

Aamjiwnaang Environment

Project Updates
March 21, 2011

"SAPING OUR HOME AND NATIVE LAND"

- Species at Risk
- U of M Health Study
- LAWSS update
- Clean Harbors
- Regulation 419
- Lambton County Health Study
- CRIC workplan
- Contaminated Sediments
- Lambton County Heritage Study
- Recycling & Waste Initiative
- Air Station Monitoring
- MAA workplan revision
- Protocol
- Consultation
- Symposium
- Native Plant Study

Species at Risk

- ▶ Building cross cultural awareness
 - Support First Nations & MNR relationship
 - Identify & share traditional knowledge
- ▶ Best practices & planning
 - Protect species at risk (SAR)
 - How ATK contributed to SAR
 - Identification & recovery of specific species
 - Inform government of interest in the area of species at risk e.g. butler

Species at Risk

▶ Previous work

- Meeting with community groups and individuals
- Research and description from community regarding past knowledge of species
- Proposed educational flash cards to be developed with species identification and Ojibway name
- Ensure that companies & government include species at risk in Environmental Screening Reports
- Councils approval to continue with project and attend workshop

U of M Health Study

- ▶ Some environmental sampling has been performed
 - water, dust , soil – preliminary results received
- ▶ Recruitment has been an issue, but it has been addressed as noted in Jan 5th HEC minutes sent to council
 - Ada Lockridge has been going door to door and participation is increasing
 - 2 full days Feb 12, 13 set aside for interviews and biological sampling; six families confirmed
 - 3 days in March 25, 26,27

U of M Health Study

- ▶ Update
 - Recruitment will be ongoing until April 2011
 - U of M increased incentives from \$50 to \$100.
 - AFN incentive contribution offering a Wii system
- ▶ Community outreach efforts were expanded
 - flyers, website, face book, Tribune and door to door
- ▶ Due to additional funding being received this study will be opened to any interested community member this summer as an extension to the study

LAWSS EA Overview

- ▶ Grid reinforcement
 - interconnect with existing system
 - providing water to south Sarnia
 - bypass W. Lambton PS in emergencies
- ▶ Transmission main twinning
 - additional supply for growth
 - emergency response purposes
 - system redundancy

LAWSS EA Comment response

- ▶ Update – January 18 HEC meeting
- ▶ Lawss would like to discuss other options for improving the Scott road water supply
 - Lawss suggested looping in Scott road and not to tap into a main line
- ▶ Lawss would like to work together to improve AFN water supply
- ▶ Mayor Steve Arnold would like to meet with Chief to discuss ways to improve water supply

LAWSS EA Comment response

- ▶ HEC suggestions:
 - Improve Vidal street's aging water main
 - Water main breaks could become an issue later on
- ▶ Improve water supply in Aamjiwnaang
- ▶ Start dialogue

Clean Harbors – Landfill Expansion

- ▶ Terms of reference
 - has been approved
 - Received notice of approval Letter dated December 21, 2010
 - Clean harbors proceeding with their EA
 - have informed us that they will be issuing a notice of commencement in the next few weeks informing council to be aware that it will be issued publically
 - AFN through our consultant and HEC commented on TOR

Clean Harbors – Landfill Expansion

- ▶ Environmental Assessment
 - EA is under review by government agencies and technical staff
 - Ensure public, aboriginal & government consultation
 - Contain sufficient detail to environmental effects and undertakings
 - Planning process will be consistent with the purpose of the EAA & public interest
- ▶ This means we will be involved in a full blown EA similar to the Shell EA process

Regulation 419 Update

- ▶ Purpose of initiative
 - To better understand and manage airborne contaminants from facilities
 - AFN involved in two parts to the initiative
 - CAMM Project – Sarnia Air Initiative
 - Standards development consultation of 8 contaminants
- ▶ 7 facilities submitted updated emission summary and dispersion modeling (ESDM) reports for Ministry review
 - As a result 6 facilities are required to do Combined Analysis of Monitoring and Modeling (CAMM) projects, one company no CAMM project required

419 Update (CAMM)

- ▶ Purpose of CAMM projects
 - is to improve emission estimates for fugitive sources of air emissions
 - Specifically for our interest benzene and 1,3 butadiene
- ▶ Benefits of the CAMM approach
 - Improves the accuracy of air emission estimates for fugitive sources of air emissions: and
 - Identifies the primary contributors to facility air emissions and point of impingement emissions

419 Update (CAMM)

- ▶ Combined Analysis of Modeling Monitoring project (CAMM)– Sarnia Air initiative still moving forward
 - 3 CAMM plans received from MOE for our review
- ▶ The approach involves
 - Siting ambient monitors close to the key fugitive sources on site as opposed to in community
 - Using dispersion modelling, “in reverse” to estimate the air emissions by using the monitored results and matching to the modelled predictions

419 Update (Continued)

- ▶ AFN goes to stakeholder meetings once a month, HEC representative Darren Henry and Dan Nahmabin
- ▶ Cumulative effects and how they are to be addressed is still a issue
- ▶ Standard setting of 8 chemicals in which AFN responded to through EBR
- ▶ AFN is only one of two first Nations involved in this process.
 - Planned vs. Unplanned Operating Scenarios

CRIC – Canadian Remedial Action Plan Implementation Committee

- ▶ Sediment Update
- ▶ Delisting Criteria

Contaminated Sediments

- ▶ \$10,000 Environment Canada funding to identify consultation requirements for RAP related issues specifically continued support from AFN on the following committees
 - CRIC, RAP Technical committees, Sediment Communications Committee, First Nations Consultation Sub –committee
 - Phase I – 2009 assessment study (fish/wildlife)
 - Phase II – sediment management options
 - Priority: SE aggregates, Aamjiwnaang, Shell & Guthrie park
 - High mercury sediment options: dredging, capping, or monitored natural recovery

Contaminated Sediments

- ▶ Status: Three additional studies required
 - Geotechnical
 - Geophysical – Assessment completed fall 2010
 - Geochemical
 - Cost is an ongoing issue
 - 2 studies deferred until 2011 fiscal year
 - Develop consultation plan with FN
 - Prepare reports to be released by end of 2012
 - Pre-design investigation – fall/winter 2010
 - Selection of preferred options – spring 2012
 - Consultation of preferred options – spring 2012
 - Initiate detailed engineering design

- ▶ 2007 community agreed that a study of the health effects associated with exposure to environmental emissions a public health priority
- ▶ AFN represented on Board of Directors
- ▶ Multi-year plan developed in three phases
 - Presently in phase two – literature review, community engagement, development of research questions
 - Issue is no funding therefore may not proceed to phase three

LCHS

- ▶ Aamjiwnaang involved in University of Michigan Biomonitoring Health Study
- ▶ Package presented to Council from HEC regarding Assembly of First Nations Biomonitoring project
- ▶ Issue – do we stay involved with LCHS with no secured funding or should we move in another direction pursuing AFN and U of M biomonitoring projects

Lambton County Heritage Study

▶ Ontario Trillium Foundation

- \$75,000 grant for 3 year field work to help develop a Natural Heritage Strategy for Lambton County
- will be used to complete inventories and to undertake field checks on approximately 30 properties.

Request for AFN representative

- steering committee consists of
 - county/city planning staff
 - senior biologist – St. Clair region
 - Sarnia urban wildlife, representative
 - Carolinian Canada – technical advisory committee

Recycling & Waste Initiative

- ▶ Waste Diversion Ontario (WDO)
 - Provides yearly funding to help reduce the costs of residential recycling
- ▶ Continuous Improvement Fund (CIF)
 - Distributes funds that have been set aside by WDO for various projects such as carts, blue boxes, recycling promotions
- ▶ Best Practices work plan developed
- ▶ Joint integrated Waste Management System
- ▶ HEC meeting April 28, 2010 Aamjiwnaang participation

Air Station Monitoring Report

- ▶ Real-time on-site measurement:
 - Sulphur dioxide (SO₂)
 - Nitrogen dioxide (NO/NO₂/NO_x)
 - Ground level ozone (O₃)
 - Total reduced sulphur
 - Carbon monoxide (CO)
 - Respirable particulate matter (PM_{2.5})
 - Volatile organic compounds (VOC)

CRIC – Canadian Remedial Action Plan Implementation Committee

- ▶ Great Lakes Water Quality agreement – GLWQA
 - identified 43 Areas of Concern (AOC)
 - the concept was each area had one or more Beneficial Use Impairments (BUI's)
 - St Clair River is an Area of Concern – BUI's originate in the AOC therefore manageable with in the AOC
 - Remedial Action Plans developed and implemented for each AOC
 - AFN part of the BPAC and CRIC working on delisting St. Clair as an AOC

Air Station Monitoring Report

- ▶ MOE Air Station Report for the Committee
- ▶ 2008–2009 Aamjiwnaang Air Station Report

Air Monitoring Station

- ▶ Off-site laboratory analysis
 - Total suspended particulate (TSP)
 - Fine particulate matter (PM_{2.5})
 - Volatile organic compounds (VOC)
 - Non-continuous sampling
 - Polycyclic aromatic hydrocarbons (PAH)
 - Metals
 - Community Information meeting and presentation of report
 - MOE will present information in April to community
 - Environment would like to hold a community information meeting outlining projects February 19, 2010

MAA Work plan Revision

- ▶ Changes to our 2010/2011, Work Plan and Budget.
 - Under budget line item Salaries
- ▶ Increased the hours/wk from 32–40 hours/wk for both positions.
 - excess of \$ 14, 640 in salary dollars by March 31, 2011.
 - Requested to move this amount into training for consultation staff.

MAA Work plan Revision

- ▶ AERMOD training
 - Aermod used as a standard by MOE and the industry.
- ▶ This training will increase the capacity of the staff
- ▶ Increase participation in consultation and stakeholder meeting with MOE regarding Regulation 419
 - Understand standard setting process as well as understand Certificate of Approvals processes for modeling for POI concentrations.

MAA Work plan Revision

- ▶ Course in Toronto February 28–March 4, 2011
- ▶ Cost is 6183.00 and \$2549.05 for accommodations, mileage, and meals for 3 people
- ▶ Move up 2012/2013 data management system to implemented
 - Update the process for internal community decision making relating to lands and resources

MAA Work plan Revision

- ▶ Community Outreach budget allocation
\$5,000 + \$5,900 from salaries budget to
purchase the software program

Protocol

- ▶ Community Comments
- ▶ Map (to be approved by council)
- ▶ Internal Process
- ▶ Log
- ▶ Form Letter

Forum on Pollution & Action

- ▶ Collaboration between HEC and researchers
- ▶ Bringing interested individuals together to learn how to get involved improving our environment
- ▶ February 10 & 11 2011
- ▶ Holiday Inn Sarnia, ON
- ▶ Large focus was centered on the Youth and what they can do to get involved

Forum on Pollution & Action

- ▶ The following are the presentations that were made at the Forum on February 11, 2011:
 - Certificates of Approval 101
 - NPRI Presentation
 - Securing Compensation
 - Water and Life–Josephine Mandamin
 - University of Michigan Health Study Update
 - Birth Mapping Update
 - Lambton Community Health Study Update

Native Plant Study

- ▶ Aamjiwnaang Native Plant Nursery Project – Letter of agreement
 - South Western Ontario Development Program (Feasibility Study – Aamjiwnaang Native Plant Nursery Project)
 - Approved \$5,000 grant from SLBDC
 - Final report received
- ▶ Enbridge approved \$35,000 for Traditional Medicinal Native Plant Survey project
- ▶ Was recently approved by council