



uniongas

A Spectra Energy Company

May 6, 2009

By RESS, email & courier

Mr. Neil McKay
Manager, Facilities
Ontario Energy Board
Suite 2700, 2300 Yonge Street
Toronto, Ontario
M4P 1E4

Dear Mr. McKay:

**Re: Union Gas Limited
Leave to Construct Application
2008 Dawn Deliverability Project
Board File # EB-2007-0661**

Pursuant to Condition 4.1 of the Board's Conditions for Approval for the above noted project, please find attached four copies of Union's Interim Monitoring Report.

Yours truly,

Mary Jane Patrick
Administrative Analyst, Regulatory Projects
Encl.

cc: Z. Cmojacki (Chair, OPCC)
Ministry of Natural Resources
G. Marvell

DAWN DELIVERABILITY PIPELINE PROJECT

**WELL DRILLING
INTERIM MONITORING REPORT**

Prepared by: Union Gas Limited
Environmental Planning
April 2009

TABLE OF CONTENTS

Dawn Deliverability Pipeline Project Well Drilling Interim Monitoring Report

	<u>Page No.</u>
1.0 Introduction	1
2.0 Background	4
3.0 Potential Impacts and Mitigation	4
3.1 Condition 1.1).....	4
3.2 Condition 2.1).....	4
3.3 Condition 3.1)	5
3.4 Condition 3.2)	5
3.5 Condition 3.3)	6
3.6 Condition 3.4)	7
3.7 Condition 4.1)	7
3.7.1 Report Circulation.....	7
3.7.2 Landowner Concerns.....	8
3.8 Condition 4.2.....	8
3.8.1 Monitoring Programs.....	8
4.0 Summary	9

TABLE 1.....Potential Impacts and Mitigation Measures

APPENDIX “A”..... Location Map

APPENDIX “B”.....Conditions of Approval

1.0 INTRODUCTION

This Interim Monitoring Report is provided in compliance with the Ontario Energy Board (“Board”) Order EB-2007-0661 granting Union Gas Limited (Union) approval of the Well Drilling Application on October 19, 2007, for the drilling of five (5) new wells in the 156 Pool (UD.280, UD. 281, UD. 283, UD. 284, UD. 285) and five (5) new wells into the 59-85 Pool (UD. 273, UD. 274, UD. 275, UD. 276, UD. 277). One existing recently drilled stratigraphic well, Union Dawn 1-33-1 (“UD.282”) was deepened in the 156 Pool (Order EB-2007-0010) so it may be used as an injection/withdrawal well. The 156 Pool and 59-85 Pool are located in the Township of Dawn-Euphemia in Lambton County. General location maps of the Pools are included in Appendix “A”.

The Dawn Deliverability Project is comprised of three (3) separate project components each of which involved separate applications to the Ontario Energy Board (OEB) and have been given individual Orders and Conditions of Approval. Interim Monitoring Reports have been produced for each component and corresponding Order.

Order EB-2007-0661 granted Union Gas Limited approval to drill five (5) new wells within the 156 Pool and five (5) new wells within the 59-85 Pool.

Order EB-2007-0010 granted Union Gas Limited approval to drill one (1) stratigraphic test well, Union Dawn 1-33-1 (“UD.282”).

Order EB-2007-0633 granted Union Gas Limited “Leave to Construct” approximately 3.4 km of NPS 36 inch natural gas pipeline. Upon completion of this project as well as the corresponding gathering lines for the new wells, all three (3) components were placed into service at the same time.

The requirements for and details of this report are outlined in the specific Conditions of Approval issued by the Board in its Order EB-2007-0661 dated October 19, 2007 as listed below. The Conditions of Approval can be found in Appendix “B”.

Accordingly, the purpose of this Interim Monitoring Report is to fulfill these conditions.

1.0 Condition 1.1

Union Gas Limited ("Union") shall drill the wells in the manner outlined in the evidence filed in this proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed well.

2.0 Condition 2.1

Union shall offer to pay the landowners and /or tenants just and equitable compensation for any damages, including present and future crop damage arising from: drilling of injection/withdraw wells; installation of gathering pipelines; access road construction.

3.0 Condition 3.1

Union shall construct the facilities and restore the land in accordance with its Application and evidence filed in this proceeding and the undertakings given to the Board, except as modified by the Order and these Conditions of Approval

Condition 3.2

Union shall ensure that the movement of equipment is carried out in compliance with all procedures and plans filed with the Board, and as follows:

- i) Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their representative tenant farmers, or their designated representatives, informed of its plans and construction activities; and*
- ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.*

Condition 3.3

Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners' approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

Condition 3.4

Union shall implement all the recommendations identified in the Union Gas Limited 2008 Dawn Deliverability: Dawn 156/59-85 Project Environmental Report dated May 2007 and Schedule 1 that was provided in a response to Board Staff interrogatory number 7.

Condition 4.1

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board and the Ministry of Natural Resources. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all comments and complaints to the interim and final monitoring reports. The log shall record the times of all comments and complaints received, the substance of each comment and complaint, the actions taken in response, and the reasons underlying such actions.

Condition 4.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

2.0 BACKGROUND

Construction was initiated for both Pools in September 2007 with topsoil stripping and the installation of new permanent roads and pads. Drilling began in January 2008 and was completed in July 2008. Upon completion of the Dawn Deliverability Pipeline Project (EB-0633) with the construction of the gathering pipelines, the wells were placed into service on November 7, 2008.

3.0 POTENTIAL IMPACTS AND MITIGATION

3.1 Condition 1.1

Union Gas Limited ("Union") shall drill the wells in the manner outlined in the evidence filed in this proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed well.

Union has adhered to the evidence filed with the Board with exception to the following:

Due to the increased size of the well drilling equipment used on this project, it was necessary to enlarge the gravel pad areas required to proceed with drilling operations. The size of the temporary pads was increase from 60 metres by 60 metres as indicated in the evidence, to 60 meters by 80 metres. The increased area required was discussed with the landowners and compensation was adjusted accordingly.

Union has complied with all applicable laws, regulations and codes pertaining to the construction of the wells.

3.2 Condition 2.1

Union shall offer to pay the landowners and /or tenants just and equitable compensation for any damages, including present and future crop damage arising from: drilling of injection/withdraw wells; installation of gathering pipelines; access road construction.

Union has made an agreement with the landowners and/or tenants to pay compensation for any damages and has reimbursed the landowners/tenants for crop damages endured during construction. Union has also agreed to reimburse the landowners/tenants for any future damages that may occur.

3.3 Condition 3.1

Union shall construct the facilities and restore the land in accordance with its Application and evidence filed in this proceeding and the undertakings given to the Board, except as modified by the Order and these Conditions of Approval

Union has constructed the facilities according to the evidence filed in support of its application and in accordance with all mitigation measures as identified in the Environmental Report filed by Union.

The majority of the land with exception of the well pad at UD.280 was restored in accordance of the application and evidence filed. This pad was not restored at the request of the landowner for use during farming operations.

3.4 Condition 3.2

Union shall ensure that the movement of equipment is carried out in compliance with all procedures and plans filed with the Board, and as follows:

- i) *Union shall make reasonable efforts to keep the affected landowner as well as adjacent landowners and their representative tenant farmers, or their designated representatives, informed of its plans and construction activities; and*

Prior to any activity associated with the development, the Lands Agent met with the directly affected landowners/tenants to discuss and identify any concerns.

The Lands Agent was available during construction to answer questions and address concerns through the Landowner Relations Program.

- ii) *The installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.*

After meeting with the landowners/tenants and reviewing their needs, the facilities were located so as to serve the requirements of Union and minimize any inconvenience to farming operations.

All well work was completed on gravel pads with travel to the wells restricted to gravel roadways. This allowed all weather access to the well locations with no additional impact to adjacent lands.

3.5 Condition 3.3

Union shall, subject to the recommendation by an independent tile contractor and subject to the landowners' approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.

Union employed the services of Todgham and Case Associates to prepare drainage plans that would maintain the integrity of the existing drainage system. No pre-construction tiling was necessary and all drainage tile concerns were addressed during post construction tiling.

Following drilling operations post construction tiling was undertaken once the size of the drilling pad was decreased to its permanent configuration. All plans were discussed and approved by the landowner.

3.6 **Condition 3.4**

Union shall implement all the recommendations identified in the Union Gas Limited 2008 Dawn Deliverability: Dawn 156/59-85 Project Environmental Report dated May 2007 and Schedule 1 that was provided in a response to Board Staff interrogatory number 7.

Union has implemented all the recommendations as outlined in the Dawn 156/59-85 Project Environmental Report and Schedule 1 provided in the response to Board Staff, Interrogatory number 7, during the construction phase of this project.

An Environmental Inspector was on site on a regular basis to observe operations such as, topsoil stripping and road/pad construction as well as other procedures that may have had an impact on the environment.

3.7 **Condition 4.1**

Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and final monitoring report with the Board and the Ministry of Natural Resources. The interim monitoring report shall be filed within six months of the in-service date and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all comments and complaints to the interim and final monitoring reports. The log shall record the times of all comments and complaints received, the substance of each comment and complaint, the actions taken in response, and the reasons underlying such actions.

3.7.1 **Report Circulation**

Four (4) copies of this interim monitoring report are provided to the Board as well as one (1) copy to the Ministry of Natural Resources.

3.7.2 Landowner Concerns

To date there have been no outstanding comments or complaints entered into Union's complaint tracking system. Union will continue to monitor the state of the land and the environment and will address any additional landowner concerns, if they should arise.

Union will ensure that the landowners are provided access to a Union Gas representative during operations of the facilities.

3.8 Condition 4.2

The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.

In fulfilment of Condition 4.2, Table 1 summarizes the construction effects and general mitigation measures carried out during construction.

3.8.1 Monitoring Programs

3.8.1.1 Water Well Monitoring

Union retained the services of Stantec Consulting Ltd. (Stantec) to undertake an independent well survey and monitoring program. Prior to the commencement of the well construction, residents located within 1 km of the proposed work were notified of the proposed water well monitoring program.

On November 26, 2007 water samples from four (4) residential wells were collected and compared with the Ministry of the Environment (MOE) Ontario Drinking Water

Standards (ODWS). None of the samples were considered a health related risk under the ODWS and the results of the testing were provided to the landowners.

3.8.1.2 Soybean Cyst Nematode

Prior to construction, Union conducted soil sampling on the affected agricultural lands associated with the development of the pools. Soil samples were taken and analyzed for Soybean Cyst Nematode (SCN). SCN is a microscopic worm-like organism found in soils that obtain their nutrients by feeding on the root systems of soybeans. Results indicated that the SCN was not present on any of the properties tested.

3.8.1.3 Archaeology

In advance of any construction activity Union retained the services of Mayer Heritage to carry out a Stage 1 and Stage 2 archaeological assessment in the areas of the well pads, roadways and gathering pipelines with no archaeological sites found.

No cultural resources were discovered during construction.

4.0 SUMMARY

This Well Drilling Interim Monitoring Report has been prepared as per conditions in the Board Order EB-2007-0661. The report provides an outline of Union's compliance with the commitments of its pre-filed evidence, the measures implemented during construction to minimize disturbance to the environment and a description of Union's monitoring programs. It is anticipated that these measures will effectively eliminate any long-term impacts to the environment.

A review of the work area will be undertaken in the spring of 2009 to determine if any additional clean-up is required. Should additional clean-up be required, it will be completed as soon as conditions reasonably allow in spring/summer 2009.

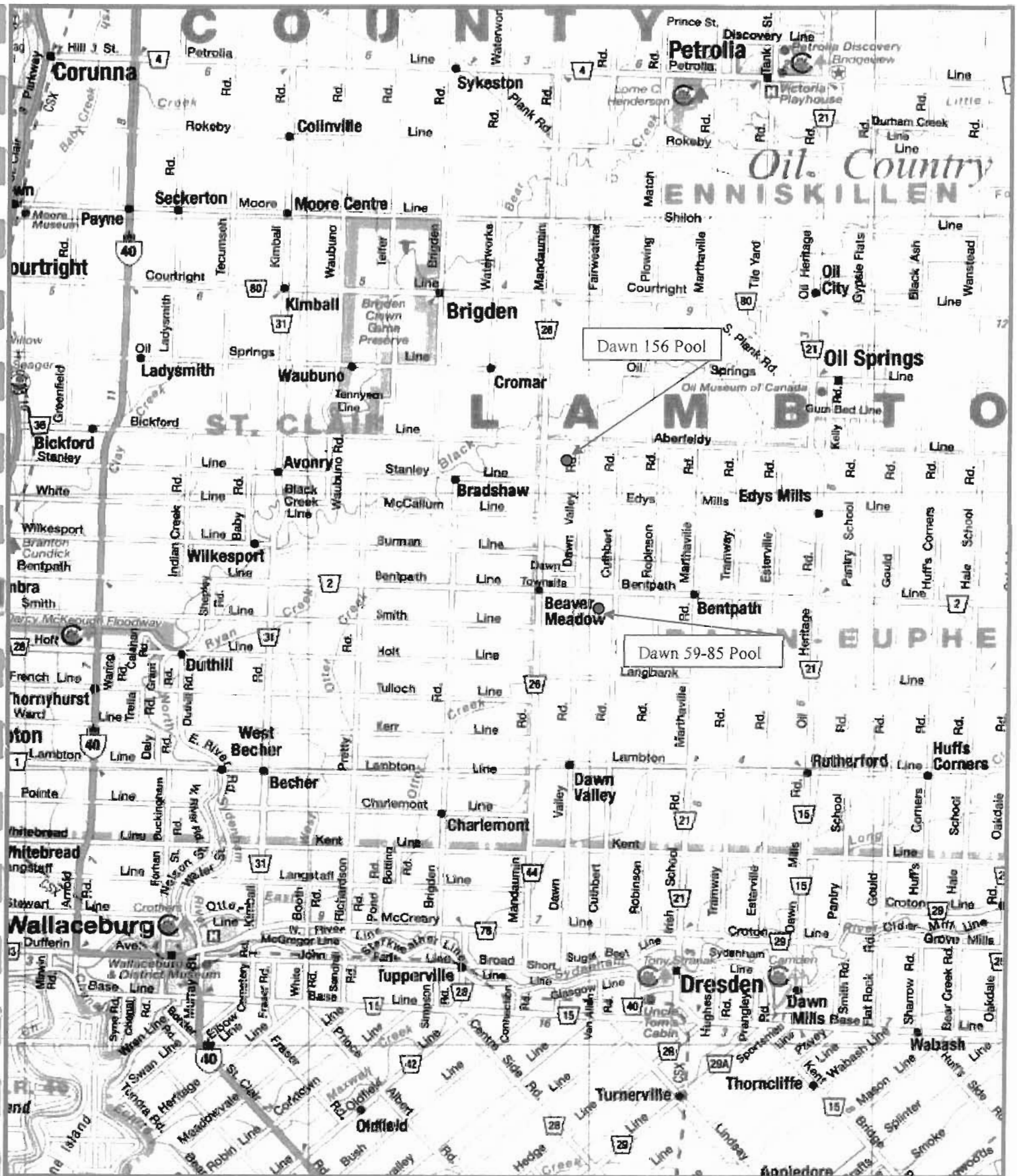
f) Noise	Noise from the drilling rig or service vehicles may disrupt nearby residents.	- Noise was controlled to the greatest extent possible so as to minimize the disruption to nearby residents. - Ensured all equipment was properly muffled.
g) Site Restoration	Improper site restoration may permanently affect soil productivity.	- Areas disrupted by drilling were restored by regrading followed by chisel ploughing and disking. - The Lands Agent reviewed and discussed site restoration measures with the landowner/tenant prior to implementation, so as to obtain any concerns or suggestions with regard to these measures. - Upon completion the Lands Agent reviewed the area with the landowner/tenant to ensure restoration had been completed to the landowner's satisfaction.
h) Fuel Storage and Handling	Improper fuel storage and handling may cause spillage and possible contamination of soil.	- Fuel was not stored near watercourses (i.e. Within 50 metres) - Fuel storage areas were clearly marked - Containment dykes and protective plastic ground matting were used in fuel storage areas to protect against spillage and leakage. - Spill clean-up materials were stored on site and available in the event of a spill. Spills or leakage were to be reported to the appropriate authority immediately (Ministry of the Environment Spills Action Centre at 1-800-268-6060)
i) Liquid and Solid Waste	Drilling fluids, solid wastes and lubricants must be properly handled, stored and disposed of so as to avoid the possible contamination of surrounding soil or water.	- Liquid and solid wastes were properly stored, handled and disposed of in an approved location. - The drilling area was clear of debris and litter during and after drilling. - Drilling fluids were properly contained in waste tanks and disposed of after drilling in an appropriate location. - The level of drilling fluids was frequently monitored to avoid possible overflow of the tank.
k) Landowner Concerns	Disruption to landowners and tenants.	- Union provided the landowners/tenants with the telephone numbers of Company personnel. - A Landowner Relations Program was established to track complaints during construction.
l) Hydrostatic Testing	Discharge of hydrostatic test water.	- A permit to take water from the Ministry of the Environment was not necessary as taking was under 50,000 litres per day. - All water from the hydrostatic testing will be discharged to an above ground tank and disposed of following applicable government regulations.
m) General	Disturbance to cultural heritage resources. Soil Testing Damage to fences during construction.	- Prior to any activities associated with the development, an archaeological survey was completed with no artifacts found. - Soils tested for Soybean Cyst Nematode; all negative - Any damages fences are to be repaired.

“Appendix A”

Location Map

Dawn 156 / 59-85

Storage Pool Locations



“Appendix B”

Conditions of Approval

Union Gas Limited

**Conditions of Approval
Well Drilling Licence**

1 General Requirements

- 1.1 Union Gas Limited ("Union") shall drill the wells in the manner outlined in the evidence filed in this proceeding and comply with applicable laws, regulations and codes pertaining to the construction of the proposed wells.
- 1.2 Authorization for the issuance of the drilling licence is limited to twelve months from the date of the Board's report to the Ministry of Natural Resources.
- 1.3 The authority granted under this order to Union is not transferable to another party without leave of the Board.

2 Just and Equitable Compensation

- 2.1 Union shall offer to pay landowners and/or tenants just and equitable compensation for any damages, including present and future crop damage arising from: drilling of injection/withdrawal wells; installation of gathering pipelines; and access road construction.

3 Construction Requirements

- 3.1 Union shall construct the facilities and restore the land in accordance with its Application and evidence filed in this proceeding and the undertakings given to the Board, except as modified by this Order and these Conditions of Approval.
- 3.2 Union shall ensure that the movement of equipment is carried out in compliance with all procedures and plans filed with the Board, and as follows:
 - i) Union shall make reasonable efforts to keep any affected landowner, as well as adjacent landowners and their respective tenant farmers, or their

designated representatives, informed of its plans and construction activities; and

- ii) the installation of facilities and construction shall be coordinated so as to minimize disruption of agricultural land and agricultural activities.
- 3.3 Union shall, subject to the recommendation of an independent tile contractor and subject to the landowners' approval, construct upstream and downstream drainage headers adjacent to the drilling area and access roads that cross existing systematic drainage tiles, prior to the delivery of heavy equipment, so that continual drainage will be maintained.
- 3.4 Union shall implement all the recommendations identified in the Union Gas Limited 2008 Dawn Deliverability: Dawn 156/59-85 Project Environmental Report dated May 2007 and Schedule 1 that was provided in a response to Board staff interrogatory number 7.
- 4 Monitoring and Reporting Requirements
- 4.1 Both during and after construction, Union shall monitor the impacts of construction, and shall file four copies of both an interim and a final monitoring report with the Board and the Ministry of Natural Resources. The interim monitoring report shall be filed within six months of the in-service date, and the final monitoring report shall be filed within fifteen months of the in-service date. Union shall attach a log of all comments and complaints to the interim and final monitoring reports. The log shall record the times of all comments and complaints received, the substance of each comment and complaint, the actions taken in response, and the reasons underlying such actions.
- 4.2 The interim monitoring report shall confirm Union's adherence to Condition 1.1 and shall include a description of the impacts noted during construction and the actions taken or to be taken to prevent or mitigate the long-term effects of the impacts of construction. This report shall describe any outstanding concerns identified during construction.
- 4.3 The final monitoring report shall describe the condition of the rehabilitated land and the effectiveness of the mitigation measures undertaken. The results of the monitoring programs and analysis shall be included and recommendations made

as appropriate. Any deficiency in compliance with any of the Conditions of Approval shall be explained.

5 Other Requirements

- 5.1 For the purposes of these conditions conformity of the Applicant with CSA 341.1-02 shall be to the satisfaction of the Ministry of Natural Resources.
- 5.2 Union shall designate one of its employees as project manager who will be responsible for the fulfilment of these conditions, and shall provide the employee's name to the Ministry of Natural Resources, the Board and to all appropriate landowners.
- 5.3 The Board's designated representative for the purpose of these Conditions of Approval shall be the Manager, Facilities.