

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: EOG Resources Canada Inc.
PROPOSAL NAME: Waskada to Pierson Pipeline Project
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Pipelines
CLIENT FILE NO.: 5544.00

OVERVIEW:

An Environment Act Proposal for the project was received on January 3, 2012. The advertisement of the Proposal read as follows:

“A Proposal has been filed by EOG Resources Canada Inc. to construct and operate three pipelines in one 32 km long right-of-way from SW 1-2-28 W1M to the existing oil battery in NE 21-1-25 W1M. The proposed right-of-way traverses the Rural Municipalities of Edward, Arthur, and Brenda. The pipelines in the right-of-way would include a 168.3 mm diameter sweet natural gas pipeline, a 219.1 mm diameter oil pipeline, and a 114.3 mm diameter sour gas pipeline. Construction of the project is anticipated to begin in spring of 2012. Completion is targeted for the fourth quarter of 2012.”

The Proposal was distributed to the "Transmission" Technical Advisory Committee (TAC) for review and was advertised in the Melita New Era, the Deloraine Times & Star, and the Virden Empire-Advance on Friday, January 20, 2012. It was placed in the following public registries: Conservation & Environment Library, Millennium Library, Manitoba Eco-Network, Lakeland Regional Library, and Border Regional Library. Comments on the proposal were requested by February 20, 2012.

A request for additional information was sent to the Proponent on March 26, 2012. On April 18, 2012 the proponent submitted information regarding a change in the pipeline route. A response to the March 26, 2012 request for additional information was received on July 16, 2012. The additional information included details of the change in the pipeline route. The request for additional information and the proponent's response were placed in the public registries and sent to TAC for review. The TAC comments on the additional information were placed in the public registries.

COMMENTS FROM THE PUBLIC:

No comments were received from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Following is a summary of TAC comments, requests for additional information, and the proponent's responses pertaining to the Proposal.

Manitoba Conservation and Water Stewardship - Wildlife and Ecosystem Protection Branch

- Clarification is required on aspects of the wildlife and vegetation survey conducted within the Waskada to Pierson pipeline environmental assessment(client file #5544).
- The environmental assessment states that there will be no wetlands affected during the construction of this pipeline (7.2.7 Wetlands). The Wildlife and Ecosystem Protection Branch considers this highly unlikely, and as shown in the photo plates, would be near impossible to accomplish. Environmental assessments of similar pipeline projects (e.g. client file # 5522) have outlined all the habitat types along the proposed route, including a detailed description of the class and size of wetlands occurring along the route. More detailed information is required before the WEPB can properly this project.
- The proponent does not provide a table outlining the distribution of vegetation communities along the pipeline ROW (cultivated, shrub, wetland, riparian, grasslands etc.). Table 5.5 provides some information but does not provide adequate details. The exact location of rare and endangered species should also be provided on a map.
- There is a lack of information on Great Plains Toad survey methods. This is a Species at Risk that must be included in an environmental assessment. It says none were observed, but if places were only checked during the day, it is probable the toads would have been missed – audio surveys during the calling season are most appropriate for this species. Also, great plains toads are not discussed under wildlife Species at Risk (p 5-21).
- p.5-11: “The proposed pipeline route is not proximal to any named lakes, Important Bird areas or NAWMP priority areas.” This pipeline does cross an Important Bird Area. How does the proponent address the fact that they overlooked such an essential portion of their wildlife review?

Recommendations:

- Provide further review of the wildlife and vegetation resources within the study area. Provide at minimum:
 - A shapefile outlining the exact route of the pipeline.
 - A shapefile outlining the distribution of vegetation communities along the ROW.
 - A table outline the distribution of vegetation communities along the pipeline ROW (cultivated, native grassland, wetland, riparian, etc).
 - A table outlining the number and class of wetlands along the pipeline ROW.
 - A review of the Great Plains Toads survey methodologies.
 - A map outlining the occurrences of rare and endangered species.
 - A map outlining the location, size, and type of wetlands along the ROW.
- Review under the draft Habitat Mitigation Program:

- Table 6.1. describes the impacts of this project on native vegetation and wetlands as “low- non significant”. The Wildlife and Ecosystem Protection Branch considers that outcome to be highly unlikely. Native prairie and wetlands are difficult to mitigate and restore. The WEPB recommends that this project be reviewed under the draft Habitat Mitigation Program administered by the Wildlife and Ecosystem Protection Branch – Manitoba Conservation. As per the programs policies, lands classified as wetlands, native prairie, and uplands that are developed for industrial purposes require habitat mitigation. While it is apparent from the environmental assessment that on-site mitigation measures will be used to minimize the negative impacts to the environment, specifically wetlands and native uplands, on-site impact minimization techniques cannot fully compensate for the spatial, temporal and functional losses to the habitat. Mitigation for these areas will require off-site compensation. As part of the mitigation process, Manitoba Conservation and Water Stewardship will require that a review of the habitat mitigation outcomes be conducted three years after construction to assess the extent to which on-site mitigation measures have been successful. A third-party consultant will need to be contracted for this assessment. This assessment will serve as the basis to determining the requirement for off-site compensation.
- Options for providing compensation are outlined below;
 - Securing nearby land and restoring, enhancing, or creating habitat;
 - Securing alternate high-value wildlife habitat and transferring ownership to a conservation agency;
 - Contributing to the Habitat Compensation Fund, to be administered by a conservation agency;
- As an alternative to relying solely on post-construction habitat mitigation assessments, the proponent may discuss with Manitoba Conservation how compensation requirements could be addressed in advance of construction, understanding that it will not be possible to fully mitigate some habitats on-site.

Request for Additional Information and Proponent’s response:

A letter dated March 26, 2012 was sent to the proponent requesting the information on vegetation communities, wetlands, rare and endangered species, the Important Bird Area, and the Great Plains Toads survey methodologies. The proponent provided the requested information in a letter dated July 16, 2012.

Additional Comments:

Upon review of the proponent’s July 16, 2012 response to the request for additional information, the Wildlife and Ecosystem Protection Branch provided comments on August 13, 2012 and on August 30, 2012. A summary of the comments are as follows:

- MB Wildlife Branch requires the following conditions be implemented for the post-construction phase of the project, in areas of native prairie and native pasture:
 - Recontouring of a disturbed site must be completed, as required, to match the predisturbed landscape and/or blend with the surrounding topography. Slope steepness and contour should consider the potential for erosion. Subsequently,

stripped topsoil should be replaced as closely as possible to the predisturbance state. Practices should be taken to reduce soil profile compaction on disturbed areas (e.g., subsoil ripping prior to topsoil replacement) assist in root penetration and soil moisture intake.

- Revegetation programs that maximize the re-establishment of native species (trees, shrubs, forbs, grasses, etc.) must be used.
- Reclamation planners must select seed mixes and plant materials that allow reestablishment of the complete range of native species. To ensure compatibility with surrounding areas, available native plant materials adapted to local growing conditions may be required to approximate the predisturbance diversity of the prairie vegetation. Revegetation planning should consider use of lower seeding rates to promote encroachment/reestablishment of native species. Plant distribution should simulate off-site occurrence as much as possible. For example, shrubs may be planted in clumps, depending on the site plan.
- Natural recovery (no seeding) is an acceptable approach to revegetation, if the reclamation planner identifies that the following site specific conditions are adequate; topography, soils, moisture, range condition and grazing pressure, weed sources, and construction timing. Reclamation Planners must consider the risk of erosion, type of available seed source, and whether the site is a sufficient distance from sources of problem plant species. The condition of the surround prairie around the site must be good (lots of seed) and the potential for erosion low.
- MB Wildlife Branch requires that if any native seed mixes are required to use in this project, that they be approved by the Regional Wildlife Biologist or Habitat Specialist prior to seeding.
- MB Wildlife Branch requires that vegetation monitoring of the native pasture/prairie portions of the project be conducted by a native prairie revegetation specialist for a minimum of three complete growing seasons (as outlined in Recovery Strategies for Industrial Development in Native Prairie) .
- MB Wildlife Branch recommends the proponent review the following guidelines with respect to working in native prairie and native pasture:
 - Petroleum Industry Activity in Native Prairie and Parkland Areas – Guidelines for Minimizing Surface Disturbance. Native Prairie Guidelines Working Group. January 2002.
 - Native Plant Revegetation Guideline for Alberta (2001)
 - Minimizing the Effects of Oil and Gas Activity on Native Prairie in Alberta. June 2002. Prairie Conservation Forum. Occasional Paper No. 4.

Disposition:

The proponent provided a satisfactory response to the Wildlife and Ecosystem Protection Branch's concerns. The Branch's comments were incorporated in the licence conditions.

Manitoba Conservation and Water Stewardship - Parks and Natural Areas Branch

No comments.

Disposition:

No action needed.

Manitoba Conservation and Water Stewardship – Environmental Compliance and Enforcement - Western Region

- Section 6.2.15 - In the event that a temporary construction site is installed all sewage and greywater generated at the site must be managed as per the Onsite Wastewater Management Systems Regulation 83/2003. The wastewater management system utilized must be registered with Manitoba Conservation.
- Section 6.2.17 - Rupture of a sewage line that results in soil contamination must be reported to Manitoba Conservation and remedial actions taken.

Disposition:

The comments were forwarded to the Proponent for their information.

Manitoba Conservation and Water Stewardship - Sustainable Resource & Policy Management Branch

No concerns.

Disposition:

No action needed.

Manitoba Conservation and Water Stewardship - Water Stewardship Division

- The Water Stewardship Division requires an Environment Act Licence to include the following:
 - The Licencee is required to enter into a wetland habitat compensation agreement, including provisions for a wetland mitigation bank, with the Water Stewardship Division, prior to the commencement of construction.
 - Under *The Water Resources Administration Act* (Manitoba), the Licencee must obtain authorization for any works or structures, prior to the commencement of construction, on a “provincial waterway.” A “provincial waterway” is a water control work, natural water channel, or lake designated under *The Water Resources Administration Act* (Manitoba).
 - The withdrawal of water for hydrostatic testing will require the Licencee to obtain an authorization under *The Water Rights Act*. The Licencee is required to obtain authorizations from the Water Stewardship Division:

- The discharge of hydrostatic test water into surface waters requires the Licencee to obtain an authorization from the Water Stewardship Division:
- Any handling and/or transportation of fish and mussels during salvage operations will require the Licencee to obtain a “Live Fish Handling Permit,” prior to the commencement of this work, from the Water Stewardship Division:
- The Licencee is required to comply with the Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat (attached).
- The Licencee is required to develop and implement an environmental protection plan that includes the following:
 - A regular maintenance inspection schedule of the pipeline;
 - Electronic leak detection equipment;
 - An emergency response plan which includes implementing staff with training and equipment in the area for rapid response in the event of an accident or malfunction and In the event of a spill into a watercourse, the downstream water system owners must be immediately contacted. Note: The two water courses mentioned in the proposal, the Antler River and the Souris River, flow into the Assiniboine River, which is a raw water source for downstream drinking water systems.
 - Measures to protect water quality in the Antler River, the Souris River, and the riparian area adjacent to the Antler River and the Souris River, during construction, operation, and an emergency response event;
 - Install silt curtains several metres past the riparian margin along the right of way;
 - Implement biodegradable erosion control materials;
 - All re-vegetation shall implement a seed mix native to the area to prevent the spread of invasive species;
 - A policy should be considered of only using soaps, shampoos, detergents and other cleaning products that are phosphate-free or that have 0.5 % or less phosphorus content are used in camps or housing facilities;
 - Any construction activity that could cause sediment transport into waterways shall be halted during periods of heavy rain fall;
 - If there are some undefined channels that carry water into a watercourse with a defined bed and banks and the crossing will be trenched, the work shall be conducted during dry conditions and temporary and permanent sediment and erosion control measures are implemented until the sites have stabilized;
 - Vehicles and other equipment shall be fuelled and serviced at least 100 metres away from any water body;
 - Wastewater (sewage and grey water) from work camps and other infrastructure shall be collected in holding tanks and disposed at a licensed wastewater treatment facility;
 - Watercourse crossings will be monitored each spring and after every major precipitation event, until all sites have stabilized; and, An annual post-construction monitoring report that will include Watercourse crossing method implemented, including: performance measured, the type of remediation, and a remediation time table and A cross-sectional and longitudinal profile of the

watercourse crossing area to ensure the bank and bed are remediated to pre-construction conditions.

- Prior to the commencement of any work to cross rivers, streams, or creeks, the Licencee is required to consult with the Water Stewardship Division:
- In order to protect riparian areas, including during trenchless drilling, the Licencee is required to establish and maintain an undisturbed native vegetation area located upslope from the ordinary high water mark and adjacent to all water bodies and waterways connected to the provincial surface water network:
 - A 30-metre undisturbed native vegetation area is required for lands located adjacent to surface waters;
 - Permanent development is prohibited within an undisturbed vegetation area;
 - The combined alteration—including new and existing structures—within this undisturbed native vegetation area is limited to a maximum of 25 % of the shoreline length (for example: 25 metres per 100 metres of shoreline length) of each lot for a boat house, path, dock, etc.; and,
 - Alteration within this undisturbed native vegetation area—including a dock and/or the removal of near shore or stream aquatic habitat—shall not occur unless an activity conforms to a Department of Fisheries and Oceans Canada Operational Statement or an activity is reviewed by the Department of Fisheries and Oceans Canada.
- The Licencee is required to comply with the provincial Drainage Policy:
 - The net loss of semi-permanent or permanent wetlands shall not occur. Wetlands are defined as areas that are periodically or permanently inundated by surface or ground water long enough to develop special characteristics including persistent water, low-oxygen soils, and vegetation adapted to wetland conditions. These include but are not limited to swamps, sleughs, potholes, marshes, bogs and fens.
 - A proponent shall establish and maintain an undisturbed native vegetation area with at least a 30-metre width.
- The Licencee shall not construct any water control works associated with the Development, nor release any drainage water from the Development, without the prior receipt of a Water Rights Licence to Construct Water Control Works from Manitoba Conservation and Water Stewardship, Water Stewardship Division:
- The withdrawal of water from wetlands for hydrostatic testing must not result in an alteration to the wetland's classification or function.
- The Licencee is required to develop a standard protocol to prevent the introduction of foreign biota:
- Prior to the commencement of construction, provide the final environmental protection plan, final watercourse crossings plan, and post-construction monitoring plan to the Water Stewardship Division:
- Based on the maps provided, it appears that conservation interests (such as a conservation agreement or fee simple ownership)—held by the Manitoba Habitat Heritage Corporation, a Crown Corporation responsible to the Minister of the Manitoba Department of Conservation and Water Stewardship—may be crossed. If conservation interests are crossed by the proposed Development, the Licencee is

required to provide both on-site and off-site compensation. The proponent is requested to provide a shapefile of the right-of-way and pipeline locations.

- The Water Stewardship Division submits the following concerns and recommendations:
 - The standard mitigation hierarchy of “Avoidance, Minimization and Compensation” is the accepted method of addressing the negative environmental and social impacts of a proposed Development on wetland habitat. Wetlands provide valuable services to the ecosystem, including: water storage, carbon sequestration, biodiversity refugia, and water filtration. Based on the environmental assessment report provided by the proponent, it appears that the proposed Development will be constructed in a manner that will limit its spatial and functional impacts to the environment. However, it is also clear that the construction of the proposed Development will cause some disturbance to existing wetland habitats and will decrease the wetland habitat overall function. Based on the potential for permanent loss of wetland habitat function, the Water Stewardship Division recommends implementing “Compensation,” the third level of the mitigation hierarchy.
 - The discussion on groundwater and aquifers in Chapter 5 is not adequate. Much of the regional groundwater discussion is not applicable to this proposed development (discussion of groundwater recharge and flow in south-eastern Manitoba for instance) and there is considerable confusion about which aquifers are being discussed. References are made to two maps from the Manitoba Land Inventory site to address local conditions. These maps were completed on the scale of the southern and central parts of the province and are entirely unsuitable for evaluating local conditions. There is mention of bedrock aquifers not being found above 150-metre depth and also that bedrock occurs at ground surface (both cannot be correct). There is essentially no discussion of shallow sand/gravel aquifers along the proposed route (other than a reference to a Souris River aquifer which is not known) nor mapping of wells, although they indicate this will be done using our water well data base. The Water Stewardship Division’s database contains only a portion of the total number of wells in the area and should not be considered definitive of the presence of all wells. Most wells are also located only to a quarter section.
 - A more comprehensive and accurate assessment of groundwater conditions and use along the proposed pipeline route should be undertaken and presented as part of this proposal. In particular, groundwater conditions near and under streams/rivers should be assessed to determine if a bored pipeline will be placed into a sand/gravel aquifer.
 - Based on a more comprehensive assessment of groundwater conditions and use, there should be a discussion of the possibility of the pipelines being emplaced within or immediately over aquifers and the risk this may entail should a rupture or release of petroleum product occur following construction.
 - The aforementioned mapping of aquifers should be incorporated into an emergency response plan, providing information on the type of aquifer and the response needed.
- The Water Stewardship Division submits the following comments:

- The Water Stewardship Division does not object to this proposal, at this time.
- The Water Stewardship Division has observed that open cut watercourse crossings are difficult to stabilize and result in erosion and sedimentation. The Division prefers a proponent to implement directional drilling at crossing locations exhibiting a defined channel and the presence of water throughout the year or sufficient water during the spring runoff to provide spawning and nursery habitat, and contribute to downstream habitat.
- Concerning hydrostatic testing, the proposal notes the use of methanol as antifreeze during pipeline testing. Although the proponent intends to recover this material upon completion of testing, the Water Stewardship Division is concerned about potential leaks and discharges during pipeline testing as methanol is quite toxic in surface waters. The use of non-toxic or the least toxic, biodegradable antifreeze fluids such as food grade ethanol or propylene glycol is preferred.
- Maintaining an undisturbed native vegetation area immediately adjacent to the shoreline of lakes, rivers, creeks, and streams helps stabilize banks, provides aquatic and wildlife habitat and protects water quality through filtering overland runoff. The width of an undisturbed native vegetation area should be the widest width possible and practical. In conjunction with other best management practices such as eliminating fertilizer use adjacent to surface waters, and the proper management and disposal of waste water, maintaining an undisturbed native vegetation adjacent to water bodies is important to help prevent degradation of water quality.
- The Water Stewardship Division's recent policy direction recommending undisturbed native vegetation areas to protect water is founded, in part, on the 135 recommendations in the Lake Winnipeg Stewardship Board's (December 2006) report titled, "Reducing Nutrient Loading to Lake Winnipeg and its Watershed, Our Collective Responsibility and Commitment to Action." All 135 recommendations were accepted in principle by the Minister of the Department, on behalf of the Government of Manitoba.

Request for Additional Information and Proponent's response:

A letter dated March 26, 2012 was sent to the proponent requesting a groundwater assessment and emergency response measures for the river crossings, mapping of water wells, and a description of surface water use. The proponent provided the requested information in a letter dated July 16, 2012.

Disposition:

The proponent provided a satisfactory response to Water Stewardship's concerns. Some comments were incorporated into the licence clauses.

Manitoba Conservation and Water Stewardship - Air Quality Section

- There are no pump stations located along the proposed pipeline that could be a potential source of air emissions and possibly be subject to the proposed national

standards which are a part of the Air Quality Management System for Base Level Industrial Emissions Requirements (BLIERs).

- Dust and noise will be generated during construction but this should have minimal impact on air quality.

Disposition:

No action needed.

Manitoba Conservation and Water Stewardship – Aboriginal Relations Branch

ARB has reviewed this project as part of the TAC committee and have determined that since the pipeline will cross 2 rivers, the Souris and Antler Rivers, a Crown Aboriginal Consultation and Initial Assessment and record of Conclusion document be completed before a licence is issued. The rest of the pipeline development is on Private Land.

Disposition:

An assessment was conducted by EOG to determine whether Aboriginal consultation should be conducted. It was determined that consultation is not required. See Crown-Aboriginal Consultation section below.

Manitoba Infrastructure and Transportation

- Where the proposed oil & gas pipelines will cross under Provincial Road (PR) 251 (NW1/4 35-1-27W to SW1/4 2-2-27W) and Provincial Trunk Highway (PTH) 83 (SE1/4 5-2-27W to SW1/4 4-2-27W), underground utility agreements will be required. Agreements can be obtained at Manitoba Infrastructure & Transportation Office located in Brandon.
- The proposed project may require access to PR 251 & PTH 83. As such, the proponent should be informed that, under the Highways and Transportation Act (PRs) and Highway Protection Act (PTHs), any new, modified or relocated access connection onto a PR or PTH will require a permit from Manitoba Infrastructure and Transportation for PRs and or Highway Traffic Board for PTHs (including change in access use). A permit may also be required for any construction (above or below ground level) within 38.1 m (125 ft) or for any plantings within 15.2 m (50 ft) from the edge of the right of way of PR 251 or PTH 83.

Disposition:

The comments were forwarded to the Proponent for their information.

Canadian Environmental Assessment Agency (CEAA)

Based on responses from federal departments, application of the *Canadian Environmental Assessment Act* with respect to the project will not likely be required.

The Department of Fisheries and Oceans indicated they are not a Responsible Authority (RA) for the project. They suggested the proponent follow its dry-open cut, high pressure directional drilling and punch & bore operational statements and asked the proponent to submit a Notification Form to DFO for each of the proposed crossings.

Transport Canada (TC) indicated they are not an RA for the project. TC requested the proponent submit applications to Transport Canada's Navigable Waters Protection Program for all the proposed pipeline crossings of navigable waters.

Environment Canada (EC) indicated they are not an RA for the project. EC prepared a letter of comments and advice for the proponent related to migratory birds, species at risk, wetlands, invasive species, temporary facility site selection, reclamation, monitoring, cumulative effects, and water quality.

Disposition:

Some comments from Environment Canada were included in the licence conditions. The proponent submitted applications to the Navigable Waters Protection Program and received approval for the three navigable water crossings. Notification forms were sent to DFO for the river crossings.

PUBLIC HEARING:

There were no requests for a public hearing. A public hearing is not recommended.

CROWN-ABORIGINAL CONSULTATION

The Petroleum Branch required EOG to conduct an assessment on whether Aboriginal consultation was required for the project. The Branch reviewed EOG's assessment and agreed that no consultation is required. Environmental Approvals Branch also reviewed the assessment document and concurs with this conclusion.

The assessment indicates the following:

- There are no Indian Reserves, aboriginal or Metis communities located within 50 km of the proposed Project.
- As the entire pipeline will be set within Freehold lands and is presently being utilized for either agricultural or commercial cattle purposes, traditional land use activities are not being undertaken in this area.
- The pipeline traverses 100% privately-held lands.
- The project traverses lands covered by Treaty 2, however impacts on traditional land and resource use, if any, would be minimal due to current land tenure and land use.
- EOG conducted a Historical Resources review of the proposed river bore locations including field inspections in the fall and early winter of 2011. It was concluded that given the absence of intact archaeological deposits and the scarcity of artifacts, the

interpretive value of these sites is limited and no additional assessment is recommended.

- A Heritage Resources Discovery Contingency Plan will be implemented by EOG during construction to prevent the disturbance of any previously-unidentified heritage, cultural or spiritual items found.
- It is anticipated that there will be no potential effects on hunting, fishing, trapping or gathering. The pipeline crossings will be bored and the vast majority of the facilities being buried. Furthermore, potential impacts on traditional use, if any, can be effectively mitigated through EOG's implementation of its standard mitigation measures and the conditions of approval.

RECOMMENDATION:

The comments received on the Proposal can be addressed as conditions of licensing for the project, or have been forwarded to the Proponent for their information. Therefore, it is recommended that the Development be licensed under The Environment Act subject to the limits, terms, and conditions as described in the attached Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the Western Region prior to construction.

PREPARED BY:

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September 6, 2012

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