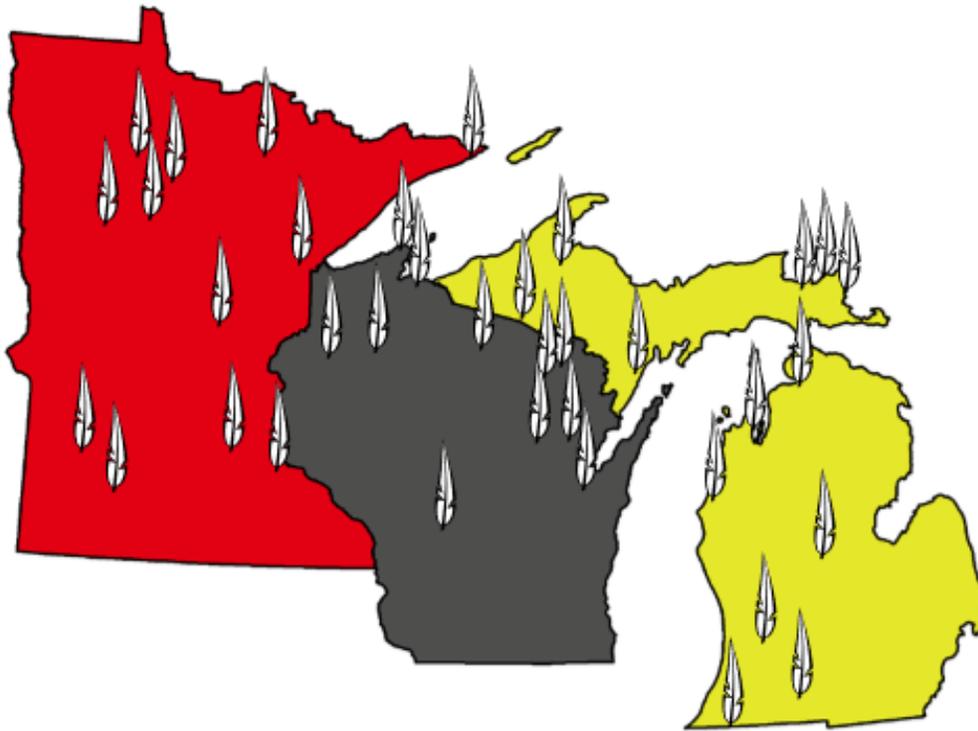


Tribal Air Resources Journal

Accomplishments, Obstacles, Successes and Setback of
EPA Region 5 Tribes – Air Quality
2019 Edition Volume XI



The *Tribal Air Resources Journal* was started by Tribes in EPA Region 5 to better publicize Tribal Air Quality Program achievements, progression, and struggles to their Tribal communities as well as in Indian Country. Environmental staff at these Tribes perform many tasks that are often carried out by multiple individuals in state and local governments. Because of this, Tribal professionals are multi-disciplinary and often understand their air quality issues better than staff working for other governments. This situation affords Tribal staff unique opportunities to manage their air resources as they deem necessary. However, this also presents distinctive problems for staff to overcome. Each Tribe is a sovereign nation that applies for, receives and is responsible for administering its own funding and is not linked to the others in terms of governance. It is our hope, in our eleventh year of publication, that this Journal will communicate the goals, achievements and issues in Indian Country to you, the reader.

The colors in the logo above are taken from the Native American medicine wheel to show our relationship to each other and the environment. The feathers were chosen to mark the location of the Tribal Nations as a symbol of the air and natural resources that we are protecting.

In this issue:

LCO bans vaping products on Rez

Little River looks to TAS

Leech Lake installs 5 electric vehicle chargers

Shakopee permitted and operating two emergency generators

Ho Chunk to initiate regulatory PM monitoring

Bay Mills conducts radon assessment

Fond du Lac receives first round of VW funds

Keweenaw Bay first Tribe in MI to attain air quality TAS

Little Traverse Band conducts mercury leaf litter project

Stockbridge begins to build capacity for Air Program

Bad River installs TSCAN station

Emission Inventories on the rise, multiple Tribes completing or in process

Over a Decade of Air Outreach

Welcome to Region 5's eleventh edition of the Tribal Air Resources Journal. Since 2008 this Journal has provided Tribes with a platform to promote their accomplishments and successes along with sharing obstacles and setbacks encountered along the way. This Journal is not only meant for EPA readers, it is equally meant to tell our story to others across Indian Country, federal and state agencies, and other areas of outreach and opportunity. It is the goal of the Journal to create awareness that: Tribes have viable Air/Environmental Programs and expertise, Tribes are leading cutting edge studies, Tribes are sovereign nations and that Tribes are great partners. It also demonstrates a continuing and underserved need where so much more work is to be done. Over the years the Tribal Air Resources Journal has expanded from bare bones Tribal journal entries to a document that includes: location maps, contact listings and a Ceded Territory map. Each Tribal submission is capped at one page, thus creating a short synopsis of the work they do and may have focused on in 2019. Needless to say there is so much more that each Tribe does each year and plans for the future. Please contact the Tribe(s) with any questions or comments as this is the function of the Journal; to create awareness and conversation.

We are proud to celebrate over one decade of the Tribal Air Resources Journal. It is even more rewarding is that readers are asking when the next edition will be released. This shows the value and interest that the Journal has garnered.

We, the Tribes of Region 5, thank you in taking the time to read our Journal and share the knowledge you have gained with others.

-Region 5 Tribes

2019 Summary of Facts for EPA R5 Tribes

Clean Air Act Implementation

- 8 Tribes in R5 currently have Treatment as a State (TAS) status. Of the 8, all TAS Tribes have CAA 105 with reduced grant match and CAA 505(a)(2) for Title V notification. Two of these Tribes also have CAA 126 authority. Many other Tribes have TAS in their ETEPs and long-range strategic plans.
- 1 Tribe has PSD Class I redesignation. 2 Tribes have expressed interest and are in their own response to comments stage of Class I redesignation process and plan to submit formal requests to EPA. One Tribe has plans to scope out Class I redesignation. Multiple other Region 5 Tribes are evaluating Class I into their long-range plans.
- One Tribe in R5 is assessing the feasibility of a Tribal Implementation Plan (TIP).
- In 2016, the SIP Rule change for Wisconsin to comply with Forest County Potawatomi Class I Redesignation has been amended into the Wisconsin SIP for FCP Class I Area administration.

EPA Funding

- **Clean Air Act** – 16 Tribes requested \$1,715,857 for air quality project/program support from EPA. 14 Tribes were *partially* funded with R5 FY19 State and Tribal Assistance Grant (STAG) funds totaling \$1,283,755. 7 Tribes received CAA 103 grant funding and 7 Tribes received CAA 105 grant funding. 6 of the 7 105 grantees have incorporated their Air Grants into a PPG grant for FY19. One Tribe has implemented an air media only PPG. R5 has implemented a 2 year workplan with a staggered funding structure for established Tribal Air Programs.
- **Tribal Radon (SIRG) Grants** – 2 Tribes are operating Radon Programs under Tribal radon grants in FY19. In FY19 EPA has 3 available grants of \$45,000 each. Multiple other Tribes are utilizing their GAP, Tribal or other funding source to implement radon outreach, testing and mitigation projects.
- **Indoor Air Quality** – Multiple Tribes across EPA R5 do voluntary IAQ work via CAA 103/105 STAG, TOSCA, SIRG, GAP, and OECA EJ funding sources to implement a wide range of IAQ projects.

Other or Past Funding Opportunities

- **American Lung Association** – Four R5 Tribes worked on IAQ projects with elders with COPD and children with asthma. Funding allowed for assessment and mitigation of the IAQ issues.
- **Supplemental Environmental Projects Funding** – Tribe installed a 1 megawatt photovoltaic solar array. EPA has started a repository for Tribes to submit their proposals for potential SEP projects.
- **MN State LCCMR funding** – 200kW community solar garden for low income Tribal Members.
- **Department of Energy** – Investment Grade Audits grant for 22 buildings on a Reservation.
- **GAP** – supplemental funding for air projects that were above STAG funding levels.
- **Tribal Environmental Health Grants** – Cooperative Indian Health Service agreements to promote Reservation sustainability on Reservations with benefits of air emission reductions.
- **DERA/VW Funds** – available diesel funds multiple Tribes in R5 plan to submit proposals.
- **Stove Swap** – Environmental Initiative project for NE Minnesota, from SEP funding. ALA projects for Wisconsin, with EPA Funding.

Tribes in EPA R5 are engaged in and serve on a wide variety of Regional and National Workgroups/Committees

National/Regional Committees:

- Clean Air Act Advisory Committee (CAAAC) – EPA R5 Tribal Representative
- Tribal Air Monitoring Support Center (TAMS) – 2 Steering Committee Representatives
- National Tribal Air Association (NTAA) – 2 R5 Tribal Reps, Vice Chair of Executive Committee
- National Radon Action Plan (NRAP) –Committee Member and NTAA Representative
- Conference of Radiation Control Program Directors (CRCPD) E-25 Committee Member
- National Tribal Science Council – EPA R5 Representative
- National Tribal Operations Committee (NTOC) –R5 Tribal Representatives
- Regional Tribal Operations Committee (RTOC) – Made up of R5 Tribes, two from each state
- LADCO- Technical Committee involvement
- Multiple R5 Tribes serving as ITEP instructors, sharing peer to peer information with other Tribes
- VW Tribal Advisory Council – R5 Tribal Representative

Workgroups:

- EPA R5 Tribal and EPA Mining Workgroup
- Great Lakes Caucus of the Western Mining Action Network
- NTAA Indoor Air Quality Workgroup
- NTAA Mobile Sources (formerly the VW Diesel) Workgroup
- NTAA Indoor Air Quality Workgroup
- NTAA Woodstove Workgroup
- Midwest Tribal Energy Resource Association (MTERA)

Regional and National Meetings:

- EPA R5 Tribal Air Meeting – at the R5 Tribal Environmental Program Managers meeting
- EPA R5 Tribal monthly air media conference calls
- Monthly NTAA-EPA-Tribal policy calls
- Multiple EPA-Tribal consultation calls
- Minnesota Tribal Quarterly Mining Meetings with Minnesota Pollution Control Agency and Division of Natural Resources
- Quarterly Minnesota Technical Staff Environmental Council (MNTEC)
- Michigan Tribal Environmental Group (MTEG)
- Wisconsin Tribal Conservation Advisory Council (WTCAC)
- National Tribal Forum on Air Quality – R5 Tribes attend, on planning committee, and present

Please refer to the documents below for individual Tribal contacts and information sharing:

- ***R5 Tribal Areas of Interest document for permits for input on TV and mNSR permits***
- ***Tribal National, Regional and Local Workgroup Involvement List***

For copies please contact: Brandy Toft brandy.toft@llojibwe.org 218.335.7429

Tribe Finder

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Acronyms

CAA	Clean Air Act
CAA 103	Clean Air Act Section 103 Funding
CAA 105	Clean Air Act Section 105 Funding
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
EI	Emissions Inventory
EPA R5 (R5)	Environmental Protection Agency - Region 5
ETS	Environmental Tobacco Smoke
GAP	General Assistance Program
Hg	Mercury
HUD	Housing and Urban Development
HVAC	Heating, Ventilation and Air Conditioning
IAQ	Indoor Air Quality
ITEP	Institute for Tribal Environmental Professionals
Met	Meteorology; Meteorological Station/Tower
MTERA	Midwest Tribal Energy Resources Association
MPCA	Minnesota Pollution Control Agency
NAAQS	National Ambient Air Quality Standard
NADP	National Atmospheric Deposition Program
NO _x	Oxides of Nitrogen
MNSR	Minor New Source Review
NSR	New Source Review
NTAA	National Tribal Air Association
O ₃	Ozone
pCi/L	Picocuries per liter for radon measurement
PM	Particulate Matter
PM ₁₀	Particulate Matter with a diameter of less than 10 micrometers
PM _{2.5}	Particulate Matter with a diameter of less than 2.5 micrometers
ppm	Parts per million
PSD	Prevention of Significant Deterioration
Rn	Radon
RPO	Regional Air Planning Organization
SIRG	State and Tribal Indoor Radon Grants
SO ₂	Sulfur Dioxide
TAS	Treatment as a State
TSP	Total Suspended Particulates
TAMS	Tribal Air Monitoring Support Center
VOC	Volatile Organic Compounds



Bad River Band of Lake Superior Chippewa

Nathan Kilger, Air Quality Specialist

Daniel Wiggins Jr, Air Quality Technician

Program in Existence since – 2001

Program Projects – PM_{2.5}, O₃, Hg, Met, Rn, IAQ, TSCAN

Location – Odanah, Wisconsin

The Bad River Band Air Program started in 2001 to fulfill the Bad River Natural Resource Department's mission of protecting and conserving the natural resources, maintaining ecosystem integrity, and managing the natural resources for future generations. The water and air quality of the entire Bad River watershed is a priority and Bad River's Air Office works to fulfill those goals.

Bad River continues to monitor radon and other indoor pollutants, along with fine particulate pollution and ground-level ozone for comparison to the NAAQS, received Treatment as a State (TAS) in 2009, and is current pursuing a redesignation from Class II to Class I for the Bad River Reservation.

Bad River has been working on several new projects this year, including the planning and development of the Ishkonige Nawadide (It Catches Fire) Solar Project. The project will be generating 658,000 kWh of electricity per year and will eliminate the need to extract 483,000 pounds of coal each year or sending 487 tons of CO₂ into our air. The project is planned to be completed in summer of 2020.

The Air Program also applied for an NRCS/BIA project that allowed the Bad River Band to host a tribal soil climate analysis network (TSCAN) weather station. This station will fill in large data gap that will provide more detailed wind pattern information, as well as provide more information when looking at drought and heavy precipitation events. This project will be a useful tool for many programs and STEM classes. Many thanks to NRCS for your support!



Installation of the TSCAN weather station, NRCS and Bad River Natural

Bad River's Air Quality Specialist presented at the National Tribal Forum on Air Quality this year during a plenary session on Wildfire Smoke-Ready Tribal Communities that focused on the *Interagency Wildland Fire Air Quality Response Program's Air Resource Advisors and Air Monitoring Tools*.

Outreach and education are vital tools to support all Air Program objectives, specifically with testing for radon and mitigating the multiple indoor air issues. The Bad River Natural Resource Office programs host and participate in an annual Lake Superior Day celebration in July with tables and displays of information for the public to view while they interact with the staff members. The Air Program continues to plan for the Radon Fun-Run which has become an annual runner's activity connected to the Bad River Health Fair.

For more information on the Bad River Band's Air Quality Office, visit <http://x.co/BRair>



Bay Mills Indian Community

Anthony Rinna, Environmental Specialist
Program in Existence since – 1991
Program Projects – Sec 109, 319, IAQ, Radon
Location – Brimley, MI

The Bay Mills Indian Community (BMIC) has been administering an environmental program since 1991. Under the GAP program, thorough collaboration with Inter-Tribal Council of Michigan, BMIC has had various projects to increase air quality throughout the Reservation.

The primary focus of the GAP Program in improving air quality is the continued monitoring of radon in residences on the Reservation. According to the state of Michigan, 12% of homes in Chippewa County have radon levels above 4pCi/L. However, several rounds of testing in the past have shown that the BMIC Reservation tested above this frequency.

Due to these historic high levels of radon on the Reservation the continued monitoring of radon is of great importance. Current testing of radon for 2019-2020 includes the testing of all residences under the jurisdiction of the BMIC Housing Authority as well as plans to expand to community buildings and offer test kits to individual Tribal households. This Program's goals are to identify structures that are in need of mitigation as well as ensure homes with mitigation systems in place are functional so that BMIC Housing Authority can make improvements where needed and perform follow-up testing to make sure mitigation systems are effective.

Outreach and education on topics such as radon and IAQ is provided to the community at both public events and printed publications.

Visit the Bay Mills Indian Community Website www.baymills.org





Bois Forte Band of Chippewa

Curt Goodsky – Environmental Manager

Program in Existence since – 2002

Program Projects – IAQ, Asthma Awareness, Climate Change

Location – Nett Lake and Vermillion (Tower), MN

The Bois Forte Environmental Services Department has not had a Tribal Air Quality Program for the past few years. The need for this Program has increased to include the growing methamphetamine issue across the Nation as well as continuing mold and radon concerns. The Bois Forte Housing Authority continues reporting mold issues, along with carbon monoxide concerns, that we cannot currently properly address. With continued new home construction this also expands our indoor air quality concerns and number of locations.

Funding for a climate change study assist the Band in accessing the state of our natural resources.

It is still the hope of our Tribe to obtain CAA funding to hire staff so the Band can address these continuing and growing concerns.



Wild roses along the shoreline of Nett Lake are a valuable natural resource, not only eye pleasing but also have medicinal properties important to the Ojibwe Culture.



Fond du Lac Band of Lake Superior Chippewa

Joy Wiecks – Air Coordinator

Phil Defoe – Air Quality Technician

Program in Existence Since - 1999

Program Projects –Class 1, O₃, Hg: wet & leaf litter, PM_{2.5}, Permit & Regulation Review

Location – Cloquet, MN

The Fond du Lac Band (Band) was the first Tribe in EPA R5 to have a dedicated Air Program and the first to be granted Tribal Authority to administer parts of the CAA in 2004. The Program provides the Band with expertise on environmental issues related to air quality. In order to protect Fond du Lac resources, the Program reviews and provides feedback on draft permits and regulatory actions, and provides education and outreach to Band members.



The Band has been able to develop its Program, assert its sovereignty, and achieve an excellent working relationship with the Minnesota and Wisconsin permitting agencies, as well as with EPA R5. Our Air Coordinator currently serves as the R5 alternate on the NTAA Executive Committee. In order to assess the effects of air pollution on the Reservation, the Air Program operates an ozone monitor, a PM_{2.5} continuous monitor, and a mercury wet deposition monitor.

The Program has also collected data on leaf litter mercury dry deposition for seven field seasons and hopes to continue this work. Our goal is that this data can help the scientific community study and predict the fate of mercury emissions in the environment and evaluate water quality in the area, as well as the effectiveness of mercury controls.

In May of 2019, Fond du Lac received first round Volkswagen settlement funds which are being used to replace two older diesel trucks on the Reservation. We also received funds to install a dual head Level 2 charging station at our Black Bear Casino Resort. We also anticipate receiving additional funds in the second round and plan to purchase three clean diesel trucks and additional EV charging stations. Black Bear's location between the cities of Minneapolis/St Paul and Duluth as it is a prime location for charging stations.



Meanwhile, the Band continues its work addressing indoor air quality issues and reviewing and commenting on proposed permits and regulatory action.





Forest County Potawatomi Community

Natalene Cummings – Air Quality Program Manager

Joe Cebe – Air Quality Specialist

Program in Existence since – 2002

Program Projects – O₃, SO₂, Acid & Hg dep, PM_{2.5}, Met, IMPROVE

Location – Crandon, Forest County, Northeastern Wisconsin

The FCPC ambient Air Monitoring Program instituted in 2002, provides important information that establishes baseline air quality, air pollution trends, and supports the management of the Class I airshed and protection of Air Quality Related Values (AQRVs) through the establishment of impact thresholds. The extensive monitoring program includes analyzers for O₃, SO₂, vaporous Hg, PM_{2.5}, collectors for acid and Hg deposition, and participation in the Interagency Monitoring of Protected Visual Environments (IMPROVE) network.

The FCPC Reservation was designated as a Class I area in 2008 and in 2010 the FCPC obtained TAS. Having Class I and TAS authorities enables FCPC to participate in the air pollution permitting process and to comment on permit applications. These delegations come with a lot of responsibility and a need for Tribal air staff to be knowledgeable and capable of reviewing the complexities of an air pollution permit application.

Under its Class I authority, FCPC has established air pollutant thresholds for the Tribe's AQRVs - vegetation, water quality, aquatic systems and visibility. Thresholds are established to determine, through modeling, if the proposed emissions from a new or modified major source facility may have an impact on the AQRVs. FCPC participates in discussions with the state issuing the permit, to insure adequate emission limits are in place to protect resources.

FCPC's Air Program staff have, and continue to participate, in Tribal air committees on a regional and national level. The Air Quality Specialist served two terms on the Tribal Air Monitoring Services (TAMS) steering committee and now serves on the Tribal committee advising on the process for awarding and processing distributions of the VW law suit settlement funds. Meanwhile, the Air Program Manager is a member of the Clean Air Act Advisory Committee (CAAAC) as a Tribal Air Programs representative.

The FCPC Air Program hopes to maintain its well established monitoring efforts with upgrades to equipment and advancing technologies, if/when funding is available. The screening of complex air pollution applications continues but is limited by expertise and available funding when outside help is necessary but grant dollars can't be utilized. Tribal Air Programs, including FCPC's, continue to grow and progress but are limited by the decreasing availability of funds. As more Tribes come in for funding for air programs from a budget that isn't expanding, some are forced to curtail their efforts and seriously limit the potential of new programs.



Litterfall Study for Hg

◀ Sample collection

Randomly generated
layout of collection trays ▶





Grand Portage Band of Lake Superior Chippewa

Vallen Cook – Air Quality Specialist

Program in Existence since – 2003

Program Projects – PM_{2.5}, IAQ, Asthma, Hg, Regional Haze, Renewable Energy, Environmental Education, Climate Change, Permit Review

Location – Grand Portage, MN

The Grand Portage Band of Chippewa Reservation is located in the most northeast point of Minnesota. We have had an established Air Program since 2003. Our focus has been on ambient air monitoring, indoor air quality, environmental education, and regional haze. In 2017 we attained TAS status. We intend is to begin working at attaining a Class I Designation for our air shed in the coming years.

The relationship between the Grand Portage Wildlands Fire Program and the Air Program is excellent. We can make recommendations on how and when it is appropriate to burn within village limits. They are very good at informing the community and comments are not usually needed. An instance is this summer where the National Park was burning piles in a small field within the village, the wind shifted and pushed smoke towards homes and our Tribal Council building. It was discussed with the Wildlands Fire Director, and they agreed to postpone the burning until wind conditions were right.

We have been very involved in the Tribal Air Monitoring Center (TAMS) serving on the Steering Committee. Our Air Quality Specialist serves as the Vice-Chair of the Steering Committee as well as the liaison between TAMS and the National Tribal Air Association. Our AQS also was a Tribal instructor for an ITEP R computer language/analysis course that took place on the Pechanga Reservation in California.

There are always challenges when it comes to Air Quality Programs and projects. The biggest issue for us is indoor air quality. Trying to establish continuity within our community hard, but we are making progress. We have been asked by Tribal Council to reach out more to those who have had reoccurring respiratory issues. The issue that glares us in the face due to the size of our community is confidentiality on what we may or may not see. It is challenging to communicate that we are only there to provide help with air quality issues and not judge on other matters.

*Grand Portage (Pete's)
Island on the Grand
Portage Reservation.*





Grand Traverse Band of Ottawa & Chippewa Indians

Carolyn Sonderegger – Environmental Service Coordinator

Program in Existence from - 2002 to 2010

Program Past Projects – O₃, IAQ, Hg, EI, Diesel Retrofit, NADP Monitoring, Rn, Burn Barrels & Educational Outreach

Location – Peshawbeston, Michigan

The Grand Traverse Band of Ottawa & Chippewa Indians (GTB) is located in the northern part of the lower peninsula of Michigan, in Peshawbeston. GTB's Natural Resource Department (NRD) environmental program was established on October 1, 1997 through grant funding from the EPA and has grown to include programs for solid waste management, pollution prevention, watershed planning, great lakes management planning, environmental health, groundwater and surface water quality protection, seventh generation initiative program, wetland protection, nonpoint source pollution, soil erosion permitting, CERCLA Section 128A (brownfields, Phase 1 contamination surveys, environmental response), and a green team. GTB's environmental program's goal is to restore and protect the natural systems upon which life depends. This includes the integral relationship between natural systems and the health and welfare of GTB members in the six-county service area, and arguably the 1836 Ceded Territory. This mission is consistent with the GTB Constitution, which states, in part, that the Constitution was adopted "to conserve and develop our natural resources."

In 2002, GTB established an Air Quality Program under the Clean Air Act (CAA) 103 grant funding. The air quality program began with National Atmospheric Deposition Program (NADP) Monitoring and during the eight years of existence added ozone monitoring, household radon testing, indoor air quality inspections of tribal residences and governmental offices, mercury deposition monitoring, emissions inventories, diesel retrofit training, creation of a burn ban ordinance, and educational outreach to the tribal membership and the local public. The GTB Air Quality Program partnered with the Michigan Department of Environmental Quality (now known as Environment, Great Lakes & Energy), NADP staff, Inter-Tribal Council of Michigan, and the U.S. EPA. In 2009, GTB was working to secure air TAS and CAA 105 funding. In 2011, GTB had to discontinue its Air Quality Program based upon the fact that the partial funding available under the CAA 103 was insufficient to fully staff and administer an Air Quality Program. Although in 2018, GTB re-affirmed air quality as a Tribal priority in 2019-2023 EPA Tribal Environmental Plan, we still lack the funds or the staff for a Program. In support of the importance of Air Quality and other Tribal programs, GTB is working to provide helpful input on air quality to other regional Tribes.

For further information, please visit our websites:

<http://www.gtbindians.org/default.asp>

<http://www.gtbindians.org/naturalresources.asp>

<http://www.gtbindians.org/environmental.asp>

GTB NRD Mission: To protect and enhance the natural resources and environment entrusted to us by the Creator & guaranteed by treaty rights, for managed & respected utilization by the Anishinabek people for past, present, and future generations.





Hannahville Indian Community

L. Scott Wieting – Environmental Specialist

Program in Existence since – 1993

Program Projects – Radon Testing, Indoor Air Quality Education

Location – Wilson, Michigan

Hannahville has requested to withdraw from the Journal for 2019.

We look forward to their submission in 2020.





Ho-Chunk Nation

Matt Malimanek, Air Quality Specialist

Program in Existence since – 2006

Program Projects – Ambient Air Monitoring, Rn, Asthma, & IAQ

Location – Black River Falls, WI

The Ho-Chunk Nation's ambient air monitoring efforts reached a major milestone in August of 2019 when its Particulate Matter Monitoring Quality Assurance Project Plan was approved by EPA R5. The Nation's two PM monitoring ambient air quality stations are expected to be producing regulatory PM data comparable to the NAAQS on January 1, 2020. The stations were established in response to Tribal members' concerns over possible impacts of large frac-sand mining operations on local air quality.



One of the Ho-Chunk Nation's Ambient Air Quality stations near Tomah, WI

On the Indoor Air Quality side of things, the Ho-Chunk Nation's Air Quality Program continues to observe and accommodate a rise in the quantity of Tribal Member requests for mold investigations, radon testing, and indoor air quality assessments. The rise is believed to be the result of the Program's recent efforts to promote the services that it offers to Tribal Members. Upon completion of home visits, members are informed of whether indoor air quality concerns exist and what actions can be taken to minimize them.



Inter-Tribal Council of Michigan, Inc.

Anthony Rinna – Environmental Specialist

Bill Bernier – Registered Sanitarian

Program in Existence since – 2000

Program Projects – PM_{2.5}, MET, O₃, IAQ and Regional Haze monitoring

Location – Sault Ste. Marie. MI

Inter-Tribal Council of Michigan, Inc. (ITCMI) has provided support for member Tribes in regards to air quality since 2000. These activities have involved individual and collections of Tribes as well as cooperation with state and federal partners.

In the recent past ITCMI has monitored the Sault Ste. Marie area for PM 2.5, Haze, Ozone and meteorological data. This program was funded through a CAA Section 103 grant. It was developed to monitor the unique problem faced in the Eastern Upper Peninsula of Michigan due to its shared border with Canada and the amount of pollution associated with the manufacturing practices in Sault Ste. Marie Ontario. In 2018 the Program did not receive funding due to a number of factors including difficulties maintaining equipment in the harsh northern climate and a lack of air quality concerns being shown by the monitoring.

Indoor air quality assessments are provided to Michigan Tribes through contracted sanitarian and environmental health services at ITCMI. Assessment requests have ranged from the investigation of air quality in family homes to the investigation of air quality and weatherization effectiveness of large facilities. ITCMI has IAQ trained personnel and a wide range of IAQ equipment to assist Tribes with their specific IAQ needs.



ITCMI Website

www.itcmi.org



Keweenaw Bay Indian Community

Jane Kahkonen – Air Quality Specialist

Program in Existence since – 2012

Program Projects – IAQ, Education and Outreach

Location – L’Anse/Baraga, MI

The Keweenaw Bay Indian Community (KBIC) is located in the Upper Peninsula of Michigan in a rural and pristine area on the shores of Lake Superior. The Reservation encompasses over 55,000 acres, 17 miles of Lake Superior shoreline, 80 miles of streams and rivers, 15,000 acres of lakes, and 3,000 acres of wetlands. It borders the Village of L’Anse and encompasses the Village of Baraga. The Reservation also has land in Marquette and Ontonagon Counties. KBIC lies within the boundary of the Ceded Territory of 1842.

KBIC is pleased to announce that in October 2019, our application was finalized for Treatment as a State status which makes us eligible for CAA 105 and 505(a)(2) authority. KBIC hopes that our approval will make it easier for other Tribes in the State of Michigan to seek TAS going forward. TAS will allow KBIC to participate more fully in state and local AQ issues regarding permitting, co-monitoring, and co-management of point source and transported pollutants. We look forward to building the capacity of our Air Quality Program (AQP), maintaining our current partnerships, as well as setting new goals for addressing our air concerns. We continue our commitment of protecting the health of all community members as well as participating in processes that create a safer environment for now and the next seven generations.

The KBIC AQP is currently working under its eighth year of EPA Tribal Air Program funding. The AQP continues to grow in accordance with the concerns of community Tribal Members and the values stated in the KBIC Integrated Resource Management Plan of “Preserving the land, air, and water quality without sacrificing sovereignty”. Community interests about air quality include mold, moisture, radon and respiratory health within the home, Mercury deposition that affects traditional food resources, pollutants created through mining and coal ash waste. *The KBIC Air Quality Program website <http://nrd.kbic-nsn.gov/air-quality>.*



Ariel view of the Eagle Mine



PM2.5 Monitoring



Warden Electric Biomass Plant



Lac Courte Oreilles Band of Lake Superior Chippewa

Brett McConnell – Environmental Specialist

Program in Existence since – 2000-2005

Program Projects – Radon Monitoring/Mitigation, NADP Network, Mold

Location – Northwest Wisconsin

LCO Tribe Bans Sale and Use of Vaping Products on Tribal Property

Due to the adverse health effects related to use of electronic smoking devices and vaping-related products, the Lac Courte Oreilles Tribal Governing Board took action Monday, Oct. 7, 2019, to protect the health of its tribal membership, including the youth, voting unanimously to ban the sale of vaping products in all Tribal retail outlets and the use of said products on all Tribal property, which includes government buildings, educational facilities and commercial enterprises.

Tribal Chairman Louis Taylor said the health of all Lac Courte Oreilles members must be safeguarded from potentially harmful and unsafe products and by keeping these products off the store shelves at LCO retail outlets and preventing their use on Tribal property, the Tribe is taking the necessary and important steps to keep our children and our community safe and to prevent exposing our people to these dangerous chemicals in the future.

According to the Centers for Disease Control, there is a current outbreak of illness suspected to be related to vaping which has sickened 1,080 people with lung illnesses and at least 18 have died in 15 states.

“The increasing number of lung injury cases we see associated with e-cigarette use, or vaping, is deeply concerning. Unfortunately, this may be the tip of the iceberg when it comes to the escalating health threat this outbreak poses to the American public, particularly youth and young adults. CDC will continue to work with FDA and state health partners to investigate the cause, or causes, of this outbreak and to bring an end to these lung injuries.”- Dr. Robert R. Redfield, MD, Director of the Centers for Disease Control and Prevention.

All seven members of the Tribal Governing Board agreed this is a health crisis due to the outbreak over recent months and urgent action was required. The LCO Legal Department will be drafting an ordinance outlining enforcement action of the ban on vaping products. Currently, employees of the Tribe are permitted to smoke only in designated areas; smoking is currently prohibited in any Tribal owned vehicle, and in any government building designated as a workplace.





Lac du Flambeau Band of Lake Superior Chippewa Indians

Dee Ann Allen – Environmental Program Manager

Program in Existence since – 2008

Program Projects – Energy Upgrades, Climate Change Resiliency Planning, IAQ, Education and Outreach

Location – Lac du Flambeau, WI

Climate Adaptation and Resiliency & Pre-Hazard Mitigation, Energy Planning Initiatives:

As part of our responsibility to ensure clean land, water, and air for seven generations, the Lac du Flambeau Tribe has approved a Pre-Hazard Mitigation plan that incorporates our Climate Change Resiliency Adaptation Plan initiatives based on Tribal ecological knowledge as well as our 25 year Energy Reduction Plan objectives. The Lac du Flambeau Band of Chippewa continues to participate in the Midwest Tribal Energy Association (MTERA). MTERA's mission is: "To empower Midwest Tribes to manage energy resources through collective action". Environmental responsibility is at the forefront of what we stand for. Lac du Flambeau continues to participate in planning and action through this organization and our Tribe continues to implement energy infrastructure projects.

General Air Quality Protection Concerns:

We continue to be faced with the accumulative and direct air quality protection & degradation impacts/concerns affecting our Reservation and Ceded Territory resources. Some of the threats include cumulative air permitting impacts and deregulation of protections from proposed or existing mining and other industrial activities; climate change hazards; chemical trails; lack of funding for Tribes to sustain full time staff to develop, monitor and implement air programs including TAS.

Indoor Air Quality Concerns:

Our Tribe struggles to deal with various indoor air issues including synthetic drug, meth, and tobacco use to mold, wood smoke and poor ventilation issues. The most vulnerable populations of our children and elderly being most impacted. Some of the homes affected by the synthetic and meth smoke are costly to renovate and remediate. We have stepped up the monitoring and housing inspections as well as outreach education. Funding to address the issues still remain.

Big Crawling Stone Lake



Manoomin





Lac Vieux Desert Band of Lake Superior Chippewa Indians

Beth Schrader – Environmental Officer

Program in Existence – 2015

Program Projects – IAQ

Location – LVD Reservation, Watersmett, Michigan

The Lac Vieux Desert Band of Lake Superior Chippewa Indians is a federally recognized Indian Tribe located in the Upper Peninsula of Michigan, near the Wisconsin border. Lac Vieux Desert has 749 enrolled members. The Reservation is composed of 1140 acres of fee land and 339 acre held in trust by the United States Government for the community. The 9- member council is an elected body, whom is selected through the election process to govern the Tribe.

The Lac Vieux Desert Band has had a difficult time getting Tribal members on board to have indoor air inspections done on their homes. Since the IAQ courses were completed for both level 1 and level 2, only a handful of inspections have been completed. With that being said, it was decided to shift our efforts to water.

More research is being done on the streams and lakes adjacent to Lac Vieux Desert. We are working on the general water quality aspects under CWA 106. There are various projects going on with wetland restorations, road improvements to culverts, and beaver control to restore the streams for adequate stream flow. We are also looking at our historic rice bed on Lake LVD and how we can restore the wild rice.



Wild rice on the Middle Branch of the Otonagon River showing the flowers during the germination stage of the plant.



Roger LaBine, LVD Tribal Member, out monitoring the wild rice for the Environmental Department.





Leech Lake Band of Ojibwe

Carma Huseby – Air Quality Specialist

Brandy Toft – Environmental Deputy Director

Program in Existence since – 2001

Program Projects – Hg (wet, litter, speciation), IAQ, Met, PM_{2.5}, Rn, Diesel, Toxics, Solar, Permits/Rules, Mining, Sustainability, Forecasting, etc...

Location – north central Minnesota, HQ located in Cass Lake, MN

The Leech Lake Band of Ojibwe (LLBO) continues to build capacity, develop and enhance its Air Quality Program (LLAP) to protect human health, cultural and trust resources within the Reservation's 865,000 acres.

Leech Lake's goal of sustainability continues with 5 electric vehicle chargers, 260 Kws of solar PV, of which 200Kw serves low income households, and finalizing a multiyear 22 building Guaranteed Energy Savings Project that will provide \$276,000 in energy savings and reduce 2,030 metric tons of GHG emissions *per year*. A solar strategy plan and a Climate Adaptation Framework were also completed. In 2020 we will be commencing a Sustainability Strategic Plan.

The LLAP operates ambient air monitoring sites for Hg (wet deposition, leaf litter, AMNet Hg speciation), BAM 1020 PM_{2.5} and meteorology. The BAM is integrated into the State of Minnesota's PQAO and Air Forecasting network and can be viewed real-time at <http://www.smogwatch.com/minn/realtimedata.cfm> <https://www.pca.state.mn.us/air/current-air-quality>. In 2019 we added a Bloomsy eye and small met station to the BAM site so when PM levels are high MPCA air forecasters and local residents can see live conditions and take precautions. <https://map.bloomsy.com/weather-stations/faBiuZWsnpapmKqr> Collaboration with the MPCA has been beneficial for both entities. MPCA has provided: technical assistance, remote data retrieval and QA/QC. Leech Lake's monitoring provides data and fulfills a data gap that Leech Lake has had concerns for years and is now acknowledged.

Other work in 2019 continues to protect and maintain LLBO's air quality as Leech Lake is surrounded by 24 Title V facilities of varying industries: coal EGUs, wood/paper, waste incinerators, natural gas compressor stations (TV on Tribal lands), and an additional six iron ore mines clustered within or near our 1855 Ceded Territory. The LLR has approximately 68 minor sources that exist within the Reservation boundaries. We also have 8 pipelines (6 oil and 2 natural gas) traversing the Reservation. With the review of environmental impact statements, Department of Commerce, Public Utilities Commission documents, Title V and minor permits on or near the Reservation it is important to understand the complexities of our airsheds and impacts upon them. LLBO received TAS for CAA 105, 505 2a in October 2007.

LLAP is engaged on local, regional, and national venues {NTAA Vice-Chair, R5 RTOC Minnesota Representative, TAMS, NRAP, CRCPD, MTERA Chair (MTERA.org)} and shares that information in the form of data, education, and outreach to and for Indian Country.

The LLAP is funded by a unique Air Media PPG combining our 105 and Radon grants. The LLAP looks forward to building and expanding capacity to better serve LLBO, while working with partners to leverage resources and promote air quality issues in Indian Country.



*BloomSky
on PM_{2.5}
BAM
enclosure.*

Solar install with GESP project.





Little River Band of Ottawa Indians

Thomas Shepard – Air Quality Specialist
 Allison Smart – Environmental Coordinator
 Program in Existence since – 2005
 Program Projects – O₃, PM_{2.5}, MET
 Location – Manistee, MI

Little River Band of Ottawa Indians (LRBOI) began its Air Quality Program in September of 2005 utilizing CAA 103 grant funding. The Tribe was concerned that ozone transport up the Lake Michigan shoreline was adversely affecting air quality in Manistee County, Michigan. Since 2005, the transport issue has been documented and acknowledged by the State of Michigan and EPA. LRBOI continues to monitor ozone to gather additional information and to support trend analysis.

The LRBOI Air Quality Program also includes the operation of a PM_{2.5} air monitoring station and meteorological instrumentation. LRBOI has an agreement with the State of Michigan for air monitoring assistance with laboratory and quality control services. This collaborative relationship benefits all involved. The Tribe hopes this relationship continues well into the future.

LRBOI is in the process of pursuing Treatment as State (TAS) for CAA 105. LRBOI will continue to educate Tribal Members and the general public to provide outreach on air quality-related issues. The Tribe plans to expand the Air Program to include an Indoor Air Quality (IAQ) Monitoring Program. The Tribe will provide ambient and IAQ education and outreach for Tribal and non-Tribal citizens. This increased awareness will help them better understand air quality issues and enable them to make more informed quality of life decisions.

In 2019 LRBOI began re-siting its air monitoring equipment in response to new construction near the existing air monitoring station. The new monitoring locations will meet federal siting requirements.

LRBOI's Home Page www.lrboi-nsn.gov



AMS and MET Spring 2019



Manistee Harbor



AMS and MET Winter 2019



Little Traverse Bay Bands of Odawa Indians

Jon Mauchmar – Environmental Specialist – Air Quality

Program in Existence since – 2004

Program Projects – IAQ Education/Outreach, Renewable Energy,
Energy Efficiency, Capacity Building

Location – Harbor Springs, MI

On September 21, 1994 the Little Traverse Bay Bands of Odawa Indians (LTBB) was federally reaffirmed with the signing of Public Law 103-324. The LTBB Reservation area encompasses approximately 336 square miles of land in the northwestern part of Michigan's Lower Peninsula and is bordered by Lake Michigan to the north and west.

In 2002, LTBB initiated an Air Quality Program that was focused on educational outreach and home radon monitoring. In 2004, the Program was expanded to include a part-time Air Quality Specialist and again in 2007 to a full-time Environmental Specialist. Program staff drafted an Emissions Inventory (EI) in 2007-2008, from 2009-2011 the Program collected PM_{2.5} data and ozone monitoring occurred for the 2012 season. An updated EI was completed in 2013. Energy audits for LTBB owned buildings were conducted from 2014-2017. Two solar arrays totaling 50 kW were installed in 2016 and 2018 to help cut energy production emissions. The current Air Quality Program is run by one Environmental Specialist and funded 75% by EPA Clean Air 103 grants.

Indoor air quality (IAQ) was a primary focus of our Program in 2019. We currently offer free short-term radon testing kits and expanded the program to offer IAQ home assessments. The Air Quality Program worked with EPA Region 5, Indian Health Services (IHS), the Institute for Tribal Environmental Professionals, the LTBB Housing Department, and other Region 5 Tribes to build capacity for the LTBB IAQ Assessment Program. In 2019, 15 homes were assessed for IAQ. Through these assessments, the Air Quality Program was able to help LTBB Housing locate areas in need of repair, cleaning, and preventative maintenance that will increase IAQ. Due to the tight building envelope designs used in our area, mold and ventilation are constant issues for LTBB IAQ.

LTBB began sampling deciduous leaf litter to analyze the presence of atmospheric mercury in our area. Sample analysis is conducted by the National Atmospheric Deposition Program (NADP). Bioaccumulation of mercury is a concern in our area as fish and wild game are mainstays in the diets of the Odawa and many others in Northern Michigan.



LTBB leaf litterfall collection (fall 2019)





Lower Sioux Community

Deb Dirlam – Director, Office of the Environment

Justin Wabasha – Environmental Technician

Department in Existence since – Since 1992

Program Projects – IAQ, Ambient Air Quality, Monitoring, Education

Location – Morton, MN

The Lower Sioux Indian Community (LSIC) is located along the Minnesota River in Morton, Minnesota. The Reservation is comprised of 1,743 acres of “trust” land held for the Tribe. The Community contains mostly flat agricultural land along with approximately 250 acres of timber and brush and Minnesota River escarpment. The Tribal commercial center sits on the uplands and is surrounded by agricultural land, prairie pothole wetlands and Tribal housing. The Tribe is governed by the elected five-member Lower Sioux Community Council. The Tribe operates business enterprises such as a casino/hotel and other establishments. Approximately 982 Tribal members live on the Reservation in 150 single family dwellings and 8 duplex rental units. The regional land use is predominantly agricultural, and several Tribal Members hold assignments to farm.

The Lower Sioux Community does not currently have an air grant through EPA. However, the Lower Sioux Office of the Environment (OE) staff is involved in air quality-related activities such as providing education and outreach to the Community Members and Lower Sioux Departments. The Lower Sioux OE staff continues to coordinate the Climate Adaptation and Renewable Energy Committee -CARE (the former Renewable Energy Advisory Committee, established in 2016). This Committee assists in climate adaption and renewable energy development including advising on topics such as Climate Resiliency. The LSIC utilizes a 2018 solar feasibility study as a strategic plan for incorporating solar energy in future development in the Community. OE staff continues to work on developing a Climate Adaptation Plan. Concerns were raised this past year upon a proposed mid-size confined animal feedlot operation (swine) located near (<0.5 mi) from the Community. Anticipate future work to address the impact on air quality for Community residences and medical/cultural plants if the proposed project becomes operational.

Air Projects/Programs for FY 2019-2020

- Open Burning, Barrel Burning, Fire Prevention, Permitting
- Mold/Moisture technical assistance to Housing working with residences affected by flooding.
- *Research on air quality concerns related to feedlot operations
- Education on Carbon Monoxide, Mold/Moisture, Asbestos, Pests, Weatherization, and Radon.





Match-E-Be-Nash-She-Wish Band of Pottawatomi Indians

Shawn McKenney – Environmental Specialist

Program in Existence since – 2003

Program Projects – Conservation Incentive Program, Emission Inventory, IAQ, Alternative Energy, Radon, Climate Change Adaptation Planning

Location – Shleboville, MI

The Match-E-Be-Nash-She-Wish Band of Potawatomi Indians (Gun Lake Tribe) is a federally recognized Indian Tribe located in southwest Michigan, approximately 25 miles south of Grand Rapids. The Gun Lake Tribe has 581 members currently enrolled. The Reservation is composed of 735 acres held in trust by the United States Government for the tribal community and possesses no exterior boundary.

The Gun Lake Tribe continues to implement the Air Quality/Quality Assurance Plan to provide indoor air quality audits to improve the overall environmental health of Tribal citizenry. The Indoor Air Quality Program, which is funded by EPA GAP, includes the following testing parameters: particulate matter, relative humidity/dew point, mold/radon, moisture testing throughout the home, and infrared readings. A general home health assessment is reported to each citizen at the conclusion of these audits. The Tribe provides indoor air quality retrofits through the Conservation Incentive Program funded through the general budget. The Tribe continues to gain training and air quality equipment to grow capacities.

<https://gunlaketribe-nsn.gov/departments/administration/environmental/direct-services-program-offerings/>

The Tribe continues to implement the climate change adaptation plan which was adopted in 2015. This includes low-emission/hybrid vehicle purchasing policies, solar feasibility studies, and increasing energy efficiency practices within tribally owned buildings. In 2019, the Tribe has assisted to install a solar array for a Tribal citizen's home, which now provides 100% of the homes electricity needs.



GLT citizen solar array Hawaii, US





Menominee Indian Tribe of Wisconsin

Jeremy Pyatskowitz – Environmental Services Director

Program in Existence – 2000 to 2010

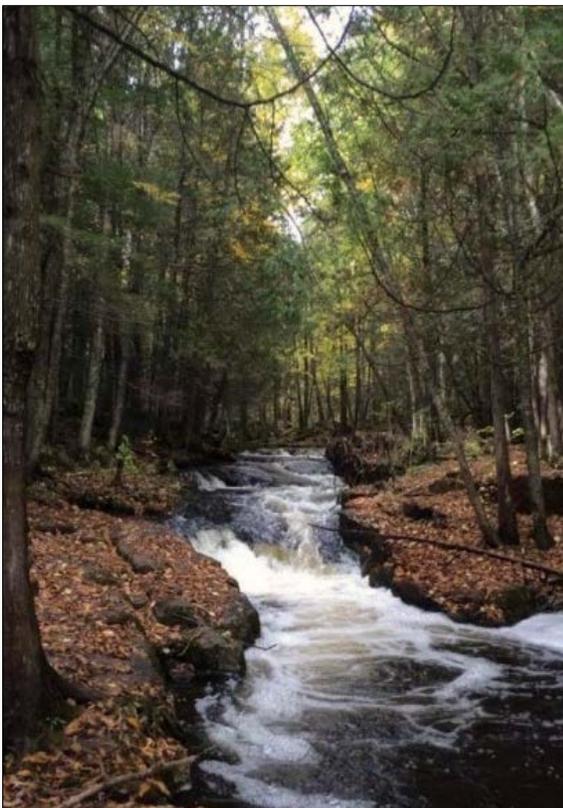
Program Past Projects – Rn, Hg, Acid Rain

Location – Keshena, WI

The Menominee Indian Tribe of Wisconsin (MITW) is a federally recognized Indian Tribe that inhabits 235,000 acres in northeastern Wisconsin which is 95% forested. The population within the Menominee Reservation is 4,857 (2000 U.S. Census).

The Menominee Tribe originally started the Air Program in 2000 to monitor for acid rain and mercury. The program was funded by a R5 103 air grant. We participated with the National Atmospheric Deposition Network for laboratory work and reporting, after 2006 we no longer participated in the acid rain monitoring due to funding cuts, however we were able to keep monitoring for mercury until March 2010. Mercury was continued longer because we filled a gap within the state for collection. One of the reasons the air funding was cut was because there is not a huge issue with acid rain or mercury levels within the Reservation. There is no industry on the Reservation except a Tribally operated sawmill in the Village of Neopit.

The Tribe annually collects fish for mercury samples. A future goal would be to be able to have an air program that would allow mercury samples collected and then combined with the fish samples to have a better correlation of mercury within the Reservation.



Little West Branch of the Wolf River.

Radon testing back in the 1980's and 1990's showed many of the homes on the Reservation with elevated radon levels. In 2009 the Tribe received a grant to do more radon testing on the Reservation. Our program provided technical assistance to homeowners who wish to install remediation systems. With the grant we were able to test many of the Tribes housing units and remediation systems were then installed by another agency within the Tribe. There is a need for continued monitoring of indoor air quality. Current workplan don't accommodate air issues. With needed funding, Menominee Tribe would be able to hire a staff member to work solely on air issues.

Currently there is no air program within the Reservation, but the Tribe is considering obtaining TAS Authority under CAA Section 105, and will be considering applying for more.





Mille Lacs Band of Ojibwe

Charles Jirô Lippert – Air Quality Specialist
 Program in Existence since – 1996
 Program Projects – O₃, IAQ, MTERA
 Location – east-central Minnesota

The Tribe began its Air Quality Program in September of 1996 with the constitutional reform of the Mille Lacs Band of Ojibwe. In the beginning, our elders knew of what the Air Program should address and made it part of the Tribe's statutes, but had no way of addressing our concerns, only hoping our vision would come together in the future. At the same time, Minnesota was under pressure to provide a determination for CO and asked for partnership with the Tribe. From this partnership, the Tribe eventually got assistance from CAA 103 grant funding via EPA. From our humble beginnings of CO monitoring, we moved to monitor for PM₁₀, then for PM_{2.5} and O₃, only to find we were down-wind transport recipient of metropolitan Minneapolis-St. Paul's air pollution. This led the Tribe to begin monitoring for meteorological conditions, monitor for speciated PM_{2.5} and for Hg. Today, the Tribe's Air Quality Program operates under CAA 105, continues to monitor for O₃, assess PSD air permits issued by them that may impact our peoples and natural resources, work on air quality aspects of climate change, sustainability projects for energy and food independence, and waste reduction. In addition, the Tribe's Air Quality Program works closely with the Tribe's Public Health, Housing and Administrative offices to assess and monitor IAQ for domestic and industrial safety and hygiene. Together with other Upper Midwest Tribes, the Air Quality Program participates with the Midwest Tribal Energy Resources Association (MTERA) to map out the Band's energy future.

In order to holistically achieve air quality protection, the Air Quality Program actively engages addressing air quality improvements at all levels—personal, indoor, outdoor, local ambient, regional ambient, and international ambient—while ensuring the Band-members are not dispossessed of their right to clean, healthy air. Together with the Water Quality Program, the Air Quality Program participated in the National Pollution Prevention Roundtable (NPPR), and was awarded to implement the Seventh Generation Initiative (SGI) in the Phillips Communities of Minneapolis, MN, from 2009–2012. Through the Air & Waste Management Association (A&WMA) as part of Technical Council from 2009–2016, ensured indigenous environmental programmatic actions covering air, water, and waste were featured in their Annual Conference and Exhibition. Though those efforts and additional needs identified, MPCA, Minnesota Department of Health, and the Band's Air Quality Program conducted a poly-aromatic hydrocarbons (PAH) in the Phillips Communities, from 2013–2016. Additionally, since 2009, Band has been working with Environmental Initiative's Clean Air Minnesota, and MPCA's Commissioner Environmental Justice Task-force 2014–2016 to guide the State on its future air quality policies. Band will be seeking redesignation as Class I air-shed, and restore Hg, Met, continuous and speciated PM_{2.5} monitoring to characterize, model and inventory air pollutants affecting the Tribe's air-shed.

Mille Lacs Band of Ojibwe
 43408 Oodena Drive
 Onamia, MN 56359
<http://www.millelacsband.com>

Chief Executive: Melanie Benjamin
 Commissioner of Natural Resources: Bradley E. Harrington
 Director of Environmental Programs: Perry Bunting



Minnesota Chippewa Tribe

Michael Northbird - Environmental Program Manager/GAP Coordinator
Program in Existence since – 2015

Program Projects – Capacity Assistance

Locations – On and Off the: Leech Lake, White Earth, Bois Forte,
Fond du Lac, Mille Lacs, and Grand Portage Reservations in Minnesota

The Minnesota Chippewa Tribe (MCT) is a Federally Recognized Tribe located throughout northern Minnesota, is a union of six (6) constituent Bands with Reservations adhering to the MCT Constitution, that was formed as the Preamble states ... “in order to form a representative Chippewa Tribal organization, maintain, and establish justice for our Tribe and to conserve and develop our Tribal resources and common property; and to promote the general welfare of ourselves and descendants”. These Band Reservations are as follows: Leech Lake Band of Ojibwe, White Earth Nation, Bois Forte Band of Chippewa, Fond Du Lac Band of Lake Superior Chippewa, Mille Lacs Band of Ojibwe, and Grand Portage Band of Lake Superior Chippewa.

The MCT Environmental Program (MCT EP) provides capacity assistance as needed for core environmental programs of the Bands that utilize EPA grants. The MCT EP develops projects to assist in the protection of MCT land both on and off the 6 component Reservations. This requires protecting the quality of the water, air, and land resources by supporting the basic infrastructure of the Bands that make up the MCT. The protection of air, water, and land resources are a priority for the Tribe. The MCT EP assesses a wide variety of potential project areas such as Tribal Waste Management (TWM), pollution prevention, emergency response planning, water quality management, air quality management, and education and outreach activities. The MCT EP recently completed 2 years of HHW Waste-Site Worker training for the MCT Bands’ staff. Over the next 2 years, the MCT EP will be conducting on-site compliance assistance for the Bands who have HHW programs and continue to advocate for improving the conditions in TWM. The goal is to ensure the proper storage, transfer, and disposal of HHW, as well as, advancing the safety of TWM workers and the community.

The MCT EP is committed to assisting constituent Band Air Programs for the benefit of the Tribe. Through technical assistance from the Bands, EPA and other Tribes, the MCT Tribal Executive Committee determines what further action(s) will be implemented when necessary. Once a determination has been made, then the MCT EP applies for the specific resources necessary to ensure all actions are taken, in order to protect air quality under MCT jurisdiction.





Nottawaseppi Huron Band of the Potawatomi

John Rodwan – Environmental Director

Amy Boetcher – Environmental Specialist

Program in Existence since – 2001

Program Projects – Ambient Air, Emission Inventory, Radon Testing

Location – Fulton, Michigan

The NHBP Air Program serves approximately 1,600 Tribal Members and is located on the Pine Creek Reservation in southwest Michigan. We do not receive any air-specific funding. We run eligible components of our Program with EPA GAP funds and the rest with Tribal general funds.

Radon Testing and Mitigation

This year, we performed a 5 year radon screening for all NHBP-managed buildings (46 total). To date, these structures have had 197 tests and 28 mitigations, and now show average radon levels of 1.7pCi/l. We still have three homes that are testing above World Health Organization recommended levels (2.7 pCi/l), and we will be done trouble shooting them by summer of 2020.

Purple Air Community Screening of Particulate Matter (PM)

NHBP is particularly interested in particulate pollution because it impacts community health. Of the 37 PM monitors currently operating by the State of Michigan, 70% are in its southeastern counties. An additional 31 PM monitors operate through an online air quality monitoring network known as Purple Air (PA), 90% of which are also in southeast Michigan. Studies from reputable air quality control agencies indicate high levels of correlation between PA sensors and expensive, commercial-grade sensors used by EPA. Even though PA monitors can't be used to make a NAAQS attainment determination, they are a promising screening tool. Particulate matter can vary from neighborhood to neighborhood, so local screenings are important. In November of this year, our PA monitor showed four days with daily PM_{2.5} averages that exceeded EPA recommended levels. In 2020, we plan to expand our screening of neighborhood-scale PM levels with PA monitors in other counties with an NHBP presence.

NHBP Environmental Dashboard

The Department created a comprehensive community outreach tool called the “NHBP Environmental Dashboard” (inset photo). The dashboard displays local environmental conditions and highlights Department Program areas. It includes real-time local weather, PM and water quality readings, and has an interactive map of Tribal parcels, local radon and environmental assessment actions. In addition, the dashboard has a live underwater camera feed. The particulate matter screenings from our local Purple Air monitor (housed at the government campus) are used to create a unique NHBP Air Quality Index. In 2020, we will continue to refine and enhance the dashboard for our membership.





Oneida Tribe of Indians of Wisconsin

Jeff Mears - Environmental Area Manager

Program in Existence since – 1988 Environmental, Health & Safety
Division established

Program Projects – Climate Change Adaption, Energy Conservation

Location – Oneida, Wisconsin

The Oneida Nation is a federally recognized Indian Nation in Wisconsin. The Oneida Nation has a 65,400-acre Reservation and just over 17,000 enrolled members. The Oneida Reservation is a part of Brown and Outagamie counties and covers parts of the Town of Oneida, Green Bay, Village of Ashwaubenon, Hobart, Howard and Pittsfield.

The Oneida Nation Indoor Air Quality Program is housed under the Oneida Environmental, Health, Safety, and Land Division (EHSLD). Consistent with our mission to strengthen and protect our people, protecting public health and safety is a significant goal of our program activities. Air quality related health risks are usually associated with outdoor pollution problems. Our Indoor Air Quality Program serves to educate our community that, in addition to these risks, the air we are exposed to in our own homes may pose health dangers as well.

Radon gas testing, education, and corrective action in Oneida Housing Authority (OHA) homes is a project we are excited to begin in December of 2019! Oneida will be collaborating with EPA, Wisconsin Department of Health Services, USDA, and Brown County for this project. EHSLD currently offers radon testing for Nation members by request. However, our goal of this upcoming effort is to complete widespread testing across the landscape of our OHA units to get current levels. EHSLD staff will be working with OHA staff to place test kits in housing site units, receive and track results, and work to connect homeowners and landlords with financial funding resources in the future for any recommended mitigation that may be necessary. We are also working on a marketing and outreach plan that will extend through January, which is National Radon Action Month. Through the use of social media messaging, outreach to existing coalitions, promotions through libraries and community health centers, press releases, and the Kalihwisaks (“She Looks for News”-our Nation’s newspaper publication), we will be promoting this program to the community as well as providing education on radon gas.



White corn drying at Tsyunhehkwa
 (“Life Sustenance”) Agriculture Center.

The eventual goal of this effort is to test all OHA units for radon levels and any newly acquired or built single family homes. Our Industrial Hygienist, Al Baird, has connected with OHA to gain access to homes that are in transition so that we may get results back before any new occupants enter the home. We are excited to partner with other local divisions and departments to work to increase our community’s awareness of this health risk and empower them to address this often under detected danger.





Pokagon Band of Potawatomi Indians

Jennifer Kanine - Department of Natural Resources Director

Kyle Boone – Environmental Specialist

Program in Existence since - 2000

Program Projects – Comprehensive Planning, IAQ, EI, Mercury,
Alternative Energy, Climate Change Planning

Location – Dowagiac, Michigan

The Pokagon Band of Potawatomi Indians (Pokagon Band) was restored to federal Tribal status through congressional act on September 21, 1994. Instead of a Reservation, the Pokagon Band was mandated a service area that consists of four (4) counties in the southwest lower Michigan and six (6) counties in north central Indiana. The Band is the only federally recognized Tribe in the state of Indiana.

Our Resource Protection Programs are integrated into Tribal development activities through comprehensive planning. The goal is to mitigate potential direct and indirect impacts to air quality up-front, rather than confront issues later. However, there are times when historic property uses on recent land acquisitions influence actions taken on those properties.

In 2019, the Pokagon Band Department of Natural Resources (PBDNR) has undertaken multiple projects to protect and monitor air quality in the service area including; monitoring indoor air quality in Tribally owned buildings, using proper mitigation methods if indoor air quality is found to be unhealthy, and continuing work on an emissions inventory (EI). The Pokagon Band continues to acquire land parcels, some of which have existing structures. Before any structure is used as Tribal housing or office space, the Band monitors indoor air quality to ensure the structure can be safely occupied. If it is deemed that the structure cannot be safely occupied, the Band will schedule the structure to be demolished. In 2019, the Band demolished three buildings that were deemed uninhabitable due to indoor air monitoring indicating high mold levels. The Band also renovated one building due to storm damage. This building is currently being monitored for mold and asbestos before occupants can move back in. Furthermore, PBDNR has continued the process of doing a Level 4 EI for the Band's service area. In 2019, PBDNR created and submitted a QAPP for the Level 4 EI that was approved by EPA Region 5. With the approval of the QAPP, PBDNR has begun creating a draft EI and expects to finish the first draft in late 2019 or early 2020.

PBDNR has also been actively reviewing prevention of significant deterioration (PSD) permits to ensure that outdoor air quality in the Pokagon Band's service area is not degraded. A meteorological station with air monitoring capabilities will be installed in November 2019 which will assist PBDNR in collecting air quality data. Future endeavors regarding air quality include the installation of outdoor air quality monitors given the conclusions of the EI, as well as continuing to review indoor air quality issues as the Band secures new properties.





Prairie Island Indian Community

Vacant – Air Quality Specialist

Gabe Miller, Environmental Programs Manager

Program in Existence – June 2014 to October 2017

Program Projects – EI, IAQ, Outreach, Radiological Monitoring

Location – Welch, MN

Prairie Island Indian Community (PIIC) is located between the Mississippi River and Vermillion River in southeastern Minnesota, approximately 45 miles downstream of the Twin Cities. The area was named Prairie Island as it is surrounded on all sides by water and was once dominated by native prairie and oak savanna habitats. Prairie Island is now composed of more than 5,000 acres of Trust and Fee land, with a variety of land uses and covers.

In 2014, PIIC established an Air Quality Program under CAA 103 grant funding. Projects implemented under this funding included indoor air quality inspections, radon testing, and outreach/education. Additionally, a Level 4 Emissions Inventory was completed and an air quality flag program was in operation for two years.

The Tribe is involved in monitoring air as it relates to environmental radiation. Xcel Energy's Prairie Island Nuclear Generating Plant is located just three blocks away from the community with spent fuel casks storage on-site. This is a high priority concern for the community. In spring of 2015, a new air sampling unit was installed; while in July of 2019, a new gamma monitor was installed to monitor environmental radiation in order to more accurately address concerns from community members. PIIC has been monitoring radiological components through cooperative work with EPA's National Analytical Radiation Environmental Laboratory (NAREL) since 1993.

Staff turn-over, funding cuts through the CAA 103 Program, and differing views on the direction of the program by Tribal administration has made continuing the Air Program a challenge. The Air Program was determined by the Tribe in fall 2017 to be low priority and was terminated. Despite this, the Land and Environment Department continues Air Program work as much as we are able: continuing radiological sampling and radon testing. Tribal land is located in a high risk zone for radon and flooding, contributing to indoor air concerns. Testing for radon in the community homes and combating mold growth has been important. Acquiring funding for remediating issues and re-starting the Air Program would be helpful.



*Left:
Gamma monitor
installed in
2019.*



*Right:
Radiation air
monitor for
bismuth,
cesium, cobalt,
iodine, lead,
manganese,
potassium,
radium,
thorium
and uranium.*



Red Cliff Band of Lake Superior Chippewa

Ernie Grooms - Air Quality Program Manager

Linda Nguyen – Environmental Director

Program in Existence since – 2010

Program Projects – IAQ, EI, Energy Conservation, PM_{2.5} study

Location – Bayfield, WI

The Red Cliff Band of Lake Superior Chippewa (Band) is located on the Bayfield peninsula in the northern most point of Wisconsin. We are surrounded on three sides by Lake Superior and enjoy a relatively undeveloped forest of hardwood and pine to our south. As we are located so far to the north the lack of heavy industry makes our area not only unique, but an area much sought after for the nature enthusiast with hiking, boating, and fishing in the summer months, to snowshoeing, skiing, and leisure during the winter. More importantly, the beauty within and around Red Cliff is due to our near pristine air quality. It is the goal of the Band to protect and maintain ALL aspects of our environment while promoting responsible future development.

The Band's Air Quality Program is in its ninth year and housed under the Treaty Natural Resources Division/Environmental Department. Program objectives include completion of indoor air quality (IAQ) assessments for residential, office, and school buildings located within tribal boundaries. The proper management of moisture, air flow, and insulation is a benefit to both health and energy costs.

The Band's Health Center recognizes the increase of asthma and allergies within our community, especially among our children, therefore the Air Quality Program has taken its first steps into the ambient air field. As many still use wood stoves to heat their home, particulate matter has been determined as the largest pollution contributor by the completion of a Level 3 Emissions Inventory. Monitoring for PM_{2.5} will allow us to track particulate levels as they travel around and through the Red Cliff Reservation utilizing the Met One E-Sampler Light Scatter Continuous Aerosol Monitor. This equipment will provide data necessary to aid in determining particulate sources that may contribute to the acerbation of asthma/respiratory sensitivity, especially during our heating seasons. Although this is not an FRM/FEM piece of equipment, the data provided can help determine if continued particulate monitoring should take place, whether it be a continued study, or if regulatory monitoring should be considered. As this is the first time a Band has used this piece of equipment for a monitoring study, completing the QAPP has proven difficult as there were no templates available.

The Program has received continued funding through CAA 103 since 2010. Funding ensures the Band's participation in local and regional issues, while furthering our ability to protect our people and our way of life.



Website: <http://redcliff-nsn.gov/>



Red Lake Band of Chippewa Indians

Jennifer Malinski – Environmental Specialist

Program in Existence since – 2007

Program Projects – CASTNET, PM_{2.5}, Met, Hg Litterfall, EI, Outreach, Smoke Management

Location – Red Lake, MN

The Red Lake Reservation is a federally recognized closed Reservation encompassing over 835,000 acres of north-central Minnesota. The Reservation is the largest within EPA Region 5, comprising greater than 59% of the federal Indian trust land in the Region. The Tribe currently has just over 12,000 enrolled members, of whom about 6,500 reside on the Reservation. Preserving the Reservation's abundance of natural resources is critical to Band members' health, welfare, traditional ways of life and economic viability.

The Red Lake Department of Natural Resources (RL DNR) began an Air Quality Program in December of 2007 with GAP funding and in the spring of 2009 secured CAA 103 funding. With the approval of its TAS application, the Program transitioned to CAA 105 funding in 2014. In 2016, the CAA 105 funding was incorporated into a Performance Partnership Grant (PPG).

For the last few years, much of the work done by the Red Lake Air Quality Program has focused on ambient air quality. Since 2014, the Program has operated and maintained a BAM 1020 PM_{2.5} continuous monitor with assistance from the Minnesota Pollution Control Agency (MPCA) and has operated and maintained a small footprint Clean Air Status and Trends Network (CASTNET) site. In 2015, ammonia monitoring began with the Ammonia Monitoring Network (AMoN), co-located with the CASTNET site. Additionally, the Air Program has completed its fifth year of leaf litter sampling as part of the Litterfall Mercury Project with the National Atmospheric Deposition Program (NADP).

Other ambient air related projects completed recently include an updated emissions inventory (EI), and a Tribal Smoke Management Plan (SMP). Active projects currently include a Greenhouse Gas EI, community outreach relating to burning of household trash, and diesel vehicle replacement through the Volkswagen Settlement Trust for Tribes.

Although ambient air quality has been the main focus of the Air Quality Program recently, indoor air quality (IAQ) remains a concern. The Program offers basic IAQ home assessments of homes on the Reservation as requested. The Air Quality Program is planning to apply for the SIRG Tribal Radon Grant when the next RFP is released. This funding has not been pursued for the last several years due to difficulty acquiring the required in-kind match.

We are always looking for partnership opportunities that allow us to improve indoor and outdoor air quality for the people of Red Lake. Red Lake DNR Website <http://www.redlakednr.org>





Saginaw Chippewa Indian Tribe of Michigan

Sally Kniffen – Environment Specialist
 Program – Currently working with ITCM
 Program Projects – Climate Change, EI, IAQ, Air Quality concerns
 for petroleum extraction operations
 Location – Mt. Pleasant, Michigan

The Anishinaabe Environment and Culture Camp is a collaborative effort between the Saginaw Chippewa Indian Tribe and Saginaw Chippewa Tribal College. The camp was started so youth 12-17 year olds could have somewhere to go to learn about our environment and our culture. The camp would not have been a success without the help of staff from several different Tribal Departments.

In 2019 we hosted our Third Annual Anishinaabe Environment and Culture Camp August 5 –9, 2019 at the Tribe's Amesbury Trust property at Tawas Lake. The youth had a blast while learning about our environment and our culture. Youth participated in environmental science activities like water quality testing and plant identifications, outdoor recreation including hiking and swimming, and Anishinaabe arts & traditions like making cedar boxes, building a sweat lodge, and making lacrosse sticks. Additionally, they were able to have these experiences while socializing with other youth and making new friends.

Through these recreational, traditional, and environmental activities the youth learned the importance of protecting Mother Earth from our Anishinaabe perspective. The goal is to make the connection between environmental science and Anishinaabe culture. The provided discussions, activities, and games gave participants the knowledge and skills necessary to pursue STEAM careers in the future and become protectors of Mother Earth. The students told us that their favorite activities were the sweat lodge, lacrosse, swimming, and bonfires. They learned about different plants and its healing properties, the roles people play in the community, and plants and outside like animals and water. Overall, the participants said yes they would recommend this camp to their friends. For additional information, please contact Kathy Hart at KHart@sagchip.org or 989-775-4123 or Taylor Brook at TBrook@sagchip.org or 989-775-4162.



Teaching traditional net fishing to youth.



Youth testing water on Tawas Lake.





Sault Ste. Marie Tribe of Chippewa Indians

Robin Bouschor – Environmental Specialist

Program in Existence since – 2016

Program Projects – IAQ, Air Toxics, VW Diesel, Outreach, Ambient Air Monitoring

Location - Sault Ste. Marie, Michigan

The Sault Tribe of Chippewa Indians (Sault Tribe) is located in the eastern Upper Peninsula of Michigan. The Sault Tribe Environmental Program has been undergoing steady growth in its capacity to take on environmental regulation, including air quality work, and the Air Program is currently carrying out our fourth project with CAA 103 funding.

To help Tribal members with indoor air quality (IAQ) issues the Air Program developed a QAPP to investigate IAQ complaints. This has led to being able to perform IAQ assessments to Tribal member's homes and Tribal Buildings. To reach more community members air quality informative articles are published in the Tribal newspaper and on the Departments' social media page. A successful work shop was held for the Tribes Head Start/Early Head Start program. Over 40 staff members received a training on IAQ concerns in a day care setting. A carbon monoxide alarm was given away to one staff member in need that was donated by the Department's Environmental Specialist, Robin Bouschor.

This year the Department attended two Sault Ste. Marie Tribe of Chippewa Indians Pow Wows held in Sault Ste. Marie, Michigan and Newberry Michigan. The Department believes outreach is a crucial approach with increasing air quality in Tribal homes. The booth featured a display of common IAQ concerns and also educational outreach material. A table was set up for kids to color the EPA Burn Wise coloring book, "Wood Smoke Activity Book", which had positive impact on a number of children. It provided a nice shaded spot for youngsters to escape the heat and discuss air quality topics with the Environmental Specialist. Meanwhile the parents/guardians were free to browse the displays and sign up for the giveaway of a free humidity meter.

The Tribe has now been accepted as a beneficiary for the 2nd funding cycle of the VW settlement. This is allowing the Tribe to replace an older diesel truck with a newer cleaner diesel. The Tribe hopes to participate in future funding cycles as well.

The Department has recently starting engaging in commenting on air quality permits within the 1836 Ceded Territory. This type of experience could not have come at a better time as it was announced this year Sault Ste. Marie, Ontario Canada will be building a Ferrochrome Production Facility on Algoma Steel Inc. property, which sits adjacent to the St. Mary River that divides the two cities. The Sault Ste. Marie Tribe of Chippewa Indians has issued a resolution opposing such a facility to be constructed near their Tribal lands and would impact the Tribe's treaty rights for the preservation, protection and enhancement of the waters of the St. Mary's ecosystem.





Shakopee Mdewakanton Sioux Community

Simeon Matthews – Industrial Hygienist

Steve Albrecht – Director of Land & Natural Resources

Program in Existence – Since 2011

Program Projects – IAQ, Alternative Energies, Composting, Tribal NSR

Location – Prior Lake, Minnesota

The SMSC was formally organized under federal Reservation status in 1969. It consisted of only 260 acres of land and none of the infrastructure that SMSC worked to build later. In 2019 it's grown to more than 4,400 acres south of Minneapolis. With that growth has come a lot of improvements to the quality of life for SMSC and its neighboring communities, but also new challenges. We are affected by pollution from traffic, industry, and even wildfires far to the north. We rely on the National Tribal Air Association (NTAA) network and its frequent publications to stay informed and effectively protect our air quality. Our GAP grant has allowed us to develop a Radon Measurement QAPP to address an indoor air quality concern.

Sustainability

In 2019 we began a critical look at where SMSC is with regards to sustainability. This means looking at the materials we use, our construction practices, and our energy usage, which directly impact air quality. We know that what's best for our air quality and our environment is often not what's "cheapest". To fund more sustainable initiatives across SMSC, county agencies and local organizations are helping us identify grants that we might have overlooked in the past.

Electrical Utility Use

In 2019 we commissioned the installation of electric vehicle (EV) charging stations to encourage the use of EV vehicles. This will increase our reliance on electrical power, but there is scientific research estimating that an EV in Minnesota will produce about half the emissions of its gas or diesel-powered counterpart if its manufacture and disposal are factored in. To reduce reliance on our electrical grid's air polluting coal-fired, natural gas-fired, and nuclear power plants, in 2019 we continued transitioning to LED lighting at our larger facilities; this also eliminates the risk of mercury pollution from fluorescent lighting. After several years of operation, we have found solar arrays to be a very low-maintenance renewable energy resource at SMSC; in 2019 we continued to investigate ways to increase our solar infrastructure.

Composting

In 2019 we increased the diversion of food wastes across SMSC. Recycling into compost at the SMSC Organics Recycling Facility reduces the methane emissions from landfilled food wastes.

EPA Air Quality Permits

The SMSC received several air permits under EPA's Tribal Minor New Source Review (NSR) program beginning in 2012. The program allows us to evaluate air quality impacts at the earliest stages of construction planning and its permits ensure that emission sources are maintained and monitored for the protection of our ambient air quality. SMSC's first two Tier 4 emergency generators began operation in 2019; they are the cleanest-burning diesel generators to-date.





Sokaogon Chippewa

Tina Van Zile – Environmental Programs Manager
 Nathan Podany - Hydrologist
 Program in Existence since – No formal program
 Program Projects – Building CAA 103 program
 Location – Mole Lake, Wisconsin

The Sokaogon Chippewa Community is located in northeastern Wisconsin and is known for its productive wild rice lake. Although small in acreage, the Sokaogon Reservation is home to pristine lakes, streams and forested wetlands.

Currently, the Sokaogon Environmental Department does not manage a formal Air Program. That being said, the Tribe has contributed to decreasing emissions by installing solar panels on 53 Tribal homes and 16 Tribal administration buildings as well as the Mole Lake Casino and Lodge in the last 4 years.

The Tribe is committed to supporting initiatives that develop and promote clean air, in the past the Tribe built 11 “Green Homes” that utilize geothermal technology for heating and cooling.

In the near future, the Environmental Department hopes to form a partnership with the Tribal Housing Department to start an Indoor Air Program. Until then, the Tribe will continue to monitor, manage and protect their precious lands for future generations.



Solar PV arrays on the Mole Lake Casino and nearby Tribal residents.



St. Croix Chippewa Indians of Wisconsin

Jamie Thompson- Air Quality Coordinator

Program in Existence since - 2004

Program Projects - Indoor and Ambient Air Quality

Location - Scattered throughout Burnett, Polk and Barron Counties, WI

Through the years the St. Croix Chippewa Indians of Wisconsin have received funding to maintain an Air Program and, in the years that funding was not available, GAP funds were used to maintain basic services to Tribal Community Members. With consistent funding provided by EPA St. Croix has been able to provide air quality assessments and education to Tribal Members for several years now.

The Indoor Air Program continues to maintain a close relationship with our St. Croix Tribal Housing Authority, which has allowed a combination of resources and expertise to ultimately advance the Air Program with rehabilitation recommendations implemented by the Housing Authority. The main focus of the assessments is moisture and leak issues that result in mold concerns. As an outcome, staff is mainly focused on building science relating to home construction and maintenance. Several areas are periodically called upon for testing including CO, radon, VOC's, ETS, sewer gases, asthma triggers and pests. Our Safety Team including Environmental, Housing Department and Clinic staff has continued to operate with good communication throughout.

As part of the St. Croix's Air Program we provide members with education and outreach focusing on creating healthy homes for St. Croix Communities. Each time we do a home inspection we give the resident a carbon monoxide detector (if needed) and a healthy home packet. Included in this packet are numerous pamphlets and articles including but not limited to healthy home tips, mold prevention, asthma and outdoor air pollution information, bed bugs pamphlet, information on carbon monoxide, and secondhand tobacco smoke to name a few. Currently we do not test for Radon, many of our homes had been tested around 10 years ago. We hope to secure funding in the near future to test homes that weren't tested and look to re-test some that were tested before.

The CAA 103 funding has allowed growth of the Program by retention of qualified staff who serve as a resource for the St. Croix communities. The major focus of the Air Quality Staff is the involvement in active R5 initiatives; such as participation in regional dialogue on conference calls, attending regional meetings, performing home assessments and working cooperatively with the Tribal Housing Department to help rehabilitate homes and promote cleaner air for Tribal members and employees.



Left -Mold growth on a Tribal members bathroom ceiling where there is not proper ventilation.

Right - Information and CO detector provided in the healthy home packet.

<http://www.stcciw.com/epa>



Stockbridge-Munsee Community *A Band of Mohican Indians*

Antoinette Tourtillot – Environmental Department Manager
 Program in Existence since – No formal program
 Program Projects – IAQ, Develop IAQ Program
 Location – Wisconsin, between Green Bay and Wausau

The Stockbridge-Munsee Community Band of Mohican Indians is a federally recognized Indian Tribe in northeastern Wisconsin.

The Stockbridge-Munsee Environmental Department has a mission to use the latest science to holistically observe, monitor and, when needed, manage the Reservation land and water and the animals and plants which they support in order to insure the diversity and purity of these resources for future generations to thrive in wellness. The vision is following our culturally sensitive ways to use scientific methods to seek ways to live sustainably with mother earth, preserving the natural resources in a pristine condition for the next seven generations. Working with our forestry and conservation committees and with other Tribal departments, to protect, maintain and where necessary, improve the health of the natural environment for all species.

The Stockbridge-Munsee Community currently does not have an Indoor Air Quality program; however, the Tribe is in the process of developing an Air Quality Program using General Assistance Program (GAP) funds to aid in this process. The project area will encompass the Townships of Bartelme and Red Springs, in Shawano County, Wisconsin, and the surrounding villages of Bowler and Gresham. The Stockbridge-Munsee Environmental Department will collaborate with the surrounding area agencies and businesses to form partnerships to effectively combat air quality issues. Staff is undergoing training and certification. Currently the Stockbridge-Munsee Environmental Department continues to address immediate air problems and other environmental concerns through:

- Radon testing
- Educational Outreach
- Recycling
- Remediation

The Stockbridge-Munsee Environmental Department and the community is focused on the health and well-being of its members and is devoted to helping identify, measure, and remediate indoor air quality issues. Together with the collaboration of outside partners our hope is to educate and remediate to ensure clean air for all to breathe.





Upper Sioux (Dakota) Community - Pezihutazizi Oyate

Amanda Wold- Environmental Director
 Dan Schacht - Environmental Assistant
 Program in Existence since - No formal program
 Program Projects -
 Location - Granite Falls, MN

Currently the Upper Sioux Community (USC) Office of the Environment (OE) does not have a formal Air Quality Monitoring Program and has had very recent turnover of its OE staff. The potential development of an Air Quality Monitoring Program in the future is a major step that will provide current scientific data specific to the lands of USC that can be utilized as a comparison across Region 5 Tribal entities. Once implemented, the obtained data will help us to understand, monitor, and manage the air quality within the USC Reservation. Sources of concern include:

Major Point Sources:

- Figure 1: Granite Falls Energy, LLC – Ethanol Plant: 3.71 miles from USC
- Figure 2: Southern Minnesota Beet Sugar Coop– Sugar Beet Plant 16 miles from USC
- Figure 3: Hog Barn/s
- Feed Lot/s

Major Non-Point Sources:

- Figure 4: Highway 67 Corridor Traffic Thoroughfare
- Agriculture Chemical Applications



Granite Falls Energy, LLC – Ethanol Plant



Southern Minnesota Beet Sugar Coop

Hog barn operation

Highway 67 corridor traffic thoroughfare





White Earth Band of Ojibwe (Gaa-waababiganikaag)

Jessical Tolifson – GAP Manager

Program in Existence since – No formal program

Program Projects – Radon, Illegal dumping, IAQ

Location – Mahnomen, MN

The White Earth Band of Ojibwe (Gaa-waababiganikaag), a sovereign nation, is entrusted to protect the land base, natural resources, treaty rights, culture and identity of our members. The White Earth Reservation, located in northwest Minnesota, was established in 1867 by a Treaty with the United States Government and Mississippi Band Ojibwe. Status as a Tribal government provides the White Earth Reservation with broad powers, ensuring various protections for the Tribe and its individual members. The boundaries include 36 townships which encompass all of Mahnomen County and portions of Becker and Clearwater Counties. The area includes five incorporated cities and five major villages. Within the White Earth Reservation there is approximately 285,000 acres of agriculture and chemical application to crop land is a major concern for the Tribe.

Cross jurisdictional issues are a major concern for White Earth, non-members disregarding Tribal environmental and conservation codes, as well as private businesses not following White Earth codes.

The White Earth Natural Resources Department was established to protect, manage and enhance the resources of the Reservation and is responsible for daily management and monitoring. Indoor air quality, along with open burning are just a few areas being addressed while a formal air program is developed.

Indoor air is a concern on the Reservation. One tool White Earth utilizes to address this is education and outreach. During community events radon kits are distributed to the public. To assist this process White Earth is currently developing a QAPP to monitor indoor air quality, which includes radon and various other human health risk factors. The Tribe also hosts an annual community household hazardous waste day and community cleanups which have been well received.

Clean Energy is another concern for the Tribe. White Earth is currently working on implementing clean energy initiatives through installation of solar panels and wind turbines. White Earth has 7 sites utilizing solar panels with 3 new sites in the planning stages as infrastructure grows.





1854 Treaty Authority

Tyler Kaspar – Environmental Biologist
 Program in Existence – No Formal Program
 Program Projects – Environmental and Permit Review, Policy Review,
 Climate Change, Education and Outreach
 Location – Duluth, MN

The 1854 Treaty Authority is an inter-Tribal resource management agency governed by the Bois Forte Band of Chippewa and Grand Portage Band of Lake Superior Chippewa. The 1854 Treaty Authority is charged to preserve, protect, and enhance treaty rights and related resources in the 1854 Ceded Territory. This Ceded Territory covers 5.5 million acres across present-day northeastern Minnesota.

Bands retain treaty rights to hunt, fish and gather in the 1854 Ceded Territory. Due to these rights, the 1854 Treaty Authority is concerned about the availability and health of the resources. The 1854 Treaty Authority tracks air impacts from sources such as power generation units, mining and other industrial facilities. Mining has had a large impact to the 1854 Ceded Territory, with many projects ongoing and new projects being proposed. The 1854 Treaty Authority coordinates with federal and state agencies in environmental review and permitting processes. Time is also spent reviewing and commenting on policies that may affect the air quality within the 1854 Ceded Territory.

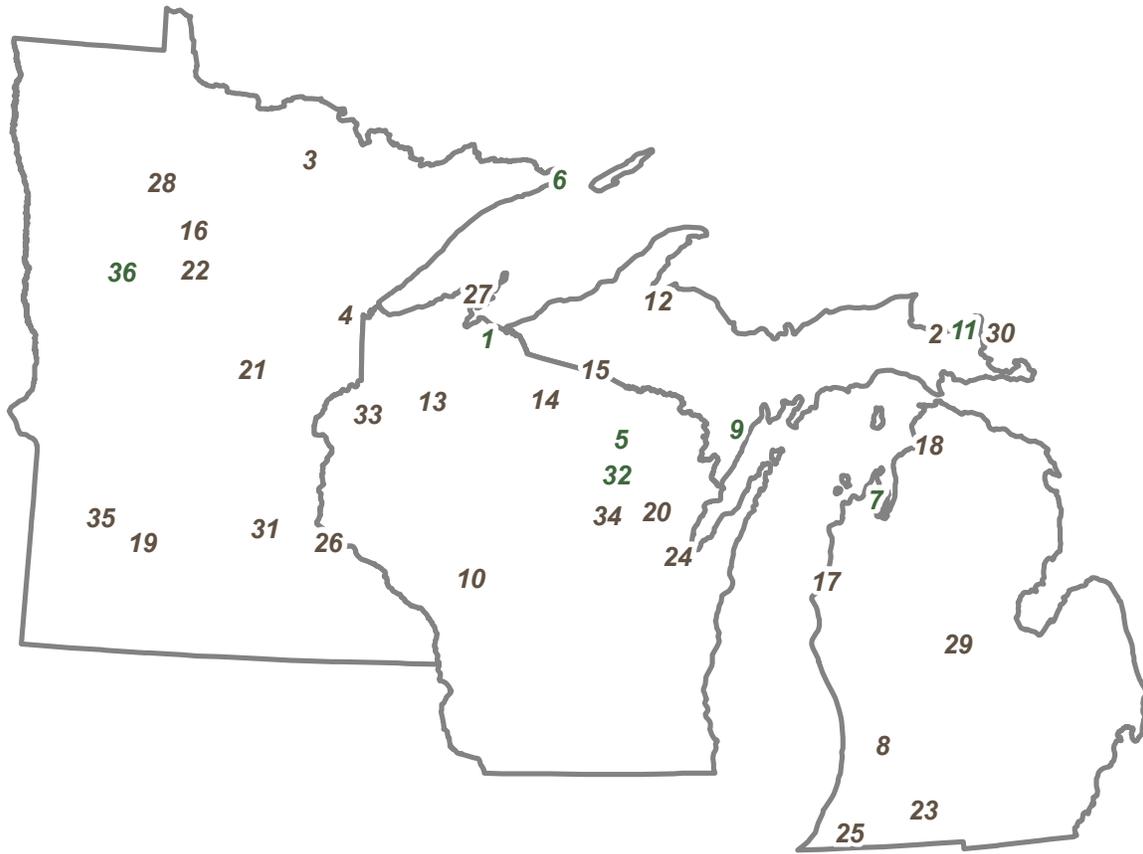
The 1854 Treaty Authority does not have a formal air program, but addresses air issues (to some degree) under activities of the Environmental Program as it works to protect human health and the environment. One of these activities is implementing the “*Climate Change Vulnerability Assessment and Adaptation Plan*” that was developed in partnership with the Bois Forte, Fond du Lac, and Grand Portage Bands in 2016. A portion of the plan is dedicated to potential climate change impacts to air quality. As part of our plan implementation in 2019, we submitted comment letters regarding air quality concerns for EPA’s proposed amendments to Air Toxics Standards for Taconite Iron Ore Processing and the Minnesota Pollution Control Agency’s major amendment to a taconite facility’s Air Individual Permit regarding fiber emissions (see below for an image of the facility, which is located within the 1854 Ceded Territory).



Taconite Iron Ore facility located in northeast Minnesota on Lake Superior and within the 1854 Ceded Territory.



US EPA Region 5 Tribes



- | | |
|---|---|
| 1 Bad River Band of Lake Superior Chippewa | 19 Lower Sioux Indian Community |
| 2 Bay Mills Indian Community | 20 Menominee Indian Tribe of Wisconsin |
| 3 Bois Forte Band of Chippewa | 21 Mille Lacs Band of Ojibwe |
| 4 Fond du Lac Band of Lake Superior Chippewa | 22 Minnesota Chippewa Tribe |
| 5 Forest County Potawatomi Community | 23 Nottawaseppi Huron Band of the Potawatomi |
| 6 Grand Portage Band of Lake Superior Chippewa | 24 Oneida Tribe of Indians of Wisconsin |
| 7 Grand Traverse Band of Ottawa & Chippewa | 25 Pokagon Band of Potawatomi |
| 8 Gun Lake Band of Potawatomi Indians | 26 Prairie Island Indian Community |
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| 10 Ho-Chunk Nation | 28 Red Lake Band of Chippewa Indians |
| 11 Inter-Tribal Council of Michigan, Inc. (Consortia) | 29 Saginaw Chippewa Indian Tribe |
| 12 Keweenaw Bay Indian Community | 30 Sault Ste. Marie Tribe of Chippewa Indians |
| 13 Lac Courte Oreilles Band of Ojibwe | 31 Shakopee Mdewakanton Sioux Community |
| 14 Lac du Flambeau Band of Lake Superior Chippewa Indians | 32 Sokaogon Chippewa Community |
| 15 Lac Vieux Desert Band of Chippewa | 33 St. Croix Chippewa Tribe of Wisconsin |
| 16 Leech Lake Band of Ojibwe | 34 Stockbridge-Munsee Community |
| 17 Little River Band of Ottawa Indians | 35 Upper Sioux Community |
| 18 Little Traverse Bay Bands of Odawa Indians | 36 White Earth Band of Chippewa |

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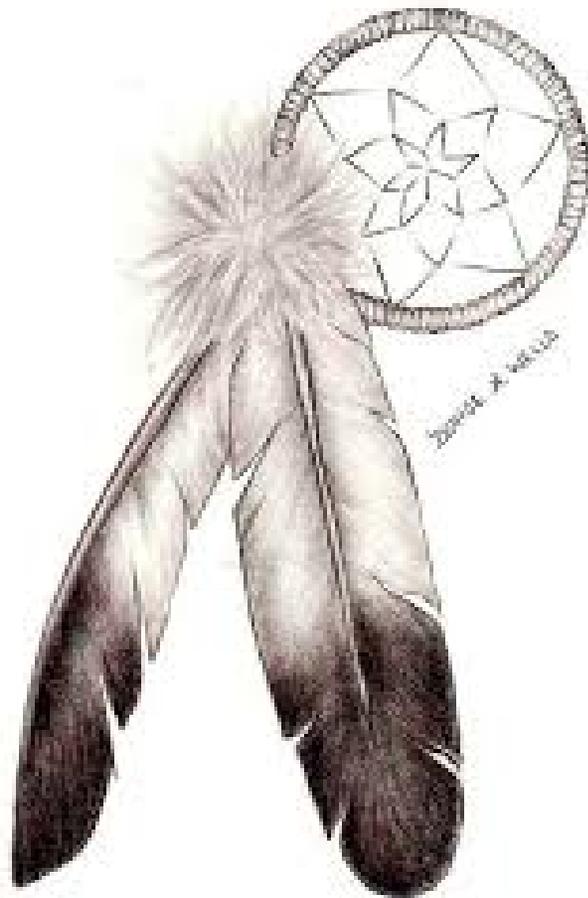
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Region 5 Ceded Territories



Boundaries for Ceded Territories are for illustration purposes only. The boundaries were digitized at a very coarse scale. Not for legal use. Years may not be accurate.

Sources: C. Lippert, USGenWeb Archives, Library of Congress, Leech Lake DRM 12/17/2013, UTM Zone 15N