Licence No.: 2302 E R

Licence Issued: December 30, 1997 Revised: October 8, 1998 and

Revised: January 11, 1999 (*Note: the only revision made on this date was to the company name.*)

IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125) THIS LICENCE IS ISSUED PURSUANT TO SECTION 27(2) TO:

TOLKO INDUSTRIES LTD.; "the Licencee"

for the Development which is the carrying out of forest management activities within the geographical boundaries of Forest Management Licence Area # 02, as detailed in the Repap Manitoba Inc. 1997-2009 Forest Management Plan and approved by Manitoba Natural Resources, subject to the specifications, limits, terms and conditions of this Licence.

DEFINITIONS

In this Licence:

- "all-weather road" means a graded and/or graveled road that may be passable by vehicles under both wet and dry weather conditions:
- "buffer" means a strip of land that is managed to reduce or eliminate the impacts of land use practices on sensitive areas or natural features:
- "chance road" means a temporary non-graveled road with minimal grade development, that may be passable by vehicles only when dry or frozen;
- "contractor" means any party entered into a contract with the Licencee for forest management activities;
- "cutover" means an area from which timber has been harvested;
- "cutting block" means a forested area with defined boundaries in which specific forest stands or parts thereof are approved for harvest;
- "Director" means an employee so designated pursuant to The Environment Act;
- "F.M.L. Area" means Forest Management Licence Area # 02 established in an agreement, and redefined in the amended and restated Forest Management Licence Agreement between the Province of Manitoba and the Licencee, pursuant to the Forest Act. The agreement defines the area in which the Licencee is authorized to undertake cutting, removal, renewal and management of crown timber, and management of crown lands;
- "FMU" means Forest Management Unit;
- "Forest Management Plan" means the Repap Manitoba Inc. 1997-2009 Forest Management Plan;
- "Forest Management Planning and Operating Practices" means the document which details the processes and practices to be followed by Tolko Industries Ltd. in planning, implementing and monitoring forest management activities undertaken on the FML Area # 02. The FMPOP's also guide the implementation of forest management activities appropriate to site specific circumstances, including measures to mitigate potential impacts;
- "habitat" means the place where an organism lives and/or the conditions thereof, including soil, vegetation, water and food;
- "hardwood" means trees belonging to the botanical group Angiospermae having broad leaves that shed annually;

- "harvesting" means the cutting and removal of trees from a forested area;
- "ice bridge" means a temporary crossing constructed from ice, snow, and/or log material that may be passable by vehicles under frozen conditions;
- "I.R.M.T." means the regional Integrated Resource Management Team of Manitoba Natural Resources located in the Northwest Region (The Pas), the Northeast Region (Thompson), the Western Region (Dauphin), the Central Region (Gimli) and the Eastern Region (Lac Du Bonnet), and which is organized to review and develop permit conditions for activities which may impact timber and non-timber resources. The membership includes regional specialist staff from Forestry, Wildlife, Lands, Fisheries, Water Resources, and Parks and Natural Areas, as well as staff from Regional Operations involved with enforcement;
- "leachate" means organic compounds removed from materials, such as cut logs or bark residue, by the action of percolating water;
- "pre-harvest forest investigation" means a stand level investigation of a potential harvest site, to document the stand characteristics and any non-timber values that may need to be protected, and to determine appropriate harvest and renewal treatments;
- "quota holder" means a person or company that has an annual timber volume allotment which allows the harvest of timber on provincial Crown land under authority of a Timber Sale;
- "reforestation" means the establishment of trees on previously forested lands by natural processes or artificial restocking (i.e. planting and/or seeding), also referred to as forest regeneration;
- "rehabilitate" means physical treatment of a disturbed site to reclaim its productive potential. This may include, but is not limited to: leveling the surface, establishing appropriate slopes to prevent erosion, loosening compacted surface soils to enable vegetation to root successfully, and re-vegetation to promote the development of the former species composition;
- "regeneration survey" means a survey carried out to determine the number and species of trees that are successfully established on a site;
- "scarification" means a method of seed bed preparation which consists of exposing patches of mineral soil through mechanical action;
- "silviculture" means the science and methods used to tend, harvest and replace forests;
- "site preparation" means the physical or chemical methods used to prepare a site for planting or to promote natural reforestation:
- "slash" means the residue left on the ground after harvesting, including unused logs, uprooted stumps, branches, tops, etc.;
- "softwood" means cone bearing trees with needles or scale like leaves, belonging to the botanical family Gymnospermae;
- "stand" means a community of trees sufficiently uniform in species, age, arrangement or condition to be distinguishable as a group from the forest or other growth on the area;
- "succession" means the orderly and progressive replacement of one plant community by another until a relatively stable community, known as climax vegetation, occupies the area;
- "temperature inversion" means a stable atmospheric condition in which cooler air at the earth's surface is prevented from rising by a layer of warmer air above;

"The Act" means The Environment Act and Regulations thereunder, as amended from time to time;

"third party operator" means a person or company other than the Licencee or its contractor, who carries out forest management activities; and

"winter road" means a road which is capable of being used only in winter.

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

- 1. The Licencee shall ensure that all operations in its F.M.L. Area carried out by its employees, representatives, contractors or by any other party pursuant to a contract entered into with the Licencee, adhere to all specifications, limits, terms and conditions contained in this Licence, unless specifically exempted.
- 2. Where operations are carried out in the Licencee's F.M.L. Area by a party other than those referred to in Clause 1 above, the Licencee working in co-operation with Manitoba Natural Resources shall take all reasonable steps within its control to ensure that such party adheres to all specifications, limits, terms and conditions contained in this Licence, unless specifically exempted.
- 3. The Licencee shall meet with private landowners who wish to sell hardwood and/or softwood from their property to Tolko Industries Ltd., in an effort to encourage landowners to embark on a woodlot management program, which would entail sustainable harvest and renewal practices.
- 4. This Licence shall be interpreted so as not to adversely affect any entitlement of a First Nation to lands under any Treaty or under any Treaty Entitlement Agreement.
- 5. The Licencee shall ensure that the Forest Resource Advisory Committee (FRAC) continues to function, that it includes representation from a cross-section of forest users and interest groups, and that membership of the FRAC not be limited only to those individuals residing within Forest Management Licence Area # 02.
- 6. The Licencee shall ensure that growth and yield data, pertinent pre-harvest forest investigation information, and harvest and renewal records, are made available to Manitoba Natural Resources, to assist in the completion of the forest inventory and the Annual Allowable Cut calculations for Forest Management Licence Area # 02.

7. The Licencee shall:

- a. ensure First Nations communities and other local communities and resource users are fully appraised of planned harvesting activities in advance; and
- b. ensure that appropriate maps and related planning documents are made available to First Nations community leaders on an ongoing basis.
- 8. The Licencee shall ensure that all future Annual Operating Plans include:
 - a. specific strategies developed in consultation with Manitoba Natural Resources, to identify and protect from harvest, specific areas of karst topography, particularly those areas within the Grand Rapids Uplands; and
 - b. as directed by Manitoba Natural Resources, the provision of adequate buffers to limit the disturbance to any significant geophysical features, including endangered spaces and vulnerable wildlife habitats such as those of the brown bat.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Harvest Restrictions

The timber harvesting proposed in the Repap Manitoba Inc. 1997-2009 Forest Management Plan is approved except for the following:

- 9. The Licencee, quota holders, or third party operators, shall not harvest timber within the boundaries of Palsa Hazel Ecological Reserve of Grass River Provincial Park, the Salt Flats Ecological Reserve or within any proposed or existing Ecological Reserves.
- 10. The Licencee shall not harvest oak, ash, elm, maple or cedar stands and shall document the occurrence, and leave standing, any groups of trees or stands of those species encountered when harvesting other species. The information documented shall be made available to Manitoba Natural Resources. Quota holders or special allocation holders may harvest oak, ash, elm, maple or cedar if approved by the I.R.M.T.

Respecting Pre-Harvest Forest Investigations, Monitoring and Research

11. The Licencee shall:

- a. conduct pre-harvest forest investigations for all proposed timber harvest blocks according to procedures established by Manitoba Natural Resources;
- b. determine, in consideration of the parameters included in the pre-harvest forest investigations, and in consultation with the Director and the I.R.M.T., the level of training to be provided to pre-harvest forest investigation staff, and ensure the required training occurs, including training in the identification of heritage resources; and
- c. use the information collected by the pre-harvest forest investigations, to determine the harvest and renewal prescription for each harvest site.

12. The Licencee shall:

- a. within twelve months of the date of this Licence, conduct consultations, with government representatives and stakeholders, to establish priorities for baseline monitoring and forest ecosystem research that may be required to emulate natural disturbance patterns;
- b. determine what, if any, additional areas for representative research and monitoring control sites (supplementary to designated no-harvest areas) may require protection from future harvesting activities:
- c. participate in the data collection and funding of monitoring and research selected for implementation in the course of the consultations described in Clause 11. (a) of this Licence, and as approved by The Director;
- d. co-operate in the establishment of permanent monitoring and research sites within the no-harvest areas of the F.M.L. Area and in long-term ecological monitoring on those sites; and
- e. ensure that the data collected in the course of monitoring or research activities pursuant to this Licence, is made available to the Governments of Manitoba and Canada, by the year 2005.
- 13. The Licencee shall co-operate with Manitoba Natural Resources in developing a plan of action for indicator species.

Respecting Guidelines

14. The Licencee shall carry out harvest and associated activities in accordance with practices set out in "Forest Management Guidelines for Wildlife in Manitoba", "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat", "Timber Harvesting Practices for Forestry Operations in Manitoba" "Consolidated Buffer Management Guidelines", and any other provincial guidelines which may be adopted for forest management activities.

Respecting Operating Procedures

- 15. The Licencee shall provide training to all forest management contractors in the identification and protection of heritage resources.
- 16. The Licencee shall, in consultation with the I.R.M.T., design and/or modify cutting block layouts and road plans in order to mitigate land use and access impacts that may be identified through government and public review of proposed activities. Resources and land uses which may be impacted, include but are not limited to:
 - a. wildlife and fish resources;
 - b. sensitive, threatened or unique wildlife or fish habitat;
 - c. vulnerable, threatened or endangered flora and fauna;
 - d. provincial parks, ecological reserves, and protected areas;
 - e. heritage resources;
 - f. traplines;
 - g. local communities;
 - h. lodge and outfitter operations;
 - i. recreational areas and aesthetic values;
 - j. future protected areas;
 - k. cultural, spiritual, or burial sites; and
 - 1. First Nations Reserve lands.
- 17. The Licencee shall minimize soil disturbance to sensitive areas such as dry upland ridges, wet soils, and permafrost areas, and by scheduling harvesting and road construction to avoid times when the sites are sensitive to surface disturbance, and by using harvest methods which will reduce surface disturbance impacts.
- 18. The Licencee shall not harvest timber from areas which have a severe erosion risk as defined by the Manitoba Land Resource Unit, or in areas which may have a severe risk of erosion as determined from an analysis of the terrain and soils data collected in the course of forest management planning.
- 19. The Licencee shall dispose of slash and harvesting debris according to the Manitoba Natural Resources, Forestry Branch policy and procedures.
- 20. The Licencee shall locate all log storage areas to ensure that any leachate that may be generated does not enter any watercourse or waterbody.

Respecting Buffers

- 21. The Licencee shall:
 - a. establish buffers in accordance with "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat", "Consolidated Buffer Management Guidelines", "Forest Management Guidelines for Wildlife in Manitoba" and any other buffer requirements that may be approved by the I.R.M.T.; and
 - b. design and/or modify buffers, in consultation with the I.R.M.T., to ensure post-harvest runoff does not negatively affect sediment loads in local waterbodies.
- 22. The Licencee shall not conduct forest management activities in any established buffer, except where approved by specific work permit conditions which will maintain habitat critical to the maintenance of biodiversity and protect the function of the buffer, as determined by the I.R.M.T..
- 23. The Licencee shall ensure sufficient buffers are maintained between harvest areas and borrow pits, and Provincial Trunk Highways or municipal roads, according to requirements of Provincial Government departments such as Manitoba Highways and Transportation.
- 24. The Licencee shall exercise particular caution when harvesting operations approach the boundaries of parks,

wildlife management areas, ecological reserves, and protected areas.

- 25. The Licencee shall conduct consultations on an annual basis, with major forest industry companies operating in Saskatchewan adjacent to the west boundary of Forest Management Licence Area # 02, to ensure that transboundary concerns are addressed, including the co-ordination of harvesting operations on both sides of the boundary in order to mitigate or eliminate any potential negative impacts. The Licencee shall ensure the results of the consultations are provided to Manitoba Natural Resources and Manitoba Environment.
- 26. The Licencee shall ensure the maintenance of all travel corridors for woodland caribou, as determined by the LR.M.T..

Respecting Stream Crossings

- 27. The Licencee shall ensure:
 - a. materials such as organic soil, silt or clay, are not used in temporary winter crossings of streams; and
 - b. all materials used in the construction of ice bridges (other than ice or snow), are removed from the water courses or water bodies prior to spring break-up.
- 28. The Licencee shall provide to the responsible Federal Government Departments administering the Fisheries Act or the Navigable Waters Act, detailed information with respect to the characteristics of the stream, including fish habitat information or navigability, at the proposed point of crossing, and the design of the proposed crossing structure.

Respecting Non-timber Resources

- 29. The Licencee shall:
 - a. report, to the I.R.M.T., vulnerable, threatened or endangered species or ecosystems, as determined by Manitoba Natural Resources, that are identified during the course of pre-harvest forest investigations and pre-road construction surveys; and
 - b. apply measures to protect vulnerable, threatened or endangered species or ecosystems, threatened or sensitive habitats, and protected areas, as determined by Manitoba Natural Resources.
- 30. The Licencee shall:
 - a. evaluate the potential for the occurrence of heritage resources on areas where forest management activities will occur, and the potential for forest management activities to impact heritage resources, in consultation with the Historic Resources Branch of Manitoba Culture, Heritage and Citizenship; and
 - b. apply measures to protect heritage resources, as directed by the Historic Resources Branch of Manitoba Culture, Heritage and Citizenship.

Respecting Roads, Camps, etc.

- 31. The Licencee shall:
 - a. ensure road development plans and access management plans are prepared in consultation with the I.R.M.T., First Nations communities and other local communities and resource users; and
 - b. ensure that appropriate maps and related road development planning documents are made available to First Nations community leaders on an ongoing basis.
- 32. The Licencee shall prepare and maintain an up-to-date inventory of all existing culverts and stream crossings installed by the Licencee, its employees, representatives, contractors or by any other party pursuant to a contract

entered into with the Licencee, within Forest Management Licence Area # 02.

- 33. The Licencee shall not develop through road access or similar connection between Provincial Trunk Highway #6 and Provincial Trunk Highway #60.
- 34. The Licencee shall ensure road access to the Pickerel Lake and Chitek Lake area is restricted to winter roads only, and that access control at the entrance to any winter roads is established, as approved by the I.R.M.T., and shall co-operate with the I.R.M.T. in route planning to ensure minimum impact on woodland caribou, moose and elk species, as well as wood bison herds ranging or migrating through the area.
- 35. The Licencee shall ensure all-weather or chance roads are constructed:
 - a. to minimize impacts on surface or subsurface drainage;
 - b. to minimize impacts to permafrost areas; and
 - c. only to the extent required, as determined by Manitoba Natural Resources.
- 36. The Licencee shall ensure that road construction is conducted in a manner which will prevent or minimize environmental impacts. This shall include, but is not limited to:
 - a. reducing the slope on the side banks of borrow pits, ditches and road shoulders; and
 - b. minimizing gradients and/or using erosion control in roadside ditches.

37. The Licencee shall:

- a. develop road decommissioning plans on an ongoing basis, in consultation with the I.R.M.T., First Nations communities and other local communities and resource users;
- b. ensure road decommissioning plans include provision for the decommissioning of culverts and stream crossings; and
- c. ensure that appropriate maps and related decommissioning planning documents are made available to First Nations community leaders on an ongoing basis.

38. The Licencee shall:

- a. close and/or rehabilitate all-weather roads, as directed by the I.R.M.T.;
- b. close and/or rehabilitate all chance and winter roads following the completion of harvest and silvicultural activities at each cutting block, as directed by the I.R.M.T.; and
- c. reforest all chance and winter roads, as directed by the I.R.M.T..

Respecting Waste Disposal / Spill Response

39. The Licencee shall:

- a. site, operate and rehabilitate borrow pits, camp sites, landing sites and garage sites, as required by The Province of Manitoba;
- b. ensure adequate containment protection is implemented for all sites when conducting vehicle or equipment maintenance activities;
- c. adopt environmentally sensitive servicing techniques including the collection and recycling, or disposal by a means acceptable to the Director, of waste oil and anti-freeze;
- d. report and clean up spills of fuel, oil, or antifreeze in excess of 50 litres, as directed by Manitoba Environment's Emergency Response Team;
- e. prepare a spill response and cleanup plan for the Director's approval, within 90 days of the date of this Licence, and adhere to the policies and procedures therein; and
- f. dispose of domestic and industrial waste as required by the Director.
- 40. The Licencee shall comply with Manitoba Regulation 97/88 R, "Storage And Handling Of Gasoline And

Associated Products Regulation" and Manitoba Regulation 172/85, "Regulation Respecting The Handling, Offering For Transport And Transporting Of Dangerous Goods".

Respecting Herbicides

- 41. The Licencee shall:
 - a. adhere to the policies and procedures for pesticide applications, as set out in Manitoba Regulation 94/88 R "Pesticides Regulation" so as to minimize the exposure of its employees and the public, as well as non-target biota, to herbicides;
 - b. establish buffers for spraying herbicides as approved by Manitoba Natural Resources;
 - c. not spray herbicides using aerial application methods, if thermal convection currents have developed in the air above the site, or during the occurrence of a temperature inversion;
 - d. ensure that particular attention is paid to the protection of the Monarch Butterfly and its habitat, as directed by the I.R.M.T.;
 - e. limit the use of herbicides in Provincial Parks, to the extent possible, as determined by the I.R.M.T.; and
 - f. not apply chemical herbicides by aerial spraying within Provincial Parks.

Respecting Reforestation

- 42. The Licencee shall implement reforestation practices to achieve the appropriate reforestation standards, as determined by the Forestry Branch, Manitoba Natural Resources.
- 43. The Licencee shall:
 - a. ensure that timber harvesting sites on Crown Land, are returned to productive forest with a similar composition to the pre-harvest stand, in accordance with the forest renewal standards of the Forestry Branch, Manitoba Natural Resources;
 - b. implement measures to maintain structure on the harvested sites similar to that which would have resulted from natural disturbances, as determined by the I.R.M.T., and in consultation with the Forestry Branch, Manitoba Natural Resources; and
 - c. within five years of date of this Licence, consult with the Forestry Branch, Manitoba Natural Resources, with respect to the establishment of age class distribution targets, to meet the goals of ecosystem based management.

LICENCE TERM

44. This Licence shall be in effect until January 1, 2010.

LICENCE REVIEW AND REVOCATION

- A. This Licence replaces Licence No. 2302 E which is hereby rescinded.
- B. Should any changes to government policy occur, that could affect the harvesting plans of the Licencee as detailed in the "Repap Manitoba Inc. 1997-2009 Forest Management Plan", a Licence review will be conducted, and revisions or amendments to the specifications, limits, terms and conditions of this Licence may be made.
- C. If in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms, or conditions of this Licence, the Director may require the Licencee to file a new proposal pursuant to Section 11 of The Environment Act.
- D. Harvest restrictions specified in this Licence may be revised on the basis of future decisions with respect to protected lands, lands that may be set aside as representative control areas, or other land use changes.

E. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.

"original signed by"

James C. McCrae

Minister

Client File No.: 3094.60