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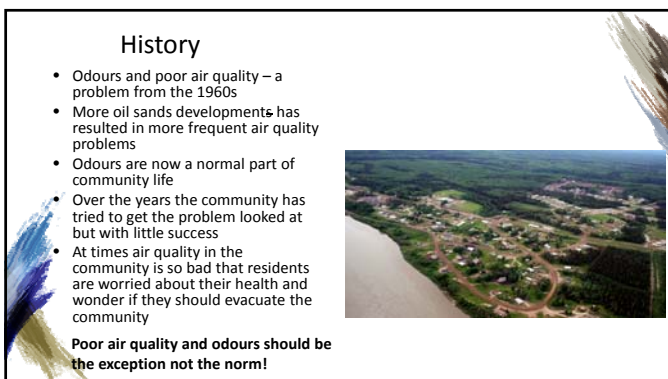
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### Recent History

- For years, Fort McKay has been complaining with the regulators and companies to better protect the air quality
- Fort McKay has been collecting its own air quality data during odour events to show how bad the air quality is at these times
- The Environment Canada Oski-ôtin air monitoring station has provided air quality data supporting the Community's concerns
- The Sustainability Department has collected information and data to support the need for action




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### What Fort McKay asked for?

- After a significant odour event in McKay in September 2014 and no proper response from Industry, FM reached out to the AER
- In May 2015 Dr. Monique Dubé, the Chief Scientist at the Energy Regulator, initiated a formal review of Fort McKay's concerns under the AER's "Recurrent Health Complaint Process"
- Objectives
  - To assess recurring complaints involving human health, air quality, odours
  - To determine the existence of technical gaps on understanding the issue
  - Recommendations toward resolution




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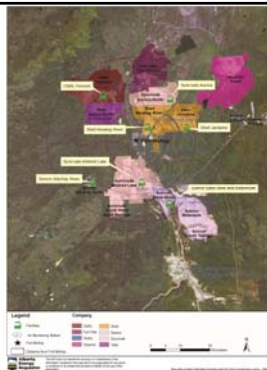
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### The Investigation

- Assessment of Recurrent air and odour complaints to the AER from 2010 – 2014 by FM residents and employees
- AER received 172 complaints from FM -> 165 related to odours
- Included fixed point-sources, area sources, mobile sources
- 523 Inspections were conducted at the facilities
- Multiple Government Agencies, Industry and Other Stakeholders involved including consultation with other First Nations and Metis




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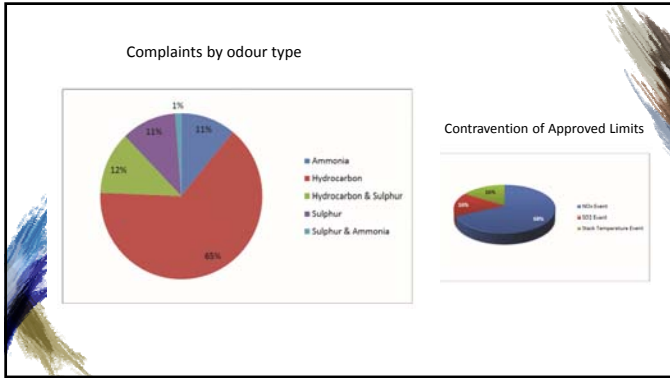
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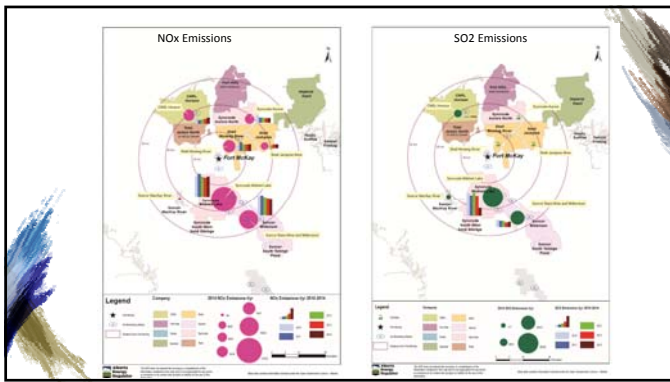
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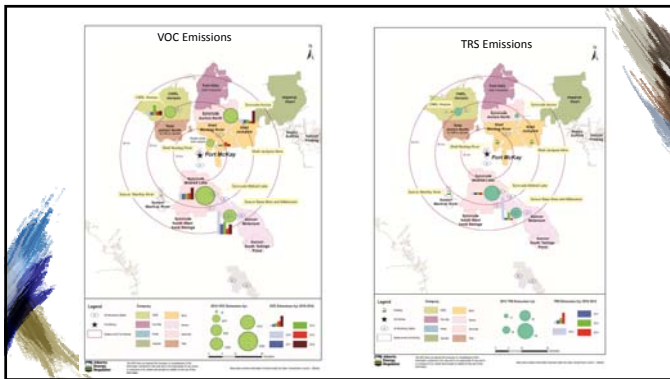
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## Recommendations

### Recommendation 1 - Understanding and Responding to Bad Odour and Air Quality Events

- Additional air quality monitoring should be installed in the community for acute concentrations of H2S and SO2
- This Monitoring will be used to help decide what to do and what to tell community members when there is very poor air quality or strong odours in the community.

### Recommendation 2 - How to treat odour events in terms of emergency response planning

- The government will consider if and what odour levels will be used to trigger an emergency response action.

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## Recommendations (continued)

### Recommendation 3 - Sharing emergency response planning information

- Industry will be required to share their emergency response plans with Fort McKay

### Recommendation 4 - Responding to Odour Calls and Complaints

- A better approach for dealing with odour complaints will be established through an AER odour complaint response protocol specific for Fort McKay

### Recommendation 5 - Connecting odour events to specific industrial sources or events

- A process to determine what industrial source or incident was responsible for each odour event through a standardized checklist for operating conditions

### Recommendation 6 - Measurement of odours and regulatory response

- There will be a review of ways to measure odours
- that would allow formal regulatory action if measured odour levels exceed certain criteria.

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## Recommendations (continued)

### Recommendation 7 - Access to Oski-ôtin Air Monitoring Station Data

- Industry, the Provincial Government and the Energy Regulator would like real-time access to the air quality data from the Oski-ôtin air monitoring station in Fort McKay.

### Recommendation 8 - Odour complaint response and support responsibilities

- The role of different groups in responding to and supporting odour complaint follow-up will be clarified.

### Recommendation 9 - Understanding odour and air emission sources

- A plan will be developed to identify and understand the industrial emissions affecting Fort McKay's air quality during odour and poor air quality events. (role for JOSM?)

### Recommendation 10 - Controlling odour and air emission sources

- "Best practices" for odour and air emission control will be identified and a plan to have these practices implemented will be developed and implemented.
- A better approach for dealing with odour complaints will be established.

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## Recommendations (continued)

### Recommendation 1 - Improved Odour Predictions

- The potential odour impacts of oil sands projects needs to be considered in the approval of projects.
- One of the tools used to do this is "air modelling" and improvements to this tool are required.

### Recommendation 12 - Improvements to environmental approval reporting requirements and access to company reports

- Air quality data reported should be more reliable and comparable between companies with Fort McKay having better access to this information.

### Recommendation 13 - Health and air quality in Fort McKay

- The potential health implications of the air quality and odours in Fort McKay will be assessed.

### Recommendation 14 - Improved Regional Air Quality Monitoring

- The current regional air quality monitoring network will be reviewed and changed to better measure and track air pollutants from facilities to Fort McKay,
- and a plan to have these practices implemented will be developed and implemented.
- A better approach for dealing with odour complaints will be established

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## Recommendations (continued)

### Recommendation 15 - The use and relationship between hydrogen sulphide and total reduced sulphur monitoring

- The most appropriate type of continuous monitoring for odorous sulphur compounds will be studied.

### Recommendation 16 - Dealing with pollutants that have no Provincial standard

- An approach for interpreting and using air quality data for pollutants with no provincial limits will be developed
- A better approach for dealing with odour complaints will be established.

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## Recommendation 17

How will the report's recommendations be implemented

**A Task Force that Fort McKay will be part of will ensure that all of the Report's 16 recommendations are implemented over the next 3 years.**

- Fort McKay is working with the Energy Regulator and Alberta Health on Terms of Reference for the Task Force that will oversee the implementation of the Report's recommendations.
- Four sub-committees are planned which will develop the detailed plans for implementing each recommendation.
- Fort McKay will also have members on each of these sub-committees.
- There will also be a Fort McKay Community Focus Group established to report to, and get feedback from, during report implementation.

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## Conclusions

- Changes are required in government policy, environmental monitoring, communications, emergency response and how companies operate.
- Significant improvements in community and regional air quality monitoring is needed
- Improving Odour/Air Quality Complaint Follow-up
- Need to Identify and manage sources of odours
- Better assessment and management of odours as part of the regulatory system
- Developing an air quality related emergency response plan/program
- Seventeen Recommendations have to be implemented if we expect air quality in Fort McKay to improve and emergency response is adequate

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Thank You!

Questions ?

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