be conducted in a way that meets the mandate of OSM. The data will be collected in a way in which Environmental Effects Monitoring and triggers will be understood. The idea is to first evaluate if change is occurring at the various sampling locations (within natural variability). However the sites in question are adding to an already established, robust and peer reviewed approach to air monitoring in the Oil Sands region by partnering with WBEA.

Finally, the methodology will also add to the transect nature of air sampling, getting better cumulative effects data to answer to forest fires, long range transport of contaminants such as mercury. This will also provide baseline data for areas potentially impacted by oil sands operation and expansion..

Continued operation and expansion of oil sands mining raises concern about the potential increase in deposition of PAHs and metals to the PAD & WBNP. PAHs are known carcinogens and mutagens that can have adverse effects on the health of humans, as well as terrestrial and aquatic organisms (ATSDR 2012). 16 PAH species have been classified as priority pollutants by the United States Environmental Protection Agency based on their deleterious effects. Some metals are also of particular concern downstream of the Alberta Oil Sands (AOS), due to their toxicity and negative impacts on health (Kelly 2009, Timoney 2007). Mercury, for example, is already a concern in the PAD with existing consumption advisories in place for fish and for gull and tern eggs in (Lake Athabasca and Lake Mamawi; Government of Alberta, 2014). Consequently, it is imperative to quantify the predicted deposition of the proposed Teck Frontier mine in the PAD and WBNP. Furthermore, the accuracy of air deposition predictions are important to realistically model impacts to downwind soil quality, water quality and sediment quality, in order to fully assess the adverse cumulative effects of the project.

Although PAH and metal contaminants are highest within a short distance to AOS developments, AOS-derived contaminants are already reaching the PAD and WBNP. Traditional Knowledge holders and Elders from the Mikisew Cree First Nation have commented that they can smell “oil sands pollution” at the south end of Lake Claire (Whiteknife 2008), and their visual observations of black particles in snow prompted an expansion of the Joint Oil Sands Monitoring snow monitoring program to include sites in the PAD. Research conducted by the Mikisew Cree First Nation – Community Based Monitoring Program (2015) indicates that at one site at Quatre Fourches within WBNP, an elevated PAH signal is attributable to petrogenic (i.e. petroleum-derived) sources. Elevated levels of metals have also been found in the PAD. In March 2012, Kirk et al. (2014) measured snowpack concentrations of mercury (Hg) and methyl-mercury (MeHg) (ng L-1) at 9 sites within the PAD, located over 200km north of the major oil sands developments, in addition to 80

sites closer to the developments. Findings indicate loadings of unfiltered THg and particulate bound MeHg within the range of 0-250 ng m-2, and between 0-5 ng m-2 at sites located approximately 150-200 km from the major oil sands development.
The region has seen an increase of deposition levels since prior to the oil sands development. Studies indicate that the footprint of elevated metal and PAHs concentrations has increased from within ~10 km of the major oil sands mining area in the late 1970s to within 50 to 80 km with the expansion of the oil sands in the early 2010s (Evans et al. 2016; Kelly et al. 2009, 2010; Studabaker et al. 2012; Kirk et al. 2014). Findings indicate that PAH deposition has increased by ~2.5–23 times since the 1960s with increasing alkylated PAHs and dibenzothiophenes (DBT) (Kurek et al. 2013, Jautzy et al. 2013). Jautzy et al. (2013) presents a historical record of airborne PAH sources and deposition dating back to 1920 from two lakes approximately 40 and 55 km east of the oil sands operations. Findings indicate an increasingly larger input of petrogenic PAHs over the past 30 years, and a shift to unprocessed bitumen from the oil sands. Similarly, Kurek et al. (2013) demonstrated through sediment coring that PAHs within lake sediments, particularly C1-C4–alkylated PAHs increased significantly after the 1960s. Regional wind patterns in turn influence PAH deposition patterns, with higher deposition in the north- south direction consistent with the north south prevailing winds (Cho et al. 2014).

Oil sands related deposition of metals has been observed up to 85 km (Kelly et al., 2010; Kirk et al., 2014; Kurek et al., 2013; Gueguen et al., 2016). Kelly et al. (2010) found that mean inferred deposition of Ag, As, Be, Cu, Cr, Pb, Zn and Hg was up to 30-fold greater within 50 km of oil sands developments than at sites more than 50 km away. Being within close proximity to WBNP's southern border, the Teck mine would be within range of near-field deposition, in addition to deposition associated with long-range contaminant transport. PACs, which includes PAHs, alkylated PAHs, and DBTs — are elevated within a 30km range of oil sand operations without upgraders (Kelly et al. 2009, 2010; Kurek et al. 2013; Cho et al. 2014). Fugitive dust for oil sand processes is thought to be a considerable source of contaminants. A study by Landis et al. (2012) analyzing contaminant in lichen samples found that sources of metals in lichen tissue include combustion processes (23%), tailing sand (19%), haul roads and limestone (15%), oil sand and processed materials (15%), and a general anthropogenic urban source (15%).
Consequently, impacts to air quality deposition of these contaminants onto the landscape from existing and proposed developments needs to be well understood in order understand the cumulative risks to environmental and human health of the Nations.

2.0 Objectives of the Work Plan

List in point form the objectives of the 2024/25 work plan below

The objectives of the CBM Air Quality Monitoring in the Peace-Athabasca Delta work are:
(1) Create an Indigenous-led air monitoring program in the Peace Athabasca Delta and at reserve locations in partnership with WBEA;
(2) Continue ACFN and MCFN CBM staff to operate the continuous air monitoring station in Fort Chipewyan and for the upgraded time integrated sampling;
(4) Monnthly checks on the long term monitoring with passive and denuder samplers at the important areas to the Nations in the Peace Athabasca Delta, traditional territories and reserves;
(5) Establish the long term triggers for all air quality parameters of concern
(6) Create further opportunities for Elders and youth to become engaged in transfer of knowledge, science literacy, and environmental management;
(6) Provide appropriate community communication materials and presentations about ambient air data
(7) Provide ambient air data for community monitoring needs, including the Air Quality Health Index (AQHI) and measuring representative ambient concentrations in populated areas.
(8) Integrate this work with the emerging IRMP through the Delta Institute

3.0 Scope

Evaluation of Scope Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would:

- Be in scope of the OSM Program (e.g., regional boundaries, specific to oil sands development, within boundaries of the Oil Sands Environmental Monitoring Program Regulation)
- consider the TAC-specific Scope of Work document and the key questions
- integrate western science with Indigenous Community-Based Monitoring)
- address the Adaptive Monitoring particularly as it relates to surveillance, confirmation and limits of change as per approved Key Questions.
- have an experimental design that addresses the Pressure/Stressor, Pathway/Exposure, Response continuum
- produce data/knowledge aligned with OSM Program requirements and is working with Service Alberta
- uses Standard Operating Procedures/ Best Management Practices/ Standard Methods including for Indigenous Community-Based Monitoring

3.1 Theme

Please select the theme(s) your monitoring work plan relates to:

- [x] Air
- [ ] Groundwater
- [ ] Surface Water
- [ ] Wetlands
- [ ] Terrestrial Biology
- [ ] Data Management Analytics & Prediction
- [ ] Cross Cutting

3.2 Core Monitoring, Focused Study or Community Based Monitoring

Please select from the dropdown menu below if the monitoring in the work plan is “core monitoring” and/or a “focused study”. Core monitoring are long term monitoring programs that have been in operation for at least 3 years, have been previously designated by the OSM program as core, and will continue to operate into the future. Focused studies are short term projects 1-2 years that address a specific emerging issue.

Community Based Monitoring

Themes

Please select the theme from the options below. Select all that apply.

- [x] Air
- [ ] Groundwater
- [ ] Surface Water
- [ ] Wetland
- [ ] Terrestrial
- [ ] Cross-Cutting

3.3.4 Air Themes

3.3.4.1 Sub Themes

Quality

3.3.4.2 Air & Deposition - Key Questions:

Explain how your air & deposition monitoring program addresses the key questions below.

Has baseline been established? Have thresholds or limits of change been identified?

Changes in ambient air quality have been detected related to emissions from oil sands operations. As an example, Davidson and Spink (2018) found that concentrations of NO2, SO2, THC, TRS, and PM2.5 between an early industrial expansion period (1998–2001) and current day (2011–2014) have significantly increased and that this change can be attributed to industrial development. The Fort Chipewyan AMS collects multiple parameters that can be used to evaluate air quality in the region, as well as compare between different communities and stations throughout the Athabasca Oil Sands Region. The addition of time-integrated sampling in Phase 2 and remote samplers in Phase 3 will provide additional information that can be used to assess the impact of oil sands development in the community and PAD.

Are changes occurring in air quality? If yes, is there evidence that the observed change is attributable to oil sands development? (Describe source-pathway-receptor and/or conceptual models) and what is the contribution in the context of cumulative effects?

Air quality monitoring is conducted in the indigenous community of Fort Chipewyan. Air quality data from this monitoring stations is converted to the Air Quality Health Index (AQHI) which provides community members with current air quality conditions. Mikisew land users and Elders comment on increased smell of oil sands pollution in the south end of Lake Claire, and associate this with a decline in the health of their wild foods and water quality, and in conjuction with other water quality issues, associate this with the higher incidences of cancer in the community. Whether air quality in Fort Chipewyan as a result of Oil Sands development is impacting the community health or not, there is at least a perceived risk, and this is impacting people's land use choices. To what extent this is occurring has not been fully documented, and likely compounded by other factors. Having a source of community generated, rigorous data, trusted by the community regarding air quality is an important step in communities reclaiming some ethical space around the discussion of health. To be able to fully understand the health choices associated with air quality, such as locations of traditional use and harvest will require good regional data which does not exist at present. It will also be pivotal for the Nations to have baseline data in advance of further Oil Sands development in order to gauge any increased harm (perceived or real) to their health.

Are there unanticipated results in the data? If yes, is there need for investigation of cause studies?

The work to analyze all of the Ft Chip data and communicate it to the Nations is not due until Fen of 2023. Therefore we are actively working on the results now. Ideally our wider programattic design will be able to detect attribution of cause should air quality trends or unusual results be found.

Are changes in air quality informing Indigenous key questions and concerns?

In part. Community question are about changes to the quality of the air in the southern reaches of their territory in the PAD and even into Fort Chipewyan as well as the consequences of contamiant deposition on the ecosystem and the water and foods they harvest.

Are data produced following OSM Program requirements and provided into the OSM Program data management system?

Yes. The data from Fort Chipewyan AMS is provided in near real time on the WBEA's website at WBEA.org and submitted to Alberta Environment and Parks on a monthly basis. The data from the time-integrated sampling in Phase 2 will be made available once the WBEA receives it from the laboratories that perform the analysis. The data will be available in the time-integrated database the WBEA is currently developing.
WBEA - https://wbea.org/historical-monitoring-data/ (continuous data)
WBEA - https://wbea.org/resources/reports-publications/air-monitoring-reports/integrated-samples-lab-results/ (time-integrated data)

Do methodologies use relevant Standard Operating Procedures/ Best Management Practices/ Standard Methods?

Quality assurance and quality control needs to be conducted in accordance with the Air Monitoring Directive, the Air Monitoring Quality Assurance Plan and SOPs for data QA/QC developed by AEP and each airshed. The WBEA's specific SOPs and QAP are available on request.

How does the monitoring identify integration amongst projects, themes or with communities?

The air and deposition work is intended to link up with the wetlands work and our wider water quality and fish health work. We are actively working on an Integrated research and Monitoring Plan for the Nations territories (including Wood Buffalo National Park) and in partnership with ECCC, Parks and AEP. By use of a cumulative effects framework we intend to monitor basins from three different stressort based regions of the WBNP and use the findings to better inform potential corrective actions to the Park/ territories.

With consideration for adaptive monitoring, where does the proposed monitoring fit on the conceptual model for the theme area relative to the conceptual model for the OSM Program?

Under the air conceptual model, this workplan addresses the following:

Pressure:
Anthropogenic Atmospheric Emissions (all)
Non-oil Sands Related (Wildfire)

Stressor:
Criteria Air Contaminants
Non-CACs
PACs (Phase 3)
Mercury (Phase 3)

Pathway:
Atmospheric Dispersion/Transport
Chemical Transformation
Inhalation
Deposition (Monitors & Modelling) (Phase 3)

Response:
Ambient Air Quality Objectives (Exceedance/trends)
Odour Events
Human Health (Screening Criteria Exceedance)

Under the Programmatic Conceptual Model, this workplan addresses the following:

Pressure:
Weather & Climate Change
Natural Disturbance
Air Emissions & Fugitive Dust

Stressors:
Wildfire
Contaminants

Pathways:
Ambient air quality
Atmospheric deposition
Odours

contaminant exposure

Response:
Health

How will this work advance understanding transition towards adaptive monitoring?

Our air quality work has positioned us to work this year under the Integrated Monitoring and Research Plan with Parks Canada, ECCC and AEP to better align long term monitoring locations, parameters, SOPs, data management, lab use, reporting needs etc. Too much uncoordinated research and monitoring work is being conducted that does not lead to any effective decision making on oil sands impacts. ACFN has established EEM triggers for all of our water chemistry and lab parameters and working with WBEA on these for air and deposition. Improvements in this alignment will assist in better unpackaging cumulative effects.

Is the work plan contributing to Programmatic State of Environment Reporting? If yes, please identify potential linkages to relevant sections of the State of Environment Report.

Long-term data is available for the core air monitoring network operated by WBEA (1998 to 2020). These data can serve as the foundation for State of the Environment (SOE) reporting for air quality.

4.0 Mitigation

Evaluation of Mitigation Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially inform:

- efficacy of an existing regulation or policy
- an EPEA approval condition
- a regional framework (i.e., LARP)
- an emerging issue

Explain how your monitoring program informs management, policy and regulatory compliance. As relevant consider adaptive monitoring and the approved Key Questions in your response.

The Fort Chipewyan AMS collects data that is used to calculate Alberta Ambient Air Quality Objectives, Alberta Ambient Air Quality Guidelines, and Lower Athabasca Regional Plan triggers. These thresholds are used to assess regulatory compliance and inform management decisions. The addition of Phase 2 & Phase 3 will provide data that can be used for source apportionment and dispersion modelling calculations.

5.0 Indigenous Issues

Evaluation of Indigenous Issues Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially:

- Investigate Indigenous communities key questions and concerns
- Includes culturally relevant receptor(s) and indicator(s)
- Include or be driven by Indigenous communities (participatory or collaborative)
- Develop capacity in Indigenous communities
- Include a Council Resolution or Letter of Support from one or more Indigenous communities
- Describe how ethics protocols and best practices regarding involvement of Indigenous peoples will be adhered to
- Provide information on how Indigenous Knowledge will be collected, interpreted, validated, and used in a way that meets community Indigenous Knowledge protocols

Explain how your monitoring activities are inclusive and respond to Indigenous key questions and concerns and inform the ability to understand impacts on concerns and inform Section 35 Rights

Part of a long-term strategy of the Nations is to develop a suite of monitoring triggers and management (or Sec. 35) triggers. These have been established for water quantity, water quality and fish health. The Nations' CBM programs are therefore looking at an EEM design to look for change within natural variation and then inform management reaction / mitigation before management or sec 35 triggers are reached. This project will directly add to the capacity of ACFN and MCFN by allowing trainined staff to be hired and take over the air quality monitoring station in Fort Chipewyan. This will further advance these Nations' leadership in environmental monitoring.

The air quality parameters are of importance to the health of the Mikisew Cree and Athabasca Chipewyan First Nations. Given that this work is driven by a desire to increase the capacity of CBM programs and by extension the Nations in environmental management, this work is deemed directly responding to a community need. Careful consideration in year two will be given to articulate community concerns around air quality with a monitoring location design, and parameter list that can help answer community questions of priority. This work will include the established Mikisew Land Users Advocates Network (a group of 14 Elders guided by an approved TOR) to assist in the ethical collection and communication of information.

Community strategic plans include increased capacity to manage the environment and to have Indigenous Knowledge and best available science guide decisions.

Reseach and monitoring and inclusion of Elders and their knowledge will adhere to community ethics policies around research. Data sharing agreements between OSM will be developed to help more broadly support and lead the ethical sharing and use of IK. This work complies with the ICBMAC co-developed ethics framework.

Does this project include an Integrated Community Based Monitoring Component?

No

If YES, please complete the ICBM Abbreviated Work Plan Forms and submit using the link below

ICBM WORK PLAN SUBMISSION LINK

5.1 Alignment with Interim Ethical Guidelines for ICBM in the OSM Program

Are there any community specific protocols that will be followed?

The ACFN Community Based Monitoring program is guided by an Elders council and is guided by policies enacted by the Chief and Council.

Does the work plan involve methods for Indigenous participants to share information or knowledge (e.g. interview, focus group, survey/structured interview), or any other Indigenous participation? If yes, describe how risks and harms will be assessed, and the consent process that will be used.

While no social science component is yet planned for this work, often in CBM work general questions about environmental change arise and air quality may be mentioned. The community builds their own interview questions, and their own staff ask the Elders the questions. Data is all owned by the Nations and stored using proprietary software.
That said, sharing such data with entities like WBEA could to advance understanding of cumulative effects. We are working very closely with WBEA to deliver co-created reporting and presentation content and as this point in our work (4th year) do not anticipate any risks or harms).

Do the activities include any other collecting/sharing, interpreting, or applying Indigenous knowledge? Please describe how these activities will be conducted in alignment with the Interim Ethical Guidelines, and any community-based protocols and/or guidelines that may also apply.

This workplan does not anticipate collection or sharing of IK

Indicate how Indigenous communities / Indigenous knowledge holders will be involved to ensure appropriate analysis, interpretation and application of data and knowledge.

The ACFN CBM program manager, Morgan Voyageur (CBM Manager, ACFN member) is also the main WBEA technician in Fort Chipewyan. He and Lori Cyprien (Manager of Lands and Rights,ACFN member) together engage an Elders Council to report on their work, findings and to allow for direction to be given.

How are Indigenous communities involved in identifying or confirming the appropriateness of approach, methods, and/or indicators?

While all SOPs were created without direct input from the community, all decisions on sampling expansion and remote locations were driven by community concerns.

How does this work plan directly benefit Indigenous communities? How does it support building capacity in Indigenous communities?

It directly employs the CBM staff and supports the operations to get answers to the community questions about changes to the environment. Mikisew members see CBM jobs as meaningful land-based work that directly supports cultural knowledge exchange between generations. We support the Elders, we support the schools, we build ‘community’ by allowing us to work with the other Nations (ACFN and FCMA) as well as Parks Canada and Alberta and even the municipality. The work plan capacity leads to empowerment in the community and support for long-term environmental management.

How is the information from this work plan going to be reported back to Indigenous communities in a way that is accessible, transparent and easy to understand?

We do this in 4 ways:
Reporting (technical and through our data visualization platform)
Presentations to the community (annually)
Engagement with the LUAN (quarterly meetings)
Annual calendars

6.0 Measuring Change

Evaluation of Measuring Change Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would potentially:

- assess changes in environmental conditions compared to baseline (e.g., validation of EIA predictions)
- report uncertainty in estimates and monitoring is of sufficient power to detect change due to oil sands development on reasonable temporal or spatial scales
- include indicators along the spectrum of response (e.g., individual, population, community)
- focus on areas of highest risk (where change is detected, where change is greater than expected, where development is expected to expand collection of baseline).
- measure change along a stressor gradient or a stressor/reference comparison

Explain how your monitoring identifies environmental changes and how can be assessed against a baseline condition. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

The Nations will employ past data from the Fort Chipewyan station to establish a monitoring trigger +/- 2SD from the mean, and future will monitoring to look for this change..

For new and emerging monitoring the idea is to establish these monitoring triggers, however would require at least 3 years of data to establish (as per Munkitrick). These remote monitoring locations will be designed to establish current conditions and rate of change. This data is essential for the ACFN and MCFN to determine potential changes to the air quality and deposition at their reserve and traditional territorial areas of importance.

In the case of the stressor gradient, Fort Chipewyan is already an existing station, part of the wider air quality and deposition WBEA network. New parameters in year two, such as the addition of VOCs, PM2.5 and PAH, will fill gaps in the current WBEA network along the stressor gradient. 3rd year stations will focus initially on EEM – looking for change along natural variation, however will be located along a gradient from south to north and into greater coverage of the PAD. This will allow observation of spatial changes stemming from stressors (stacks, fugal emissions etc.). The Nations are interested in understanding better air quality and deposition patterns associated with development.

A major outcome of long-term ambient air quality monitoring is to measure long-term trends in air quality so that the impacts of oil sands activities and other non-oil sands activities on human and environmental indicators can be determined. Long-term, continuous air monitoring at consistent monitoring locations in the oil sands regions allows this assessment. Measuring change in air quality parameters needs to consider the dynamic nature of air quality in the oil sands region. In addition to conventional statistical methods for assessing air quality trends, alternative methods also need to be used to adequately measure change.

7.0 Accounting for Scale

Evaluation of Accounting for Scale Criteria (Information Box Only- No action required)

Your workplan will be evaluated against the criteria below. A successful workplan would potentially be:

- appropriate to the key question and indicator of interest
- relevant to sub-regional and regional questions
- relevant to organism, population and/or community levels of biological organization
- where modelled results are validated with monitored data
- where monitoring informs on environmental processes that occur at a regional scale. e.g. Characterizing individual sources to gain a regional estimate of acid deposition and understand signal from individual contributing sources.

Explain how your monitoring tracks regional and sub-regional state of the environment, including cumulative effects. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

Active air monitoring is concentrated in the minable oil sands region (north of Fort McMurray) where the greatest air emissions are occurring. Data from the active monitoring network are being used to support validation of the GEM-MACH model. Active monitoring also takes place in communities and in the vicinity of industrial sources allowing for sub-regional assessment for the state of the environment. The existing

monitoring network does not necessarily account for regional changes outside of the minable oil sands region because of the vast areal expanse and the cost/practicality of active monitoring. However, once validated with active monitoring data, air modelling information and satellite data can be used to fill existing gaps in the regional monitoring network.

The methodology will also add to the transect nature of air sampling, getting better cumulative effects data to answer to forest fires, long range transport of contaminants such as mercury.

8.0 Transparency

Evaluation of Transparency Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would potentially include:

- a plan for dissemination of monitoring data, including appropriate timing, format, and aligns with OSM program data management plan
- demonstrated transparency in past performance
- identified an annual progress report as a deliverable
- reporting of monitoring results occurs at timing and format that is appropriate for recipient audience.

Explain how your monitoring generates data and reporting that is accessible, credible and useful. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

Data produced from this work will go directly into the well established WBEA network of data and database-reporting. Continuous data is available in near real-time and submitted to Alberta Environment and Parks by the end of the following month, after data processing. Time-Integrated data is available once the results have been received from the laboratories conducting the analysis. WBEA has a proven and demonstrable record of openness and data transparency. All new data collected will follow these same standards.

WBEA - https://wbea.org/historical-monitoring-data/ (continuous data)
WBEA - https://wbea.org/resources/reports-publications/air-monitoring-reports/integrated-samples-lab-results/ (time-integrated data)

9.0 Efficiency

Evaluation of Efficiency Criteria (Information Box Only- No action required)
Your workplan will be evaluated against the criteria below. A successful workplan would include:

- appropriately addressed a risk-informed allocation of resources
- identified the role and justification for each staff member on the proposed work plan
- identified in-kind and leveraged resources (e.g., resources and approaches are appropriately shared with other OSM projects where possible)
- established partnerships (value-added) and demonstrated examples of coordinated efficiencies (e.g., field, analytical)
- identified co-location of monitoring effort
- demonstrated monitoring activities and information collected are not duplicative
- considered sampling/measurement/methods compatibility to other data sources (e.g., AER)

Explain how your monitoring is integrated with other OSM projects and incorporates community-based participation and/or engagement in proposed monitoring activities. As relevant, consider adaptive monitoring, the TAC specific Scope of Work document and the Key Questions in your response.

This is a Community Based Monitoring program that is integrated with the Atmospheric Pollutant Active Monitoring Network, long-term monitoring workplan supported by the air monitoring TAC through a close partnership with the WBEA. The project is driven and directed by the Nations (Athabasca Chipewyan First Nation and Mikisew Cree First Nation). The strength of this integration is built upon a previously successful three year workplan with WBEA as partners.

10.0 Work Plan Approach/Methods

List the Key Project Phases and Provide Bullets for Each Major Task under Each Project Phase

Continue ACFN and MCFN CBM staff to operate the continuous air monitoring station in Fort Chipewyan and for the upgraded time integrated sampling;

Monthly checks on the long term monitoring with passive and denuder samplers at the important areas to the Nations in the Peace Athabasca Delta, traditional territories and reserves;

Establish the long term triggers for all air quality parameters of concern

Create further opportunities for Elders and youth to become engaged in transfer of knowledge, science literacy, and environmental management;

Provide appropriate community communication materials and presentations about ambient air data

Provide ambient air data for community monitoring needs, including the Air Quality Health Index (AQHI) and measuring representative ambient concentrations in populated areas.

Integrate this work with the emerging IRMP through the Delta Institute

Describe how changes in environmental Condition will be assessed

Some methods that will be used to assess changes in environmental condition include but are not limited to: (1) comparing concentrations of key parameters with AAAQOs, AAAQGs other relevant benchmarks; (2) Identifying temporal and spatial trends in ambient air quality; (3) based on (1) and (2) determining if there are emerging issues that required further investigation; and (4) informing the public on ambient air quality through indicators such as the AQHI.

Are there Benchmarks Being Used to Assess Changes in Environmental Condition? If So, Please Describe, If Not, State "NONE"

Air quality objective guidelines, Section 35 triggers, LARP for air quality (exclusive of WBNP)

(e.g., objectives, tiers, triggers, limits, reference conditions, thresholds, etc.)

Provide a Brief Description of the Western Science or Community-Based Monitoring Indigenous Community-Based Monitoring Methods by Project Phase

The methods used to monitor air quality continuously within the three oil sands deposits are consistent with the requirements of the Air Monitoring Directive (Alberta Environment and Parks, 2016). The instrumentation is standard and is used across the country in routine air monitoring. The monitoring protocols are well documented and available to the public. The monitoring methods used to measure particulate matter, volatile organic compounds and polycyclic aromatic hydrocarbons using semi-continuous or time-integrated techniques also must follow the requirements of the Air Monitoring Directive.

Daily Operation
- A daily system check of the station is required every morning

Monthly Operation
- Monthly calibrations of all continuous analyzers (~3 hours/calibration)

- Annual calibration of meteorological equipment
-Regular and emergency maintenance of equipment
-20-40 hours per month and On-Call Requirements, as the ambient air monitoring station must comply with

the Alberta Air Monitoring Directive’s requirement of 90% operation uptime
-If an issue is identified during the daily system check, a technician must response in a timely manner and correct the issue

Time-Integrated Sampling

Parameters:
VolatileOrganicCompounds (VOCs)
Particulate Matter (PM2.5)
Mass, ions, metals
PolycyclicAromaticHydrocarbons(PAHs)
Operational Requirements for Time Integrated sampling year 2
2 hours for collection/deployment 5 times a month + shipping time.

List the Key Indicators Measured, If Not Applicable, State N/A

The methods used to monitor air quality continuously within the three oil sands deposits are consistent with the requirements of the Air Monitoring Directive (Alberta Environment and Parks, 2016). The instrumentation is standard and is used across the country in routine air monitoring. The monitoring protocols are well documented and available to the public. The monitoring methods used to measure particulate matter, volatile organic compounds and polycyclic aromatic hydrocarbons using semi-continuous or time-integrated techniques also must follow the requirements of the Air Monitoring Directive.

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-Regular and emergency maintenance of equipment
-20-40 hours per month and On-Call Requirements, as the ambient air monitoring station must comply with the Alberta Air Monitoring Directive’s requirement of 90% operation uptime
-If an issue is identified during the daily system check, a technician must response in a timely manner and correct the issue

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Parameters:
VolatileOrganicCompounds (VOCs)
Particulate Matter (PM2.5)
Mass, ions, metals
PolycyclicAromaticHydrocarbons(PAHs)
Operational Requirements for Time Integrated sampling year 2
2 hours for collection/deployment 5 times a month + shipping time.

11.0 Knowledge Translation

In the space below, please provide the following:

- Describe the plan for knowledge transfer and distribution of learnings from the project. This could include workshops, publications, best practice documentation, marketing plan, etc.
- Demonstrate that the knowledge transfer plan is appropriate for the intended end-users.

WBEA will continue to train and where possible mentor the Athabasca Chipewyan and Mikisew Cree First Nation CBM staff to be able to monitor independently the continuous air monitoring station in Fort Chipewyan.

Project learning will also be valuable to the Air TAC in developing further Phased integration with Indigenous communities. Given that the end users are the Indigenous people in the oil sands region it is not only appropriate but imperative that the engagement on air monitoring is driven by community needs. This project will push the limits of integration for CBM with the broader OSM by moving through the phases towards independent air quality and deposition monitoring (with the obvious caveat that WBEA supports expertise, equipment, and lab analysis.

As all data will add to the existing WBEA network of reporting, the benefits will also include regional Indigenous groups (and others) having access to improved understanding of air quality and deposition in the PAD, which could benefit others such as the Wood Buffalo Ntional Park Action Plan. Knowledge gained from this process will assist the ICBMAC in better defining overall framework for CBM and for integration needs.
WBEA

12.0 External Partners

List by project or project phase each component that will be delivered by an external party (including analytical laboratories) and name the party. Describe and name the associate work plan/grant/contract for these services. * state none if not required

WBEA

*To ensure complete work plan proposal submission, all grants and contracts listed in this section should also be captured in Grants & Contracts.

13.0 Data Sharing and Data Management

For 2024-25 the following approach will be taken by the OSM Program related to data sharing.

For all work plans of a **western science** nature funded under the OSM Program, data sharing is a condition of funding and must align with the principle of **"Open by Default"**. In this case, all data is to be shared with the OSM Program as directed by the OSM Program Data Management work plan.

For all work plans involving **Indigenous Knowledge** as defined below and funded under the OSM Program, data sharing is a condition of funding and the Indigenous Knowledge components of the work plan must align with the principle of **"Protected by Default".** In this case, all data as defined as Indigenous Knowledge, are to be retained by the Indigenous community to which the Indigenous Knowledge is held.

Indigenous Knowledge is defined as:

*"*The knowledge held by First Nations, Inuit and Métis peoples, the Aboriginal peoples of Canada. Traditional knowledge is specific to place, usually transmitted orally, and rooted in the experience of multiple generations. It is determined by an Aboriginal community's land, environment, region, culture and language. Traditional knowledge is usually described by Aboriginal peoples as holistic, involving body, mind, feelings and spirit. Knowledge may be expressed in symbols, arts, ceremonial and everyday practices, narratives and, especially, in relationships. The word tradition is not necessarily synonymous with old. Traditional knowledge is held collectively by all members of a community, although some members may have particular responsibility for its transmission. It includes preserved knowledge created by, and received from, past generations and innovations and new knowledge transmitted to subsequent generations. In international or scholarly discourse, the terms traditional knowledge and Indigenous knowledge are sometimes used interchangeably.*"*

This definition was taken from the Canadian Government's Tri-council Policy Statement for Ethical Research involving Humans (Chapter 9, pg. 113) and is an interim definition specific to the Oil Sands Monitoring Program.

13.1 Has there, or will there be, a Data Sharing agreement established through this Project? *

Yes

13.2 Type of Quantitative Data Variables**:**

Both

13.3 Frequency of Collection:

Other

13.4 Estimated Data Collection Start Date:

Apr 1, 2023

13.5 Estimated Data Collection End Date:

Mar 31, 2026

13.6 Estimated Timeline For Upload Start Date:

apr 1, 2023

13.7 Estimated Timeline For Upload End Date:

mar 31, 2026

13.8 Will the data include traditional knowledge as defined by and provided by an Indigenous representative, Community or Organization?

No

Table 13.9 Please describe below the Location of Data and Data Type:

Add a Data Source by clicking on the add row on the bottom right side of table

Name of Dataset	Location of Dataset (E.g.:Path, Website, Database, etc.)	Data File Formats (E.g.: csv, txt, API, accdb, xlsx, etc.)	Security Classification
WBEA continuous and time-integrated monitoring data	https://wbea.org/historical-monitoring-data/ https://wbea.org/resources/reports-publications/air-monitoring-reports/integrated-samples-lab-results/ https://www.alberta.ca/access-air-quality-and-deposition-data.aspx	.csv	Open by Default

14.0 2024/25 Deliverables

Add an additional deliverable by clicking on the add row on the bottom right side of table

Type of Deliverable	Delivery Date	Description
Technical Report	Q4	
Public Dissemination Document	Q4	
OSM Program Annual Progress Report (required)	Q4	
Technical Report	Q1	
Technical Report	Q2	
Technical Report	Q3	
Technical Report	Q4	
Stakeholder or Community Presentation	Q4	

15.0 Project Team & Partners

In the space below please provide information on the following:

- Describe key members of the project team, including roles, responsibilities and expertise relevant to the proposed project.
- Describe the competency of this team to complete the project.
- Identify any personnel or expertise gaps for successful completion of the project relative to the OSM Program mandate and discuss how these gaps will be addressed.
- Describe the project management approach and the management structure.

Project management is undertaken by Bruce Maclean, on behalf of Lori Cyprien. Bruce Maclean has an exceptional track record and experience in managing OSM funds on behalf of both MCFN and ACFN.

Lori Cyprien is a proud member of the Athabasca Chipewyan First Nation (ACFN) and current Manager of Land and Rights with the Dene Lands and Resource Management team for the ACFN. She resides in Fort McMurray with her partner Troy and son Archer. She holds a diploma in Renewable Resources from Northern Alberta Institute of Technology, a degree in Natural Resources from Thompson River University and a Master of Science in Environment and Management from Royal Roads University. Lori's career started at Syncrude Canada with the reclamation research team. While working for the company she worked her way from a summer student to a site team leader. She completed her MSc thesis at the company, looking at the levels of trace metals in Labrador Tea found on and around the site. Fort Chipewyan is very important to her, she grew up in the community and still has many family members there. Therefore, protecting the land is one of her top priorities.

Bruce Maclean has been the project manager for the ACFN and MCFN CBM programs for 10 years. Bruce Maclean is the Director of Maclean Environmental Consulting, and project manager for the Mikisew Cree First Nation Community Based Monitoring program, as well as Monitoring Coordinator for the Athabasca Chipewyan First Nation's Community Based Monitoring and Guardian programs. He is the current co-chair of the OSM Indigenous Community Based Monitoring Program.

Bruce has spent the last decade leading the development of regional community based monitoring that integrates Indigenous Knowledge with Western Science to understand the impacts of oil sands, hydro development and climate change on the Peace Athabasca Delta and its people. Bruce obtained his B. Sc. in Environmental Sciences from the University of Manitoba in 1997 and received an unconventional breadth of education from living and working with Indigenous people from the Amazon to the Arctic.

His work experience includes the Centre for Indigenous Environmental Resources where he managed staff to build the capacity of First Nations to deal directly with their environmental concerns through education and training, targeted environmental research, restoration activities and facilitated workshops between rights holders. His work experience also includes participation in the aquatic and fish community investigations in preparation for the Environmental Impact Assessments for the proposed Keeyask and Conawapa generating stations in northern Manitoba. This work, in collaboration with Split Lake Cree Nation, Fox Lake Cree Nation, York Factory Cree Nation and War Lake First Nation, focused on the movement of lake sturgeon along the reaches of the Nelson River. This involved working with Elders and resource users from the community and resulted in three publications about fish movement along the Nelson River. He has international experience working with the government of Mexico on the protection of the Meso-American barrier reef and sustainable fisheries and is fluent in English, French and Spanish.

Bruce is motivated by creating opportunities for Elders, scientists and youth to come together to explore the margins of knowledge, especially as relates to environmental restoration.

Morgan Voyageur is a member of the Athabasca Chipewyan First Nation and lives in Fort Chipewyan. Morgan is the ACFN Community Based Monitoring Program Manager, since 2021 and a lead CBM researcher since 2011, (CBM coordinator since 2015). Morgan is a family man and an active land user. He enjoys hunting, fishing and trapping and spending time in the outdoors with his family and friends. He also loves to learn about local Dene history. Morgan will be trainined as the ACFN lead field tech for monitoring and

calibration related to this project.

Matthew Courtoreille is a Mikisew member and a full time Community Based Monitoring program staff member. Matthew Courtoreille is an active land user, the youth member of the Elders Land User Network, and a recent graduate of the Keyano College accredited Environmental Monitoring Training Program. Matthew will be trained as the Mikisew lead field tech for monitoring and calibration related to this project.

The WBEA has a proven history of ambient air monitoring and expertise. WBEA is a key partner for this workplan and will provide training and technical support.

16.0 Project Human Resources & Financing

Section 16.1 Human Resource Estimates

Building off of the competencies listed in the previous section, please complete the table below. Add additional rows as necessary. This table must include **ALL staff involved** in the project, their role and the % of that staff's time allocated to this work plan. The AEPA calculated amount is based on an estimate of $120,000/year for FTEs. This number cannot be changed. The OSM program recognizes that this is an estimate.

Table 16.1.1 AEPA

Add an additional AEPA Staff member by clicking on the add row below the table. The total FTE (Full Time Equivalent) is Auto Summed (in Table 16.2.1) and converted to a dollar amount.

Name (Last, First)	Role	%Time Allocated to Project

Table 16.1.2 ECCC

Add an additional ECCC Staff member by clicking on the add row below the table. The total FTE (Full Time Equivalent) is Auto Summed (in Table 16.2.2) and converted to a dollar amount.

Name (Last, First)	Role	%Time Allocated to Project

The tables below are the financial tables for Alberta Environment & Protected Areas (AEPA) and Environment & Climate Change Canada. All work plans under the OSM Program require either a government lead or a government coordinator.

Section 16.2 Financing

The OSM Program recognizes that many of these submissions are a result of joint effort and monitoring initiatives. A detailed “PROJECT FINANCE BREAKDOWN” must be provided using the Project Finance Breakdown Template provided, accessible here. Please note that completion of this Project Finance Breakdown Template is mandatory and must be submitted along with each workplan.

Table 16.2.1 Funding Requested BY ALBERTA ENVIRONMENT & PROTECTED AREAS

Organization - Alberta Environment & Protected Areas ONLY	Total % time allocated to project for AEPA staff	Total Funding Requested from OSM
Salaries and Benefits (Calculated from Table 16.1.1 above)	0	$0.00
Operations and Maintenance		
Consumable materials and supplies		
Conferences and meetings travel		
Project-related travel		
Engagement		
Reporting		
Overhead		
Total All Grants (Calculated from Table 16.4 below)		$249,150.00
Total All Contracts (Calculated from Table 16.5 below)		$0.00
Sub-Total (Calculated)		$249,150.00
Capital*		$15,000.00
AEPA TOTAL (Calculated)		$264,150.00

* The Government of Alberta Financial Policies (*Policy # A600*) requires that all **capital asset** purchases comply with governmental and departmental legislation, policies, procedures, directives and guidelines. **Capital assets** (*Financial Policy # A100*, Government of Alberta, January 2014) are tangible assets that: have economic life greater than one year; are acquired, constructed, or developed for use on a continuing basis; are not held for sale in ordinary course of operations; are recorded and tracked centrally; have a cost greater than $5,000.
Some **examples of capital asset equipment include:** laboratory equipment, appliances, boats, motors, field equipment, ATV's/snowmobiles, stationary equipment (pier/sign/weather), fire/safety equipment, pumps/tanks, heavy equipment, irrigation systems, furniture, trailers, vehicles, etc. (*Financial Policy # A100*, Government of Alberta, January 2014).

Table 16.2.2 Funding Requested BY ENVIRONMENT & CLIMATE CHANGE CANADA

Organization - Environment & Climate Change Canada ONLY	Total % time allocated to project for ECCC staff	Total Funding Requested from OSM
Salaries and Benefits FTE (Please manually provide the number in the space below)	0	$0.00
Operations and Maintenance		
Consumable materials and supplies		
Conferences and meetings travel		
Project-related travel		
Engagement		
Reporting		
Overhead		
ECCC TOTAL (Calculated)		$0.00

* ECCC cannot request capital under the OSM program. Any capital requirements to support long-term monitoring under the OSM program should be procured by Alberta and captured in that budget table.

Table 16.3

Complete ONE table per Grant recipient.

Add a Recipient by clicking on add table below the table. The total of all Grants is Auto Summed in Table 16.2.1

GRANT RECIPIENT - ONLY: Name	Lori Cyprien
GRANT RECIPIENT - ONLY: Organization	Athabasca Chipewyan First Nation – Dene Lands and Resource Management
Category	Total Funding Requested from OSM
Salaries and Benefits FTE	$155,450.00
Operations and Maintenance	
Consumable materials and supplies	$16,500.00
Conferences and meetings travel	$1,200.00
Project-related travel	$24,500.00
Engagement	$12,500.00
Reporting	$15,000.00
Overhead	$24,000.00
GRANT TOTAL (Calculated)	$249,150.00

Table 16.4

Complete ONE table per Contract recipient.

Add a Recipient by clicking on add row below the table.. This section is only to be completed should the applicant intend to contract components or stages of the project out to external organizations. The total of all Contracts is Auto Summed in Table 16.2.1

CONTRACT RECIPIENT - ONLY: Name	
CONTRACT RECIPIENT - ONLY: Organization	
Category	Total Funding Requested from OSM
Salaries and Benefits	
Operations and Maintenance	
Consumable materials and supplies	
Conferences and meetings travel	
Project-related travel	
Engagement	
Reporting	
Overhead	
CONTRACT TOTAL (Calculated)	$0.00

Table 16.5 GRAND TOTAL Project Funding Requested from OSM Program

The table below is auto calculated, please do not try to manually manipulate these contents.

Category	Total Funding Requested from OSM
Salaries and Benefits Sums totals for salaries and benefits from AEPA and ECCC ONLY	$0.00
Operations and Maintenance	
Consumable materials and supplies Sums totals for AEPA and ECCC ONLY	$0.00
Conferences and meetings travel Sums totals for AEPA and ECCC ONLY	$0.00
Project-related travel Sums totals for AEPA and ECCC ONLY	$0.00
Engagement Sums totals for AEPA and ECCC ONLY	$0.00
Reporting Sums totals for AEPA and ECCC ONLY	$0.00
Overhead Sums totals for AEPA and ECCC ONLY	$0.00
Total All Grants (from table 16.2.1 above) **Sums totals for AEPA Tables ONLY**	$249,150.00
Total All Contracts (from table 16.2.1 above) **Sums totals for AEPA Tables ONLY**	$0.00
SUB-TOTAL (Calculated)	$249,150.00
Capital* **Sums total for AEPA**	$15,000.00
GRAND PROJECT TOTAL	$264,150.00

Some **examples of capital asset equipment include:** laboratory equipment, appliances, boats, motors, field equipment, ATV's/snowmobiles, stationary equipment (pier/sign/weather), fire/safety equipment, pumps/tanks, heavy equipment, irrigation systems, furniture, trailers, vehicles, etc. (*Financial Policy # A100*, Government of Alberta, January 2014).

17.0 FINANCIAL MANAGEMENT

The OSM Program reserves the right to reallocate project funding during the current fiscal year on the basis of project performance and financial overspend or underspend.

☑ Please check this box to acknowledge you have read and understand

In the space below please describe the following:

- Discuss how potential cost overruns and cost underruns will be managed.
- If this is a continuing project from last year, identify if this project was overspent or underspent in the previous year and explain why.
- Describe what risks and/or barriers may affect this project.

Programmatic overruns for salary can be managed by allocating less expensive field technicians to undertake some of the non-technical tasks. Some staff time may be delivered in-kind should the need arise. Field costs related mostly to collections could be managed by dropping the number of total sites. Underspending would largely be a factor if contribution agreements are received in late Q3 or Q4, which the OSM hopes to mitigate for this fiscal.

18.0 Alternate Sources of Project Financing - In-Kind Contributions

Table 18.1 In-Kind Contributions

Add an In Kind Contribution by clicking on the table and then clicking on the add row on the bottom right side of table.

Description	Source	Equivalent Amount ($CAD)
Lori Cyprien - Director	ACFN-DLRM	$15,000.00
	TOTAL	$15,000.00

19.0 Consent & Declaration of Completion

Should your application be successful, The OSM Program reserves the right to publish this work plan application. Please check the box below to acknowledge you have read and understand:

☑ I acknowledge and understand.

Lead Applicant Name

Lori Cyprien

Title/Organization

Athabasca Chipewyan First Nation - Dene Lands and Resource Management

Signature

Lisa Tssessaze Digitally signed by Lisa Tssessaze Date: 2023.10.27 14:15:38 -06'00'

Government Lead / Government Coordinator Name (if different from lead applicant)

Title/Organization

Signature

Lisa Tssessaze Digitally signed by Lisa Tssessaze Date: 2023.10.27 14:16:09 -06'00'

Please save your form and refer to the instructions page for submission link.

Program Office Use Only

Governance Review & Decision Process

this phase follows submission and triggers the Governance Review

TAC Review (Date):

ICBMAC Review (Date):

SIKIC Review (Date):

OC Review (Date):

Final Recommendations:
Decision Pool:

Notes:

Post Decision: Submission Work Plan Revisions Follow-up Process

This phase will only be implemented if the final recommendation requires revisions and follow-up from governance

ICBMAC Review (Date):

SIKIC Review (Date):

OC Review (Date):

Comments:
Decision Pool:

Notes & Additional Actions for Successful Work Plan Implementation:

Lisa Tssessaze

Digitally signed by Lisa Tssessaze
Date: 2023.10.27 14:16:40 -06'00'

Signature