

Land and Water Boards of the Mackenzie Valley

SLWB Community Meetings, February 2020



IMPERIAL OIL N.W.T. LIMITED NORMAN WELLS OPERATION

The only SLWB Type-A Water Licence



Paul Dixon
Executive Director
SLWB

Aswathy Varghese
Regulatory Specialist
SLWB

Imperial: 100 Years of Operations in Norman Wells, NT

1920

- Seasonal Refinery Producing Gasoline and Diesel for Local Markets

1942

- Construction of the Canol “Canadian Oil” pipeline began. Drilled 60 wells to increase crude oil production.

1944

- Proven Area Agreement was signed on July 21, 1944 between the Minister of Mines and Resources (His Majesty) and Imperial Oil Limited (Imperial).

1945

- Resumed production for northern markets but expanded to year-round operation.

1978

- Seismic and delineation well drilling program was undertaken. Plans began to significantly expand operations.

1981

- Norman Wells Oil Field Expansion Project approved by Fed. Govt. after Environmental Impact Assessment.

1983

- Six artificial islands constructed (NW Oil F Exp. Project) in Mackenzie River.

1985

- Completed 866 km pipeline from Norman Wells to Zama AB (NW Oil F Exp. Project).

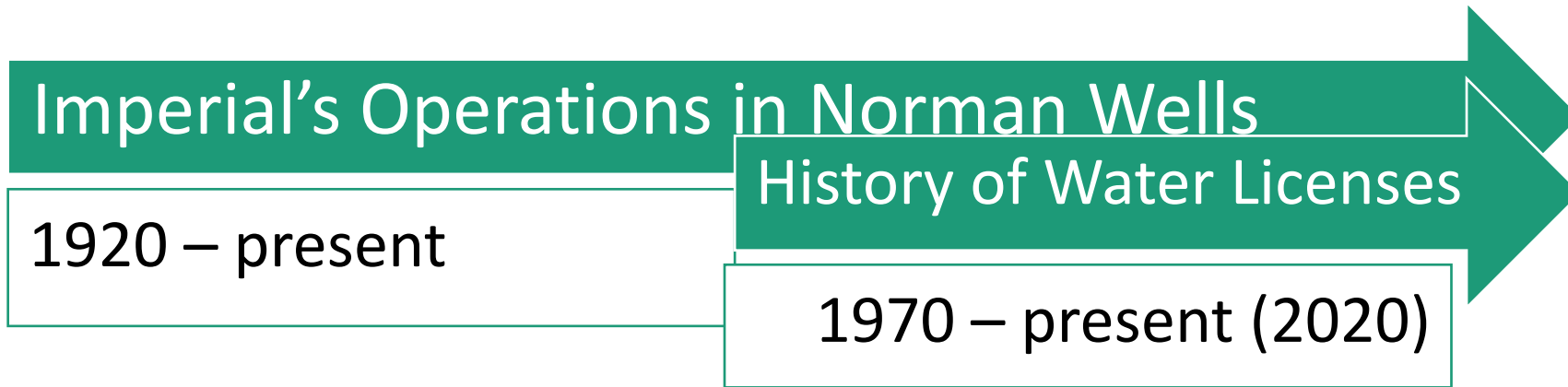
1991

- Peak of the Oil Production and Decline.

1996

- Old refinery and Battery 3 shut down.

100 Years of Imperial's Operations in Norman Wells



History of Water Licenses in a Timeline (DIAND to SLWB)

1970

- **First Licence was authorized** under the *Northern Inland Waters Act* (NWIA, 1970), by DIAND
- NWT Water Board Established

1994

- **Licence N3L1-0919** - issued by NWT Water Board in July 1994 under the *Northwest Territories Waters Act* (1992).

1998

- ***Mackenzie Valley Resource Management Act (MVRMA)* 1998** – established the land and water boards including **SLWB**

1999-
present

- **SLWB has issued three authorizations** for Imperial:
 - **S99L1-003** (1999-2004); **S03L1-001** (2004-2015); **S13L1-007** (2015-2025)



Regulatory Components of Imperial Oil Resources Limited



Canada Energy
Regulator

Régie de l'énergie
du Canada



Enbridge Pipeline

Image Source: CER/NEB



Norman Wells Operations

Image Source: SLWB Public Registry/Imperial

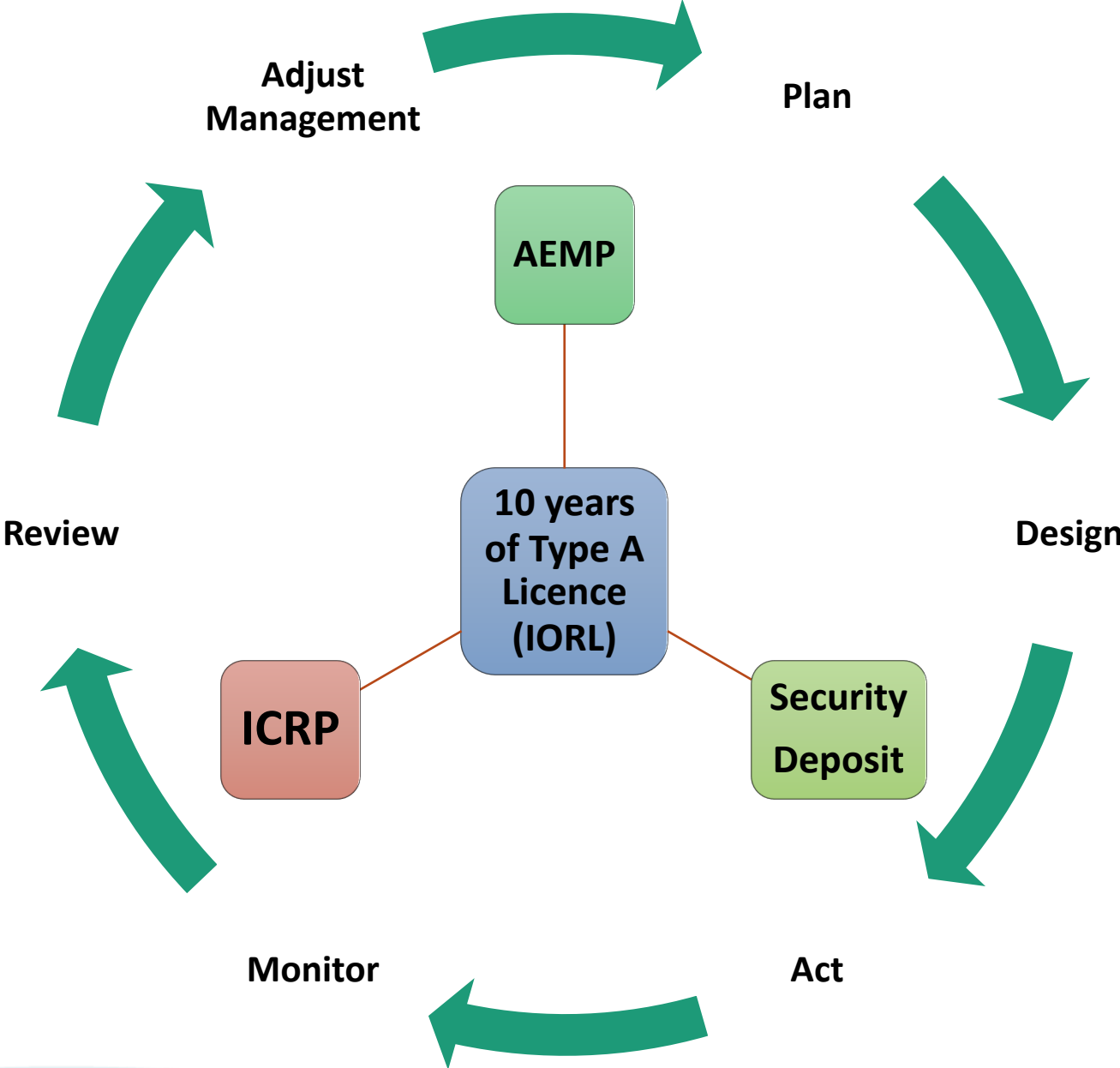


Role of Sahtu Land and Water Board (SLWB)

- The SLWB has issued three authorizations for Imperial:
 - **S99L1-003**: August 30, 1999 – August 29, 2004
 - **S03L1-001**: August 29, 2004 – March 24, 2015
 - **S13L1-007**: March 4, 2015 – March 3, 2025
- All three authorizations required public hearings.
- Primary focus of water licence proceedings: **management and protection of water quality and abandonment (closure) and reclamation of licensed undertakings.**



Adaptive Management



Imperial's 2015 Water Licence Renewal

- Two requirements of the 2015 renewal were for Imperial to prepare:
 - **Aquatic Effects Monitoring Program**
 - **Closure and Reclamation Plan**
- Prepared with **input from three working group sessions** held in Norman Wells, NT
 - November 19-20, **2014**; September 23-24, **2015**; and January 26-27, **2016**.
- Attendees: NEB/CER, INAC/AANDC/CIRNAC, DFO, ECCC, GNWT-ENR, RRCs (Deline, Norman Wells, FGH), SSI, Land Corporations (Yamoga, Deline, Norman Wells, Tulita), IORL, Amec, SLWB.
- 4th meeting on April 4, 2018 - for Interim Closure and Reclamation Plan (ICRP)





**NORMAN WELLS OPERATIONS
INTERIM CLOSURE AND RECLAMATION PLAN
SUBMITTED FOR APPROVAL MARCH 2016**

Submitted to:
Imperial Oil Limited
Calgary, Alberta

Submitted by:
Amec Foster Wheeler Environment & Infrastructure
Calgary, Alberta

March 2016

CC4058.800

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THIS REPORT CONTAINS PROVISIONS LIMITING LIABILITY, THE SCOPE OF THE REPORT AND THIRD PARTY RELIANCE



Norman Wells Operations Aquatic Effects Monitoring Plan

October 2019

Imperial Oil Resources NWT Limited
Bag 5000, 1001 Canol Drive,
Norman Wells, Northwest Territories
X0E 0V0, Canada
Switch Board: (867) 587-3100

Interim Closure and Reclamation Plan (ICRP) for Water Licence

REVIEW PROCESS FOR ICRP

**Reviewers – DFO, GNWT-ENR, NEB,
Norman Wells Land Corporation, SRRB, SSI**

- Comments on the public registry include:

- * Concerns about removing protective rip-rap from the artificial islands , Mackenzie River;
- * Concerns about the proposed Waste Management Facility
- * Reason for higher levels of metals in Bosworth Creek
- * Adequacy of traditional knowledge and engagement;
- * Long term monitoring of surface and groundwater;
- * Socio-economic benefits/ opportunities.



BOARD DIRECTION AND APPROVAL

**ICRP version 1.0 approved by the Board
on Jan 5, 2017 with directions:**

- 1) Proposed WMF concept - a preliminary environmental screening and engagement plan will be required.
- 2) This is an Interim Plan for a still-operating field, with areas that require further refinement.



Review and Approval Process for Aquatic Effects Monitoring Program (AEMP)

AEMP version 1.0 reviewed on the ORS – by GNWT-ENR, DFO, NWLC

Jan 5, 2017 - SLWB approved version 1.0 with requirements to include monitoring of small bodied fish.



AEMP version 2.0 reviewed – by ECCC, GNWT-ENR, SRRB

May 28, 2018 - version 2.0 not approved as requirements were not met.



3rd party review of AEMP confirming the Board's direction for fish monitoring.

Dec 24, 2019 – AEMP version 3.0 on ORS for public review – comment period ending Feb 26, 2020.



Your Comments

We would like to hear your comments and concerns about:

- the Aquatic Effects Monitoring Program (AEMP);
- possibility of another working group workshop to hear about some of the water sampling results.



Closure and Reclamation – Working towards final C & R Plan

- On-site waste management facility – preferred option.
 - Bulk of waste – hydrocarbon and salt contaminated soils.
- IRCP: Imperial held engagement sessions in Norman Wells, NT.
- Imperial also met other stakeholders to discuss regulatory requirements.
- Preliminary investigation of habitat around the artificial islands has been completed
 - Islands provide some nesting and feeding habitat for resident and migratory fish as well as overwintering refuge and locations for setting gillnets.



Water Licence Amendment Application 2020

- An application for amendment to the Water Licence for this project is going to be submitted.
- Overview of the licensing process:
 - 1) **Check** whether all the required documents/reports are submitted;
 - 2) The item is posted on the ORS – **opportunity for public comment** (on quality of information);
 - 3) Staff need to complete a **Preliminary Screening** to evaluate potential impacts and proposed mitigation measures for all physical, biological, social and cultural values.
 - SLWB will be holding a **technical/talking session** to hear everyone's concerns and issues.
 - The workshop results will assist the Board in decision making.
 - 4) **Additional technical workshops** for security and for review of design and technical documents;
 - 5) A **public hearing** will be required for the application. There is opportunity for oral and written submissions to be made at the hearing.



Contact Information

- **Federal Inspector** – Tim Morton (867) 669-2442; tim.morton@canada.ca
- **Imperial Norman Wells Operations Superintendent** – Jody Crawford (587) 476-2398; jody.a.crawford@esso.ca
- **Imperial AEMP contact** - Christine Wickens, Environment and Regulatory Advisor (587) 476-5007; Christine.a.wickens@exxonmobil.com
- **Imperial Environment and Property Solutions** - Closure and Reclamation - Heather MacPherson (587) 476-4057; heather.macpherson@esso.ca
- **Canadian Energy Regulator (CER)** – Katherine Roblin (403) 221-3272 Katherine.roblin@cer-rec.gc.ca
- **SLWB** – Paul Dixon, Executive Director (867) 598-2413 ext. 225; paul.dixon@slwb.com
- **SLWB** - Bonnie Bergsma, Regulatory Specialist (867) 496-2778; bonnie.bergsma@slwb.com
- **SLWB** – Aswathy Varghese, Regulatory Specialist (867) 598-2413 ext. 223 ash.varghese@slwb.com
- **MVEIRB** – General Inquiry – Catherine (McManus) Janz – Administrative Assistant (867) 766-7050; preliminaryscreening@reviewboard.ca
- **MVLWB** (Enbridge Pipelines Licence) – Angela Love, Regulatory Specialist (867) 766-7456; angela.love@mvlwb.com
- **Enbridge Pipeline** – Inspector – GNWT-Lands Dehcho Region - Kyle Christiansen (867) 695-2626 ext. 206



Sahtu Organizations/ Reviewers

Fort Good Hope

- Charter Community of Fort Good Hope
- Fort Good Hope Metis Nation
- Fort Good Hope Renewable Resource Council
- Fort Good Hope Metis Nation
- K'asho Got'ine District Land Corporation
- Yamoga Land Corporation

Délįnę

- Délįnę Got'ine Government
- Délįnę Renewable Resources Council

Norman Wells

- Norman Wells Land Corporation
- Norman Wells Renewable Resource Council
- Town of Norman Wells

Colville Lake

- Behdzi Ahda First Nation Band, Colville Lake

Tulita

- Hamlet of Tulita
- Tulita Band Council
- Tulita District Land Corporation
- Tulita Land Corporation

Sahtu Co-Management Boards, Government Organizations

- Sahtu Land Use Planning Board
- Sahtu Renewable Resource Board
- Sahtu Land and Water Board
- Sahtu Health and Social Services
- Sahtu Secretariat Incorporated
- GNWT-ENR – Sahtu Region
- GNWT Lands – Sahtu Region





Thank you!!

