

Oil Sands Monitoring (OSM)

2016-2017 PROJECT PLAN SUMMARY

Project Name:	A2-1-3 Athabasca Oil Sands Dry Deposition
Type of Project:	Focused Study
Delivery Agent:	Wood Buffalo Environmental Association (WBEA)
Project Contact:	Bob Myrick (AEP) - bob.myrick@gov.ab.ca Sanjay Prasad (WBEA) - sprasad@wbea.org
Budget:	\$ 263,000

Project Description:

Passive technology is currently used at remote Boreal sites to obtain monthly average air concentrations of HNO₃ and NH₃. This project will use enhanced technology/methodology to monitor air quality and deposition (including NO₃, NH₄, SO₄, and PM_{2.5}) at four remote forest health (FH) sites equipped with solar-powered towers. This project also includes the installation and operation of denuders at two additional meteorological towers in order to expand the geographical coverage of this monitoring activity.

Project Objectives:

To monitor air quality and deposition at the remote FH ecosystem sites, co-located with continuous monitoring instruments for validation of the passive measurements, in order to provide the data necessary to establish cause-effect linkages, and evaluate ecosystem effects due to air emissions

Key Outcomes:

More credible data on deposition to ecosystems for use in cumulative effects measurement

Geographic Scope:

Five sites in Regional Municipality of Wood Buffalo (RMWB), and one site in NW Saskatchewan.

Associated Data and Reports:

All WBEA air monitoring data are fully quality-assured and then uploaded to the WBEA website for public reporting. Monitoring data is summarized and reported annually in support of AEP assessments. Results will be published as appropriate in peer reviewed scientific literature with open access privileges.