

**2. PUBLIC MEETING TO CONSIDER
DRAFT REGIONAL OFFICIAL PLAN (97) AMENDMENT 1 -
PROPOSED WASTEWATER/LEACHATE PIPELINE FROM TRAIL ROAD WASTE FACILITY**

COMMITTEE RECOMMENDATIONS AS AMENDED

That Council:

- 1. Having held a public meeting, enact a by-law to adopt Regional Official Plan Amendment 1 to the 1997 Regional Official Plan, attached in Annex 'A';**
- 2. Approve pipeline route selection (Route 3) as the preferred location for a pipeline to convey leachate from Trail Road Waste Facility and contaminated groundwater from Nepean Landfill Site to the R.O. Pickard Environmental Centre for treatment and disposal, for the following reasons :**
 - Fewer number of wells within the likely zone of influence than along Route 4;**
 - Route 4 pipeline intersects the longest section of permeable sands, whereas Route 3 intersects only a short section;**
 - Less impact on agricultural operations ;**
 - Less impact on property values (two dwellings along Route 3 vs. eight dwellings along Route 4);**
 - Less impact on business activity (no accesses crossed along Route 3, vs. three crossed along Route 4; no businesses within 100 metres of Route 3, vs. three businesses within 100 metres of Route 4);**
 - Health and safety - Route 3 impacts no dwellings, whereas Route 4 impacts nine dwellings.**

DOCUMENTATION

1. Environment and Transportation Commissioner's and Planning and Development Approvals Commissioner's joint report dated 27 June 2000 is immediately attached.
2. Correspondence from Township Clerk R. Haller, Township of Goulbourn, on behalf of Mayor J. Stavinga, dated 10 July 2000, immediately follows the report.
3. An Extract of Draft Minute, 11 July 2000, follows and includes a record of the vote.

REGION OF OTTAWA-CARLETON
RÉGION D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf. **50** 14-93-0021-V
 Your File/V/Réf.

DATE 27 June 2000

TO/DEST. Co-ordinator
 Planning and Environment Committee

FROM/EXP. Environment and Transportation Commissioner
 Planning and Development Approvals Commissioner

SUBJECT/OBJET **PUBLIC MEETING TO CONSIDER
 DRAFT REGIONAL OFFICIAL PLAN (97) AMENDMENT 1
 PROPOSED WASTEWATER/LEACHATE PIPELINE FROM
 TRAIL ROAD WASTE FACILITY**

DEPARTMENTAL RECOMMENDATIONS

That Planning and Environment Committee recommend that Council:

- 1. Subject to the public meeting, enact a by-law to adopt Regional Official Plan Amendment 1 to the 1997 Regional Official Plan, attached in Annex 'A';**
- 2. Approve pipeline route selection (Route 4) from the Trail Road Waste Facility west on Cambrian Road to the Richmond Forcemain on Eagleson Road, as the preferred location of a pipeline to convey leachate from Trail Road Waste Facility and leachate contaminated groundwater from Nepean Landfill Site to the R.O. Pickard Environmental Centre for treatment and disposal.**

PURPOSE

Proposed Regional Official Plan (97) Amendment 1 (ROPA 1) is before Planning and Environment Committee for a public meeting.

BACKGROUND

The Region's landfill sites generate two separate and distinct wastewater streams that must be managed in a cost-effective and environmentally responsible manner. The percolation of rainwater and snow melt

through the garbage at the Trail Road Waste Facility produces leachate that is captured in the landfill liner of Stages 3 and 4. The leachate is currently transported by tanker trucks to the R.O. Pickard Environmental Centre for treatment. The volume of leachate transported is currently about 70,000 cubic meters per year. This translates to about 7 tanker loads per day on average, but can rise to as many as 21 tanker loads during very wet weather.

The second wastewater stream comes from groundwater in the bufferland near the unlined Nepean Landfill Site that is contaminated with leachate that is migrating away from the site and has periodically discharged to the surface outside the Region's property. As part of the closure and long-term management of the Nepean Landfill, the Ministry of the Environment (MOE) required that the Region obtain additional bufferlands and mitigate the effects of leachate contamination of the groundwater. It is proposed to construct a drainage system in the bufferlands adjacent to the landfill to intercept the contaminated groundwater. It should be noted that the contaminated groundwater is a relatively weak wastewater compared to either the Trail Road leachate or typical domestic sewage. The volume of water required to be removed is estimated to be between 350,000 and 700,000 cubic meters per year, which corresponds to between 40 and 80 tanker truck loads a day, making the alternative of truck transport to the Pickard Centre extremely difficult.

In 1995, an environmental assessment study on leachate management concluded that transportation of the leachate via a dedicated pipeline connection to the Region's wastewater collection system with ultimate treatment at the Pickard Centre was the best overall solution. With the identification of a pipeline as the best method for managing the leachate from the Trail Road Waste Facility, it was recognized that use of the pipeline for disposal of contaminated groundwater was preferable to the option of an engineered wetland for on-site treatment.

The technical consideration of various routes proceeded, however it was recognized from public consultation in 1998 that there were some concerns about a pipeline. In July 1998, a consulting engineering firm was retained to conduct a peer review of the 1995 Leachate Management Study and the original recommendation of piping the leachate, to address the economics and environmental risks and to assess advances in wastewater treatment technology. The review, completed by the firm of CG&S, concluded that a pipeline was still the best solution. The consultant's report was tabled with Planning and Environment Committee in October of 1998 and staff were directed to consult with stakeholders and the public. The subsequent public consultation included public meetings and open houses, newsletters, community newspaper advertisements, public tours of the landfill site, written and e-mail comments, a phone poll and individual meetings with stakeholder groups.

In March of 1999, staff presented the results of the public consultation to Planning and Environment Committee and subsequently Council approved the following recommendations on 14 April 1999:

1. Approve the off-site conveyance of leachate from the Trail Road Waste Facility and leachate contaminated groundwater from the Nepean Landfill Site by pipeline to the R.O. Pickard Environmental Centre for treatment and disposal, subject to the monitoring and on-going reporting to Council by the Region's Health Department.

2. Authorize the Environment and Transportation Department to undertake a pipeline route selection process.

To carry out this work, the Department proceeded with a Consultant Selection Process which resulted in the firm of J.L. Richards & Associates Limited, with Dillon Consulting Limited as a sub-consultant, selected to carry out the Route Selection Process.

A further recommendation was also approved by Council to initiate a Leachate Pre-treatment Research Programme to look at new and emerging technologies that could be used to pre-treat leachate on-site before putting it in the pipeline. This programme is underway and a status update is contained in a companion report.

In a letter dated 24 June 1999 (attached in Annex 'B'), the MOE endorsed the decision to construct the pipeline and urged the Region to proceed as quickly as possible. The Ministry also expressed support for the Leachate Treatment Research Programme.

ROUTE SELECTION PROCESS

The first step in the public consultation process was to hold an open house and workshop at Trail Road on 26 February 2000. The agenda included a number of issues related to the operation of the Trail Road Waste Facility including the Optimization Study, the Route Selection Process and the Leachate Treatment Research Programme. The proposed public consultation plan was outlined and attendees were asked to assist by volunteering to participate in Public Liaison and Technical Advisory committees for the various initiatives.

A comprehensive public consultation effort for the Route Selection Process was subsequently carried out and included the following key components:

- Participation of the public and interested stakeholders in developing the criteria to be used to select the preferred pipeline route;
- Sufficient pre-design engineering on the identified routes to provide solutions to problems related to corrosion, odour control and environmental issues;
- Two public meetings to provide information and receive input from the public;
- The process would meet the objectives of the Class Environmental Assessment for Municipal Water and Wastewater Projects.

Public participation/input was solicited through the following means:

- Direct mail-outs to key stakeholders, interested individuals and community associations;
- Three open houses;
- The creation of a Public Liaison Committee (PLC);
- Meeting with special interest groups (a separate meeting was held with rural residents);
- Advertisements in the three daily newspapers and local papers in Nepean, Kanata and Stittsville;
- Newsletters.

The details of this Route Selection Process and the public consultation are recorded in the report titled “Trail Road Waste Facility Wastewater/Leachate Pipeline - Route Selection and Public Consultation Project.” A copy of this report is available for viewing in the Regional Resource Centre. A copy of the executive summary of the report is attached as Annex ‘C’.

PIPELINE ROUTE ALTERNATIVES

During the development and identification of possible pipeline route alternatives certain constraints were identified to minimize the impact on the community and to ensure an efficient pipeline was built:

- The pipeline route must be technically and economically feasible;
- The pipeline must discharge to a sewer with adequate capacity;
- The pipeline route should follow public rights-of-way or utility corridors.

Four possible pipeline routes were identified with minor variations on two of the routes. The following is a description of these routes and a reference map is attached in Annex ‘D’:

Route 1 - North from the Trail Road Waste Facility leachate pumping station to Cambrian Road, east along Cambrian Road under the 416 to Cedarview Road, north on Cedarview Road to the Strandherd Road realignment, east on the Strandherd Road realignment to Greenbank Road, north on Greenbank Road to the railway tracks and northeast along the railway tracks to the East Barrhaven Collector.

Route 1A - This route is a variation on Route 1, in which a section of the pipeline would be located in the future Transitway corridor, located east of Greenbank Road, instead of on Greenbank Road.

Route 2 - North from the Trail Road Waste Facility leachate pumping station to Cambrian Road, east on Cambrian Road under the 416 to Greenbank Road north on Greenbank Road to the railway tracks and northeast along the railway to the East Barrhaven Collector.

Route 2A - This route is a variation on Route 2, in which a section of the pipeline in Greenbank Road north of Strandherd Road is located in the future Transitway corridor, instead of on Greenbank Road.

Route 3 - North from the Trail Road Waste Facility leachate pumping station to Cambrian Road, east on Cambrian Road under 416 to Jockvale Road, east from Jockvale Road along future road right-of-ways to the Stone Bridge Pumping Station.

Route 4 - North from the Trail Road Waste Facility leachate pumping station to Cambrian Road, west on Cambrian Road to Twin Elm, south on Twin Elm to the Cambrian Road open road allowance, west on the Cambrian Road open road allowance to the Richmond Forcemain on Eagleson Road.

The criteria used to evaluate the pipeline routes were initially developed by the consultant, in accordance with the accepted principles for conducting a Class Environment Assessment, and presented to the

Public Liaison Committee in a workshop session. The PLC reviewed the evaluation criteria and ranked their relative importance as high, medium or low. The evaluation criteria and the relative rankings was presented to the public at the first Open House held on 04 May 2000. Public comment received at the Open House was used by the PLC to revise the criteria rankings and create two additional criteria. The revised criteria and rankings were then used by the consultants to evaluate each of the identified pipeline routes. The criteria were grouped under the following categories:

- Natural Environment;
- Cost;
- Health & Safety;
- Social;
- Cultural;
- Economics;
- Agriculture;
- Planned Land Use;
- Complexity of Operation.

The results of the evaluation of the routes are summarized in the table in Annex 'E' where Route 4 with the best rating is identified as the preferred route. The results of the analysis and the identification of the preferred route were presented to the PLC on 01 June 2000 and subsequently to the public at an Open House on 08 June.

PUBLIC CONCERNS WITH THE PREFERRED ROUTE

During the public consultation process, a number of concerns were raised by members of the public and residents living near the preferred pipeline route. These concerns are summarized as follows with a staff comment:

The Integrity of a Pipeline and the Potential for Leakage

The pipeline will be constructed of continuously "butt-fused" high density polyethylene (HDPE). This material has been used extensively for water distribution mains, sewage forcemains, natural gas distribution pipes and in leachate collection systems and is highly resistant to corrosion. The same material was used by the Region for the Gloucester Street watermain "slip-lining" project, for the Carlsbad Springs "trickle-feed" water distribution system and for the new feedermain to Manotick Island, which was directionally-drilled under the Rideau River.

The pipeline will be pressure tested following construction to ensure that there are no leaks and it will be periodically re-tested to ensure continued integrity. The most common cause of leakage from a pipeline is accidental damage caused by excavation equipment. The pipe will be installed a minimum of 2.4 metres below ground and there will be markers installed along the pipeline alignment to alert people of the presence of the pipeline and where to call for a locate. If someone were to damage the pipe, the monitoring system will alarm through the SCADA system (Supervisory Control and Data Acquisition)

and automatically shut down the pumps. Staff would respond to the alarm by dispatching a crew to investigate, make repairs and immediately begin cleaning up any damage.

The Effect of a Leak on Water Wells

As noted above, the pipeline will be periodically pressure tested to ensure its integrity. Damage to the pipeline caused by careless excavation activities is unlikely to contaminate water wells because of the small amount released that would in any case be cleaned up immediately.

In the unlikely event of a well becoming contaminated, the Region would provide corrective measures that would depend upon the situation but could include well head sealing or drilling a new well in a different location. It should be noted that pipelines carrying a variety of materials, such as petroleum products as well as sewage, are often installed in areas containing water wells. To reassure residents adjacent to the pipeline, staff have offered to have their wells tested periodically for any trace of contamination from any source.

Protection of the Jock River

It is proposed to install the pipeline inside a casing pipe under the Jock River and a tributary agricultural drain using the directional drilling technique to minimize the possibility of environmental damage to the Jock River. As noted above, this technique was used successfully to construct the new watermain under the Rideau River to Manotick Island. The benefit of this design is that any leakage in the pipe under the river would be contained in the casing pipe and would be detected at monitoring locations at each end of the casing.

The Impact on Groundwater Levels and the Jock River Watershed

It has been questioned whether the removal of leachate and contaminated groundwater would have a negative effect on local groundwater levels and reduce flows in the Jock River. The leachate comes from snow and rain falling on the lined portion of the active landfill. The water proposed to be removed to control migration of contaminated groundwater will have only a localized effect on groundwater levels immediately adjacent to the Nepean Landfill. The volume to be removed is not significant compared to the volume of water in the watershed and will have no measurable impact on the Jock River. On the contrary, the effect will be to eliminate a negative environmental impact on the groundwater adjacent to the Nepean Landfill.

The Impact on Development in Richmond

Planned development in Richmond will not be impacted. The pipeline will connect to the existing Richmond sewage forcemain on Eagleson Road and the operation of the Richmond pumping station will be interconnected with the leachate pumping station at Trail Road through the Wastewater Collection SCADA system. There is excess capacity in the Richmond pumping station and forcemain system except during rare high flow periods. Analysis of flow data gathered over the past seven years indicates that the capacity of the pumping station is exceeded on average only once every two years for a period

of one to two days. During these high flow periods the leachate would not be pumped but rather would be stored at the landfill. The contaminated groundwater collection system would be turned off with no effect because of the slowness of groundwater movement.

Odour and Health Effects of Gas Venting

In pipelines carrying liquids, provision must be made for the release of entrained gases that tend to accumulate at high points in order for the pipeline to operate properly. These “air release valves” are a standard feature of all long pipelines designed to carry liquids, including water feeder mains, sewage forcemains and leachate pipelines. In the case of sewage and leachate where the gases released can be odourous, measures are taken to remove this nuisance typically with replaceable granular activated charcoal filters. It should be noted that since leachate has similar characteristics to sewage, the gases that are produced are also similar and can be effectively treated. No public health hazard results from this practice.

The preferred pipeline route discharges to the Richmond forcemain which in turn discharges to the Glen Cairn Collector in Kanata. Biological activity in the anaerobic (airless) environment of the Richmond forcemain produces hydrogen sulphide and other odourous gases. The construction of a biofilter is proposed to control both odours and hydrogen sulphide induced corrosion in the sewer. Biofilters operate by providing a controlled environment for naturally occurring bacteria that break down the gases. A temporary facility located on Corkstown Road near Eagleson Road and the 417 is currently in operation. The permanent facility will be capable of handling any additional odours produced by the leachate, however it is expected that the addition of the leachate may actually reduce the amount of gas produced in the forcemain because of the reduced detention time.

Advancement of the West Rideau and Jock River Collectors

Potential business development in Barrhaven has raised speculation that the requirement for the extension of the West Rideau Collector and the Jockvale Collector may be advanced, and therefore, that connection of the leachate pipeline to the Jockvale Collector might then become a viable alternative routing. The wastewater servicing plan for the Nepean South Urban Community, as identified in the Official Plan, calls for the West Rideau Collector to be extended from the current terminus south along old Highway 16 and under the Jock River. The Jockvale Collector would connect to the West Rideau and extend in a north-westerly direction, re-crossing the Jock River, to eventually reach the business park near Strandherd and Cedarview Roads. The construction of this ultimate collector sewer system is estimated at more than \$10 million. The City of Nepean is currently assessing interim servicing alternatives that can allow development to proceed while deferring the construction of the ultimate collector system. The timing of the ultimate solution is expected to be a number of years away.

It must be emphasized that the leachate pipeline is required to correct the on-going environmental impact of the leachate contaminated groundwater on neighbouring properties at the Nepean Landfill and that the MOE has been as urging the Region to proceed to correct the problem as quickly as possible. For this reason the Department does not recommend waiting for the future collector system to be built.

PROPOSED REGIONAL OFFICIAL PLAN AMENDMENT 1

Proposed Regional Official Plan Amendment 1 is required to implement the recommended solution as identified in the long-term leachate management study for the Trail Road Waste Facility. Section 10.4, Solid Waste Management, does not address the need for a leachate collection system to allow for this method of collecting and treating leachate. An amendment to Schedule H of the Regional Official Plan is not required since the leachate pipeline is not intended to address wastewater services in the rural area as described in Section 10.3.

Proposed Amendment 1 to the Regional Official Plan would introduce a new policy to Section 10.4, “Solid Waste Management”, which would permit the Region of Ottawa-Carleton to construct a dedicated pipeline to remove leachate from the Trail Road Waste Facility (formerly known as the Trail Road Landfill) in the City of Nepean and contaminated groundwater from the Nepean Landfill Site. The proposed pipeline would direct the leachate and contaminated groundwater flows to the central wastewater treatment facility (R.O. Pickard Environmental Centre). A policy prohibiting other wastewater connections to this dedicated pipeline is also included in the proposed Official Plan Amendment.

A copy of the proposed Amendment is attached to this report as Annex ‘A’.

Circulation of Proposed ROPA 1

Draft Amendment 1 was circulated to a number of technical agencies, Regional departments, and interested parties. In addition, copies of the proposed amendment were available at the three public open houses held in conjunction with the pipeline route selection process.

Comments were received from the Conservation Partners Planning and Development Review Team, a resident of the City of Ottawa, the Ministry of Citizenship, Culture and Recreation, the Ministry of Municipal Affairs and Housing and the Region’s Health Department.

Their comments summarized below, are available for viewing in the Resource Centre, Heritage Building, 111 Lisgar Street.

The Conservation Partners Planning and Development Review Team, the Ministry of Municipal Affairs and Housing, the Ministry of Citizenship, Culture and Recreation and the Region’s Health Department had no objections to the proposed amendment.

Mr. William Griffith of 846 Griffith Way in the City of Ottawa suggested that the policy of prohibiting other wastewater connections to the dedicated forcemain was too restrictive.

Staff Comment

The proposed forcemain will be a dedicated leachate and contaminated groundwater pipeline from the Trail and Nepean Sites with no provision for any outside connection to the system. The recommended pipeline route would connect to the Richmond forcemain north of the Village of Richmond. The forcemain would be designed and sized to safely handle the leachate and contaminated groundwater and not to accommodate or facilitate growth in south Nepean. The operation of the two forcemains (Richmond and proposed Trail Road Waste Facility/Cambrian Road Forcemain) would be integrated. The leachate and contaminated groundwater can be pumped on an intermittent basis during off-peak times; therefore, the addition of the leachate and contaminated groundwater to the Richmond Forcemain will have no impact on the capacity of the Richmond forcemain system.

CONSULTATION

The Class Environmental Assessment Process

The route selection process followed the Class Environmental Assessment Process. Upon approval of the recommended route for the pipeline, an addendum to the Leachate Management Plan will be formalized and submitted to the Ministry of the Environment.

It will then be placed on the public record for comment for a period of 30 days. The next steps in the process will depend on whether or not there are 'Bump-Up' requests. If there are no 'Bump-Up' requests, we will be able to proceed with the implementation of the recommendations, pending approval of the Regional Official Plan Amendment. Should there be 'Bump-Up' requests, they will have to be reviewed by the Ministry of the Environment, who will then provide direction on what steps will have to be taken.

Under the *Planning Act* for Proposed ROPA 1

The public was advised during the Open Houses on 26 February 2000, 04 May and 08 June, that an Official Plan Amendment would be required for the pipeline to be constructed. Notice of the Proposed Regional Official Plan Amendment was published in *Le Droit*, the *Ottawa Sun*, and in the *Ottawa Citizen* on 16 June; in the *Barrhaven Independent*, and *Stittsville Weekend Signal* on 10 June; in the *Kanata Kourier* and in the *Carp Valley Press* on 16 June; in the *Nepean Clarion* on 17 June; in the *Manotick Messenger* on 20 June and in the *Ottawa-Carleton Review* during the week of 26 June.

In addition, notice of the public meeting and a copy of the proposed ROPA 1 was mailed to various stakeholders, community associations and other interested parties.

FINANCIAL IMPLICATIONS

There are no financial implications directly associated with the Regional Official Plan Amendment.

Funds for the proposed wastewater/leachate pipeline are contained in the Capital Budget for Landfill Leachate Management.

Approved by
M.J.E. Sheflin, P.Eng.

Approved by
N. Tunncliffe, MCIP, RPP

Attach. (5)

DRAFT

AMENDMENT 1**OFFICIAL PLAN (1997) OF THE
REGIONAL MUNICIPALITY OF OTTAWA-CARLETON****PURPOSE**

The purpose of Amendment 1 is to permit the Region of Ottawa-Carleton to construct a dedicated pipeline to remove leachate from the Trail Waste Facility (formerly known as the Trail Road landfill) in the City of Nepean and contaminated groundwater from the closed Nepean Landfill site. The proposed pipeline would direct the leachate and contaminated groundwater flows to the central wastewater treatment facility (R.O. Pickard Environmental Centre). A policy prohibiting other wastewater connections to this dedicated pipeline is also included in the proposed Official Plan amendment.

BASIS

In April 1999, Regional Council approved the recommendation to transport leachate from the Trail Waste Facility and leachate contaminated groundwater from the closed Nepean Landfill site by pipeline to the Region's wastewater treatment plant (R.O. Pickard Environmental Centre) for treatment and disposal. Council also directed staff to undertake a route selection process for the wastewater/leachate pipeline.

A Leachate Pipeline Public Liaison Committee was set up to provide input to the public consultation process and to review the evaluation criteria for the proposed pipeline routes. Subject to public comment, these criteria have been used to determine the best route for the pipeline.

The pipeline route, regardless of which alignment is selected, requires this Regional Official Plan amendment before construction can proceed.

Proposed Regional Official Plan Amendment 1 is required to implement the recommended solution as identified in the long-term leachate management study for the Trail Waste Facility.

Section 10.4, Solid Waste Management, does not address the need for a leachate collection system to allow for this method of collecting and treating leachate. An amendment to Schedule H of the Regional Official Plan is not required since the leachate pipeline is not intended to address wastewater services in the rural area as described in Section 10.3.

Proposed Amendment 1 to the Regional Official Plan would introduce a new policy to Section 10.4, "Solid Waste Management", which would permit the Region of Ottawa-Carleton to construct a dedicated pipeline to remove leachate from the Trail Road Waste Facility (formerly known as the Trail

Road Landfill) in the City of Nepean and contaminated groundwater from the Nepean Landfill site. The proposed pipeline would direct the leachate and contaminated groundwater flows to the central wastewater treatment facility (R.O. Pickard Environmental Centre). A policy prohibiting other wastewater connections to this dedicated pipeline is also included in the proposed Official Plan Amendment.

THE AMENDMENT

1. Section 10.4.2, of the Plan, Solid Waste Management Policies, is hereby amended by the addition of the following after policy 7:

“8. Permit the installation of a wastewater / leachate pipeline to allow for the piped transmission of leachate from the Trail Waste Facility (formerly known as the Trail Road Landfill) and contaminated groundwater from the Nepean Landfill site as the most effective way to manage an existing environmental and health issue. This wastewater / leachate pipeline will be for the sole purpose of transmitting leachate and contaminated groundwater from the lands on and around the Trail Waste Facility and the Nepean Landfill site to the wastewater collection and treatment system. Connections to the wastewater / leachate pipeline, other than from the Trail Road Facility and the Nepean Landfill Site, will not be permitted.”



Ministry of the
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OTTAWA-CARLETON ENVIRONMENT & TRANSPORTATION DEPARTMENT	
PM	
RECD JUL 06 1999	
FILE NO.:	
REC. NO.: 4111	
FILE:	COPIES SENT TO:

June 24, 1999

Mr. Pat McNally
Director, Solid Waste Division
Region of Ottawa-Carleton
Trail Waste Facility
4475 Trail Road
Nepean, Ontario
K0A 2Z0

Dear Mr. McNally,

RE: Leachate Management - Trail Waste Facility and Nepean Landfill Site

This is further to your letter of June 22, 1999 in which you asked for this Ministry's position or comment on a number of questions related to leachate and contaminated groundwater management at the above sites. I have now had an opportunity to review these questions and discuss them with and obtain input from staff in other Branches of this Ministry.

This Ministry supports the findings of the report entitled "Region of Ottawa -Carleton Trail Road landfill Site Leachate Treatment and Disposal Options" to construct a pipeline to convey both the leachate and contaminated groundwater to the R.O. Pickard Centre for treatment. Research into the treatment of leachate and leachate contaminated groundwater by alternative methods is also encouraged. While this Ministry is unable to commit any direct funding for a partnership program at this time, support services could be provided. This would include chemical analytical work and technical reviews and advice.

With respect to research, a pilot scale engineered wetland would be an option worth some consideration. It should be noted however, that discussions with Ministry staff have indicated that constructed wetlands have seasonal operational difficulties and would therefore require secondary facilities to ensure that discharge criteria are not exceeded at any time. Provisions would therefore be necessary to collect the effluent from the pilot plant for further treatment at the R.O. Pickard Centre prior to discharge. A Certificate of Approval would not be required for a pilot plant with no direct discharge to surface water or groundwater.

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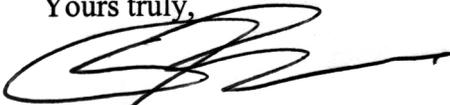
Mr. Pat McNally
June 25, 1999
Page 2

The construction of a full-scale engineered wetland would require a Sewage Works Certificate of Approval. To determine the required discharge criteria, an individual surface water assimilation study would be required as well as a full wastewater treatability study. Considering the discharge point (i.e. a seasonally dry drain) which discharges ultimately to the Jock River (a degraded Policy 2 receiving water); very stringent discharge criteria and monitoring requirements would be applicable.

This Ministry is very concerned that work proceed on the proposed pipeline as soon as possible. This groundwater contamination problem was originally identified in 1995. In May 1997 the Ministry and Region of Ottawa-Carleton agreed on an abatement program with a scheduled return to compliance date of 1999. Any work on research programs should not interfere with the timing of the pipeline installation. Recent progress with respect to the contaminated groundwater at the Nepean Landfill Site is unsatisfactory and must be resolved without further delay.

I would appreciate meeting with you by September 30, 1999 to review and formalize a revision to the schedule for the project.

Yours truly,



S. Burns
District Manager

DSH/th

EXECUTIVE SUMMARY

1. PROJECT BACKGROUND

This report comprises the record of a Wastewater/Leachate Pipeline Route Selection and Public Consultation project that will be filed as an Addendum to the Schedule B Class Environmental Assessment entitled Trail Road Leachate Management Plan advertised May 24, 1995.

The Region operates the Trail Waste Facility and is responsible for the closed Nepean Landfill site. The Trail Waste Facility is currently receiving solid waste in Stage 4. Stages 1 and 2 have been capped. Stage 3 is to receive an interim cap this summer pending completion of the Optimization Study. Stages 3 and 4 are lined with a geosynthetic composite liner which includes a leachate collection system. Excess leachate collected from these stages is trucked to the R.O. Pickard Environmental Centre for treatment. The Nepean site is capped but not lined and some leachate contaminated groundwater is migrating south and west of the site.

The 1995 Dillon Report on a Leachate Management Plan recommended "periodic removal of leachate to central sewage treatment plant by dedicated pipeline to the existing sanitary system." The Dillon assignment was carried out under Schedule 'B' of the Class Environmental Assessment for Municipal Water and Wastewater Projects. The Report did not, however, identify routes for the proposed pipeline. Dillon was then retained to evaluate possible pipeline routes and carry out a detailed design for the preferred route. In March, 1998, while the detailed design of the preferred route was in progress, concerns were raised by a number of Barrhaven residents regarding the route. As a result, the design process was stopped and further public consultation took place. In response to public concerns, the Region retained CH2M Gore & Storrie Limited to carry out a "peer review." This study reviewed a number of treatment options and the pipeline option. The pipeline option scored highest in all categories. Further public consultation then took place to present and review the findings of the CH2M Gore & Storrie Limited study.

Upon completion of the public consultation process, a report was submitted to Regional Council for approval. The following are two of the recommendations approved by Council:

1. approve the off-site conveyance of leachate from the Trail Waste Facility and the leachate contaminated groundwater from the Nepean Landfill site by pipeline to the R.O. Pickard Environmental Centre for treatment and disposal;
2. authorize the Environment and Transportation Department to undertake a pipeline route selection process.

It is intended that, once the route selection and public consultation project has been completed and the preferred alternative route and preliminary design have met with the approval of Regional Council and the Ministry of the Environment, detailed design and construction will then proceed.

In August, 1999, J.L. Richards & Associates Limited, in association with Dillon Consulting Limited and Williamson Consulting Inc., was retained to carry out the Wastewater/Leachate Pipeline Route Selection and Public Consultation project. The purpose of this project is to select and develop a conceptual design for the preferred pipeline route for transferring leachate and contaminated groundwater from the Trail Waste Facility site to the Regional sewer system, including the following key components:

participation of the public and interested stakeholders in developing the criteria used to select the preferred pipeline route;

pre-design engineering on the preferred route to identify and provide solutions to problems related to corrosion, odour control and environmental issues;

a minimum of two public meetings to provide information and receive input from the public; and

follow a process that meets the objectives of the Class Environmental Assessment for Municipal Water and Wastewater Projects.

It should be noted that the Wastewater/Leachate Pipeline project is one of three projects currently under way at the Trail Waste Facility site. The other two are the Optimization Study and a research program investigating potential on-site pre-treatment processes.

2. PUBLIC CONSULTATION

Early in the project, a Public Consultation Plan was prepared which was later discussed with and confirmed by a Public Liaison Committee (PLC). This Plan outlined the components of the public consultation program, including setting up and operating with a PLC, holding two Public Open House events and other methods and opportunities to keep the public informed and to obtain meaningful public input throughout the process.

After an initial Public Open House Information Session and Workshop held by the Region on February 26, 2000 to inform the public of all three ongoing projects at the Trail Waste Facility and to generate public interest in participating in the projects, the following were carried out:

Advertisements were placed in the daily newspapers requesting volunteers to sit on a Public Liaison Committee. All that volunteered were accepted.

A Public Liaison Committee was set up which met three times, once before each Public Open House and a special meeting held as a Workshop on evaluation criteria for route selection.

Two Public Open House/Meetings were held, one to review the evaluation criteria and the other to present, discuss and review the Consultant Team's findings and route evaluation and conclusions based upon the evaluation criteria.

It is considered that the Public Consultation process was successful as it generated significant public interest and turnout at Open House meetings, numerous questions were posed and Regional staff and Consultant Team members provided answers. As well, a special meeting was held with a stakeholder group to discuss the specific concerns of rural residents. Both the evaluation criteria development and rating, as well as the evaluation itself, were influenced by public input.

3. PIPELINE ROUTE ALTERNATIVES

In selecting the alternative pipeline routes for study, the following were considered:

the route must outlet to a sewage collection facility with adequate capacity within a reasonable distance from the leachate pumping station at the Trail Waste Facility;
and

the route will preferably follow public rights-of-way to avoid disruption to private property and the need to obtain property or easements.

Three suitable discharge points into the Regional sewer system were identified:

the East Barrhaven Trunk Sewer south of the railway tracks and east of Greenbank Road in Barrhaven;

the Stonebridge Pumping Station in the Monarch Homes Stonebridge Subdivision south of the Jock River, which discharges to the West Rideau Collector; and

the Richmond sewage forcemain along Eagleson Road.

Six alternative pipeline routes were developed. These, along with the three discharge point locations, are indicated on a map in Figure 4.1 in the Report.

The conceptual design of the pipeline indicates it would be a 200 mm (8") diameter high density polyethylene pipe with butt fused joints located along the shoulder of roadways or within the pavement at a depth of 2.4 m (8').

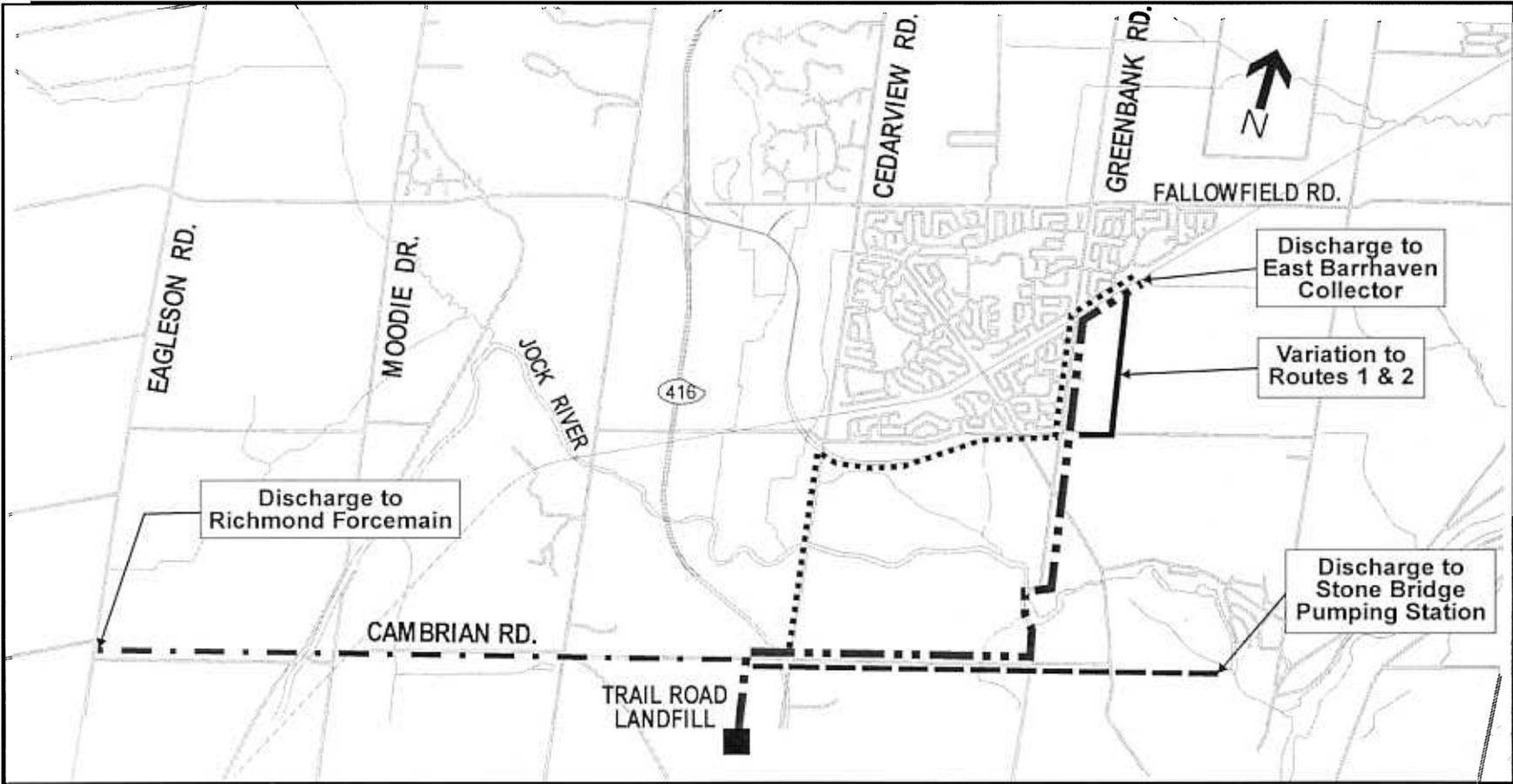
4. EVALUATION OF ALTERNATIVE ROUTES

In consultation with the PLC and the public, nine evaluation criteria groups were developed with detailed indicators, and ranked in terms of their relative importance (see Tables 5.1 and 5.2). These criteria and indicators were used by the multidisciplinary Consultant Team in collecting data on the different routes and evaluating and comparing results for each route. Conceptual level designs for a pipeline along each route were developed with respect to location within the road right-of-way, how obstacles would be crossed and probable special construction techniques and requirements. Mitigating measures to eliminate or minimize potential adverse effects were recognized in the evaluation. In developing mitigating measures, special attention was given to odour and corrosion control at discharge points venting to atmosphere and the conceptual design for all Jock River (and tributary) crossings included the use of a double walled pipe.

The Consultant Team's findings, evaluation results and conclusions are indicated in Tables 5.3, 5.4 and 5.5. **The preferred alternative route is Route 4, which follows the Cambrian Road alignment west from the Trail Waste Facility Pumping Station and connects to the Richmond forcemain on Eagleson Road.** The differences in evaluation results for this alternative Route and those for alternative Route 3, pumping to the Stonebridge Pumping Station, owned by Monarch Homes, were not major. For reasons outlined in Table 5.5, however, Route 4 was selected as the preferred alternative. This pipeline route passes mainly along the shoulder of the road past farm fields and in the centre of the road allowance from Richmond Road to Eagleson Road (road closed). The pipeline would be installed through the Twin Elm Community under the road using a directional drilling technique (trenchless technology) to avoid disruption. A similar technique would be employed in installing the double walled pipe Jock River crossing and the double walled pipe tributary crossing east of Twin Elm. No special odour or corrosion control facilities would be required at the outlet as the Wastewater/Leachate Pipeline would connect into another closed conduit at Eagleson Road. The Region has already implemented a project for odour and corrosion control in the Glen Cairn Trunk Sewer, which is the outlet for the Richmond forcemain. The addition of wastewater and leachate to this flow will not affect the design of this facility. Air release vents at high points along the Wastewater/Leachate Pipeline would be fitted with canister type air filters to prevent the release of any odour to atmosphere. As well, the addition of wastewater and leachate to the Richmond forcemain will not impact on the rated peak flow capacity of the Richmond Pumping Station. During periods when the Richmond Pumping Station is required to pump at peak design capacity (usually spring snowmelt), Stage 3 and Stage 4 Trail Waste Facility leachate could be temporarily stored on site and pumping from the Nepean site could be halted with no adverse environmental effects.

5. RECOMMENDED COURSE OF ACTION

It is recommended that the Region file an Addendum to the Schedule B Class Environmental Assessment, then proceed with the approval, detailed design and construction of a Wastewater/Leachate Pipeline Project in accordance with the conceptual design for Route 4. As noted in the Report and as advertised to the public throughout the public consultation process, an Official Plan Amendment for implementing this project is required.



Annex D Identified Route Locations

- Route 1 (dotted line)
- Route 2 - - - - - (long dashed line)
- Route 3 - - - - - (short dashed line)
- Route 4 - . - . - . (dash-dot line)

Table 5.4 summarizes the route ranking by criteria group. Please note that the route rankings are relative only and have no numerical value (eg. in comparing a ranking of 1 versus 3, it does not mean that the "1" is 3 times better than the "3", only that it is preferred). Also presented in Table 5.4 are the criteria group rankings that were developed with public input.

Table 5.4
Trail Waste Facility Wastewater/Leachate Pipeline
Route Ranking Summary

Criteria Group	Criteria Group Ranking	Route 1	Route 1A	Route 2	Route 2A	Route 3	Route 4
Natural Environment	High	1	2	5	6	4	3
Cost	High	5	3	6	4	2	1
Health and Safety	High	6	4	5	3	1	1
Social	Medium	4	3	6	5	1	1
Cultural	Medium	3	5	3	5	1	1
Economics	Medium	6	4	4	2	1	2
Agriculture	Medium	Ranked Equally					
PLU	Medium	3	3	5	5	2	1
Complexity of Operations	Low	2	2	2	2	6	1

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

**PUBLIC MEETING TO CONSIDER
DRAFT REGIONAL OFFICIAL PLAN (97) AMENDMENT 1
PROPOSED WASTEWATER/LEACHATE PIPELINE FROM
TRAIL ROAD WASTE FACILITY**

- Environment and Transportation Commissioner's and Planning and Development Approvals Commissioner's joint report dated 27 June 2000

Committee Chair Hunter began by reading a statement required under the Planning Act, wherein he advised that anyone, whose intention it was to appeal Regional Official Plan Amendment 1 to the Ontario Municipal Board (OMB), must either voice their objections at the public meeting or submit their comments in writing prior to Amendment 1 being adopted by Regional Council. Failure to do so could result in refusal/dismissal of the appeal by the OMB.

Jim Miller, Director, Engineering Division, Environment and Transportation Department (ETD), introduced Joseph Phelan, Senior Project Manager, Policy and Infrastructure Planning Division, Planning and Development Approvals Department, and Dave McCartney, Manager, Environmental Projects Branch, Environment and Transportation Department. Messrs. Miller, Phelan and McCartney then briefed the Committee on the staff report.

Councillor Molly McGoldrick-Larsen asked if, as part of background documentation in costing out transportation of leachate and groundwater contamination to the sewage treatment plant, costing was done on the transportation of both leachate and groundwater.

Mr. Miller advised that presently the Region is trucking approximately 10 tanker trucks of leachate each working day at a cost of approximately \$300,000 to \$400,000 (annual operating costs to the Solid Waste Division). He said currently, contaminated groundwater was not being trucked but estimated there would be between five to eight times the volume of contaminated groundwater to deal with. If the Region were to truck it, the cost would be in excess of \$2 million. He explained this was not part of the analysis with respect to costing.

Mr. Sheflin added only the actual amount currently being spent was used, not a potential future amount. He said staff were being conservative in this analysis and the project was justified based solely on the current cost of transportation of the leachate.

Councillor McGoldrick-Larsen questioned if the Ontario Municipal Board (OMB) would be concerned the Region had not included in its analysis, the cost of transporting the contaminated groundwater. Tim Marc, Manager, Planning and Environment Law, noted the evaluation by the Environment and Transportation Commissioner was a valid one and he said he could see no cause for concern if the matter went before the OMB. He said if it was justified on the basis of

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

leachate alone, it was clear any additional groundwater that had to be put in the system, would only serve to strengthen the case at the OMB.

Councillor McGoldrick Larsen then asked if an analysis was done on components of the combined leachate and groundwater (as opposed to separate analysis). Mr. McCartney advised the hydrolic analysis was done on the assumption of a combined flow, the total volume under peak flow and average day conditions. As well, experts looked at the impact of the leachate on both the leachate pipeline material itself, as well as the downstream piping facilities and it was not a concern.

The Councillor then had questions with respect to the servicing of the lands at Strandherd and Highway 416. She stated she had discussions with the City of Nepean and they are expecting the interim servicing report to come forward in September. Councillor McGoldrick-Larsen asked if staff had consulted with Nepean as to the timeline for interim servicing and what possibilities might be there.

Mr. Miller advised Regional staff have been communicating with City of Nepean staff. He pointed out Nepean is looking at this from an interim servicing point of view, using a small flow projection with the intent of using the existing sewer system as much as possible. He said Nepean is looking at a number of routes, including some right through the Barrhaven community. Mr. Miller explained what staff refer to in the report is the whole sewer system which he estimated would be at least seven to eight years away and would cost in excess of \$10 million.

Councillor Legendre referenced page 15 of the staff report and the impact on Richmond and its forcemain. He said there had been some concern that the leachate would be filling up the capacity of that pipe but staff are saying there would be the ability to pump on an intermittent basis. He took this to mean when Richmond was getting high flows, the Region would stop feeding. He said although this sounded reasonable, he believed that high flow condition would likely happen simultaneously at Richmond and at Trail Road, as in the case of excess precipitation or snow melt.

Mr. Miller noted the “peak event” problems in Richmond occurred possibly once every two years during the spring melt period, and appeared to be from infiltration into the sewer system. He said careful analysis indicated there would be adequate capacity in the forcemain over 99% of the time. Another benefit of putting more flow into the pipe during low flow conditions would be to decrease detention time of the wastewater from Richmond, which would also lead to fewer problems with hydrogen sulfide gas.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Responding to another question from the Councillor, Mr. Miller explained there were no plans to build storage capacity at Trail Road to hold contaminated groundwater and leachate during peak flows. He explained the landfill was lined to contain this material, and that staff would continue their monitoring efforts. In extreme cases, he noted there was a trucking option, but there was no desire to use this on a continuous basis.

Councillor Legendre then had questions concerning the cost of Routes 3 and 4. Mr. McCartney explained the estimated capital cost of Route 3, at approximately 5,725 metres, was \$2,490,000.00, whereas Route 4, at 6,125 metres, was \$2,285,000.00. He said a number of factors made Route 3 more expensive, including its placement under Highway 416. Mr. McCartney further explained that if Committee wished to include the operating costs and life cycle costing over a longer period of time, these were estimated at \$3.725 million for Route 3, and \$3.22 million for Route 4. He confirmed all other route alternatives were more expensive.

Councillor McGoldrick-Larsen asked if the capital cost requirement for a proposed future booster pumping station on the Richmond forcemain had been included in the costing analysis for Route 4. Mr. McCartney said this additional cost was not included as it had already been accounted for in Richmond's future. He explained that because the pipeline would use the Richmond forcemain's off-peak capacity, there would be no impact on when the future boosting pumping station would be required. He stated there would be a future cost requirement for the booster pumping station even if another route were chosen for the pipeline, and the pipeline would not accelerate this need.

Councillor McGoldrick-Larsen then asked if the same standard had been applied to all routes during the evaluation. She noted Route 4 proposed to use a double-walled pipe for a portion of its route under the Jock River, and asked if the same costing standard would be used as that applied to Route 3, using an existing double-walled pipe already in place under the river. Mr. McCartney explained the costs calculated for Route 3 included the replacement of the existing pipe underneath the Jock River, installed by Monarch Development Corp. as part of its development. This jointed polyvinyl chloride (PVC) water distribution type of piping system would be replaced with the same type of cased, continuously fused pipe as proposed for Route 4, to make the comparisons equal. As well, Mr. McCartney explained, the costing had been done in this fashion because staff had assured the public the Region would provide a high level of protection to the Jock River system.

Councillor McGoldrick-Larsen asked if this was the factor that had driven up the cost of Route 3, which resulted in the lower cost of Route 4 being the preferred alternative. Mr. McCartney

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

confirmed this was one of the things that increased the cost of Route 3 over Route 4; however, he noted this was not the only factor.

The Committee then heard from the following public delegations.

Ernie Lauzon explained he would speak on behalf of Werner Daeschel, who was unable to attend for medical reasons. Mr. Lauzon said Mr. Daeschel was opposed to the amendment, and preferred on-site treatment at the landfill site.

Roger Pyper, speaking on behalf of the Citizens Review Committee (CRC), recommended deferral of ROPA 1, based on a procedural problem resulting from a Motion moved at Council on 9 June 1999. He said the Motion, which originated with the Planning and Environment Committee, required an anaerobic digester be incorporated in the Trail Road Waste Facility Optimization Expansion Project. Mr. Pyper said the CRC had determined the directives of this Motion had not yet been carried out.

The speaker said the CRC sees the optimization of Trail Road, the groundwater/leachate pipeline and pre-treatment of leachate to be closely aligned. He recounted the June, 1999 Motion asked that an anaerobic digester be added to the current process of re-circulating leachate through the landfill, the effect of which would be to enhance the reduction of waste in the landfill, thereby contributing to optimization. Mr. Pyper noted documentation regarding the Trail Road Waste Facility Optimization Expansion Project stated that groundwater leaving Trail Road met Ministry of the Environment (MOE) Reasonable Use guidelines and that surface water met MOE standards and objectives. He felt that since the groundwater met standards approved by the province, it was reasonable to conclude that leachate was the only problem requiring amelioration. He also believed that since putting leachate into a pipeline would require Council to issue a waiver to its Sewer Use By-law, there likely was a hazardous condition that needed exploration to determine to whom the hazard applied.

While attempting to determine the effects of contaminated groundwater and leachate, Mr. Pyper said the CRC had learned that in addition to the Sewer Use By-law, another standard had to be met; a Discharge Agreement Maximum Limit (DAML). He said the CRC attended a public meeting where the need to treat leachate in order to improve it was acknowledged, but that for the moment, the landfill would have to continue to operate under a waiver of the Sewer Use By-law. Mr. Pyper said no mention had been made of the DAML at the same public meeting. He felt that in light of MOE standards which were less than adequate at protecting public health, a higher standard might be required.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

The speaker said a true optimization of the landfill would provide an opportunity to incorporate innovative technologies in compliance with the stated policies of Regional Council (ROP, Section 4.1.2 (8)). He also felt that once a pipeline was installed, the policy of at-source pollution prevention might be ignored.

Mr. Pyper recalled that Councillor McGoldrick-Larsen had alluded to a study regarding the conveyance of leachate in groundwater to the R.O. Pickard Environmental Centre (ROPEC) that did not factor in the cost of groundwater recovery and piping. He noted the inference that piping contaminated groundwater to ROPEC would be cheaper than transporting it by truck, but that this had not been costed in the original study. He also said wastewater treatment technologies currently operated by local companies could provide opportunities for compliance with Council's policy objectives to "facilitate the creation of jobs and strengthen the Regional economy through planning and infrastructure decisions which support industrial and business development" (ROP, Section 4.1.1 (1)). The speaker also found it curious that the amendment spoke to an issue in the ROP addressing solid waste, yet he noted contaminated groundwater and leachate were liquids. He added that liquids are normally transported by pipe to ROPEC for treatment, yet the amendment did not append itself to anything dealing with sewers.

Mr. Pyper said the CRC was trying to get information on an organization called SUBBOR (**Super Blue Box Recycling**, an affiliate of Eastern Power Limited, Toronto), which had been in receipt of some Federal assistance. In closing, he reiterated the CRC's request for deferral, in light of its view that the Motion of 9 June 1999 had not yet been acted upon.

In light of the many points touched upon by the delegation, Councillor Beamish asked for clarification as to the immediate nature of the delegation's deferral request. Chair Hunter offered the CRC was asking for action on the request for a study for an anaerobic digester system at Trail Road. Because this had not yet been acted upon, the CRC felt the amendment should be deferred until the technology could be examined to see if it could be incorporated in leachate management. Mr. Pyper added that if this technology were explored, it might be discovered that treatment might be done at source.

Responding to a question from Councillor Legendre regarding the status of the anaerobic digester, Pat McNally, Director, Solid Waste Division, Environment and Transportation Department, explained the motion regarding anaerobic digestion had originally come forward in conjunction with the Trail Road Optimization Project, and that different alternatives were being examined regarding the project. He noted staff had met with the CRC in relation to the Optimization Project and the role of anaerobic digestion. Mr. McNally stated the Optimization Project currently has draft terms of reference. The comment period has concluded and staff are working with the consultant to review the comments received. Mr. McNally said staff would

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

review the draft terms of reference to ensure that the option for an anaerobic digester is identified.

Mr. McNally confirmed for Councillor Legendre that staff have progressed with the anaerobic digester as part of the optimization project, with which it was originally identified. He explained the digester was not identified in conjunction with the leachate program. He outlined that staff were asked, as part of the optimization, to consider using anaerobic digestion and poplar trees. Mr. McNally confirmed staff were going forward with the optimization project, whose most significant first step involves preparing a draft terms of reference for an environmental assessment (EA).

Councillor Legendre said he too recalled the digester had been discussed as part of the optimization project, but he believed Committee had been considering leachate and contaminated groundwater around Trail Road as part of one package. He asked whether proceeding with the pipeline would mean forgetting about the digester.

Mr. McNally explained that optimizing Trail Road included establishing more air space at the site. He said that assuming the Region received MOE approval on the terms of reference, proceeded with an EA, and secured more air space, the use of various technologies including anaerobic digestion could be incorporated in the site. Mr. McNally confirmed that even if a digester were to be used at Trail Road, there would still be a need to convey the waste fluid somewhere. The digester's purpose would not be to digest fluids flowing from the facility, but would ensure they were in a better state.

Elaborating on the DAML for Councillor Legendre, Mr. McNally explained the Regional Regulatory Code (RRC) requires a special discharge agreement to allow for the discharge of leachate to the sewer treatment works. He said as a result, there is discharge agreement in place for Trail Road.

At Councillor Legendre's request, Mr. Pyper explained what caused him to raise the issue of the DAML. He said in order to pipe leachate, the requirements of the Sewer Use By-law had to be met and there were three chemicals emanating from Trail Road that did not meet these standards. He further explained the CRC had learned that Trail Road was operating under a waiver of the by-law, and that in addition to the Sewer Use By-law, an additional condition had to be met, the DAML. He pointed out that for two years, xylene gas was in excess of the DAML, the consequence of which was that two regulations intended to establish a minimum standard were being breached.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Mike Sheflin, Commissioner, Environment and Transportation Department, explained the DAML allowed the Region to exceed certain normal bounds in exceptional cases, but that this excess was carefully monitored. He said the Region set the limits, monitored the site to ensure that limits were not exceeded, and strictly monitored leachate as recommended in MOE guidelines.

At Councillor Beamish's request, Mr. Sheflin clarified the DAML is established to do two things; to protect the Region's system and treatment plant, and to ensure that effluent leaving the plant does not exceed MOE guidelines for dumping into the river. He said the Region had a Certificate of Approval (C of A) that had to be met at all times.

Councillor Beamish noted these agreements did not apply solely to landfill sites. He asked if the Region also entered into such discharge agreements with anyone else having an abnormal type of sewer discharge, such as a manufacturing plant. The Commissioner explained the Region has an Industrial Sewer By-law and the Region works with several hundred local industries. He noted there are approximately 20 such agreements, which are only required for those industries that are in excess of the limits. He confirmed that with the DAML, the Region was merely treating its landfill as a separate industry, similar to a private industry.

Councillor McGoldrick-Larsen asked staff about the SUBBOR project currently under way in Guelph, about the Region's involvement in the project, and about its future potential, depending on the outcome of the optimization study.

Mr. McNally said staff endeavor to keep abreast of the most current undertakings and newest technologies. With respect SUBBOR, he said staff had earlier this year met with a representative who advised of a demonstration project currently being developed in Guelph. He noted that subsequently, the Region had agreed to participate as a monitor in verifying the SUBBOR technology at the request of an agency working in conjunction with the U.S. Environmental Protection Agency. He said one of the seeming environmental benefits of the SUBBOR technology is that it offers advances with respect to greenhouse gas emissions. Mr. McNally said the social and economic impacts will also be studied, and that Committee will be updated as information becomes available. As to the long-term possibilities for the use of SUBBOR or other technologies, Mr. McNally said he did not believe the installation of a leachate pipeline or the landfill optimization would put the Region in a position where alternate innovative technologies could not be considered. He noted that ultimately, there was still a need for some disposal, with Trail Road being the Region's disposal asset. He emphasized that with the optimization project, staff were trying make the best possible use of this asset.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Chair Hunter noted the delegation had asked for deferral of this item until there had been further study regarding the anaerobic digester option. He asked if any member of Committee was prepared to move such a Motion.

Mr. Sheflin drew the Committee's attention to a paragraph in a letter from the MOE dated 24 June, 1999, which stated, "Recent progress with respect to contaminated groundwater at the Nepean Landfill Site is unsatisfactory and must be resolved without further delay."

Councillor Hill proposed the following Motion:

That the pipeline route selection (Recommendation No. 2 of the report) be deferred until the City of Nepean Sewer Servicing Study is available (which is expected in September of 2000), outlining flow capacity in the Barrhaven sewer system.

The Committee Chair acknowledged the Motion of Deferral, but noted this was different from what the delegation was requesting. There being no further Motions, the Committee resumed hearing from the following public delegations:

Alastair Munro, a resident at the intersection of the Twin Island Bridge and Richmond Road, told the Committee he owns a farm abutting the road allowance where the new leachate pipeline was being proposed to go. A long-time resident of the area, Mr. Munro gave an historical perspective of rural life, noting a general degeneration in the quality of life over the past 35 years, beginning with the inception of the first landfill. He felt the problems of dealing with landfill-related problems such as odour, dust and dirt were going to be compounded by the installation of a leachate pipeline. Commenting on the consultative process, Mr. Munro felt that although there had been opportunity for input, he believed the decision to select Route 4 had been made largely to appease Barrhaven residents, who greatly outnumbered the rural residents. Referring to the criteria indicators of capital and operating costs, the speaker felt it made more economic sense to install a pipe that was going to convey leachate eastwards in the east to begin with.

Mr. Munro also noted that for Route 3, a double-walled pipe would have to be installed 150 metres east of the river because of sandy soil conditions. He said no mention had been made of using double-walled pipe along Route 4 when going through sandy soil west of Moodie Drive. The speaker felt a double standard was being applied, as much of the area encompassed by Route 4 contained sandy soil. He also noted no mention had been made of any increased pump capacity for Richmond, and he felt the selection of Route 4 would hold up development in Richmond. Mr. Munro understood that a new sewer would be added to serve a new industrial park between Highway 416 and Strandherd Drive, and felt that this was where the leachate

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

pipeline should go. He said he did not oppose the piping of the leachate, and felt there was a greater hazard to convey the leachate by trucks. In closing, Mr. Munro recommended deferring a decision on Route 4 until the study on the new sewer in Barrhaven was completed. He implored the Committee not to proceed with ROPA 1 at this time.

Councillor Legendre noted Mr. Munro's concerns regarding potential impacts, and asked how an underground pipeline would affect the speaker's property. Although he was unsure of the immediate impact, Mr. Munro felt there were alternatives to piping leachate into the Richmond sewer, which he felt would withhold development in Richmond. The speaker felt that connection to the sewer proposed for Barrhaven within the next five to six years would be a better long-term solution.

Councillor Stewart noted Mr. Munro had alluded to a "double standard" in terms of a single walled pipe going through the rural area versus a double walled pipe elsewhere, and asked staff to explain. Mr. Miller said a double-walled pipe had been planned for the section of the route under the Jock River only.

Councillor Stewart noted that in the staff report under "Complexity of Operations", only Route 4, in the rural area, did not appear to require an additional odour control system. She asked why this was so, when odour control was required of all other routes.

Mr. McCartney explained a temporary biofilter installed on the Glen Cairn collector in Kanata would be used to control odour for the time being. A more permanent solution would be to "piggyback" onto the new facility slated for construction next year.

Councillor van den Ham noted he had not yet familiarized himself with the background documentation, however, he found it odd that one of the complexities of operation identified for Route 3 had been that the system would be run by another municipality. He said this would end this year, and that it appeared the selection had been skewed toward Route 4. Noting these types of operations were usually forced onto those in rural areas, he asked Mr. Munro if anyone in the rural area had participated in the review process.

Mr. Munro said he had attended the first public meetings in May and June when he had learned of a route proposed for his area, and had provided some input. He said he had not attended a subsequent meeting in June as he believed a decision had already been made.

Councillor van den Ham then asked for details on the group which had been formed to partake in the consultative process. Mr. Miller explained a public liaison committee had been formed, comprised of all who had applied in response to Regional advertisements. In addition to the

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

standard public consultation process, staff had held information session at the landfill in February on this project, as well as other solid waste projects. Mr. Munro commented that although the consultants and staff had been very good about consulting with area residents, he felt the number of rural residents was not sufficient to make a difference.

Councillor Hill asked staff to comment on Mr. Munro's assertion that the construction of a leachate pipeline along Route 4 would hold up or affect development in Richmond. Mr. Miller explained capacity would not be taken away from Richmond as the facility was designed to use the capacity available in the existing pipeline over 99% of the time.

Chair Hunter pointed out Richmond had an allocation in the ROP, and the capacity in the Richmond forcemain would allow this capacity to be met. He sought confirmation that nothing in this amendment could take away from this capacity, or the right of Richmond to develop to what had already been approved. Mr. Miller confirmed nothing being discussed would take away from Richmond's right of capacity. He said Richmond's problems with infiltration into its sewer system were irrespective of this issue.

Regarding the issue of sandy soil, Mr. Miller explained the analysis for areas adjacent to the Jock River crossing called for double-walled pipe in groundwater areas to ensure the continuous integrity of the crossing under the Jock River. Further to Councillor van den Ham's reference to another municipality's control of a pumping system, he explained Monarch Construction operated the pump station under its subdivision agreement.

Mr. Miller clarified for Councillor Beamish that double walling was used because if there were a break under the river, normal excavation processes could not be used. With a double walled pipe, the line could be turned off, the pipeline extracted, and another one could be reinserted. The casing would trap any leaked fluids.

Councillor Beamish then asked Mr. Munro to explain his major concerns regarding a pipeline going into the road bed in front of his property. Mr. Munro said he was worried about contamination from potential leaks. He also expressed concern about putting all the leachate from the West Carleton and Trail Road landfills into one main, which he felt would greatly contaminate areas downstream from where he lived. He said his greatest wish was that the pipeline be installed elsewhere, as he felt rural residents had shouldered such burdens too often in the past.

In light of the first delegation's request to defer the installation of a pipeline altogether, and the second's request to defer selection of a route, Chair Hunter asked Mr. Marc whether the two

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

parts of the recommendation had to stand together, or whether it would be possible to approve the pipeline, but defer the route selection.

Mr. Marc said it was possible to split the items. However, he alerted Committee to the possibility that ROPA 1 could be appealed to the Board, with a subsequent request for a deferral until the pipeline route had been determined.

On the issue of deferral, Mr. Sheflin again referred to the letter from the Ministry of the Environment staff dated 24 June 99, which read in part: *“This Ministry is very concerned that the work proceed on the proposed pipeline as soon as possible. This groundwater contamination problem was originally identified in 1995. In May, 1997, the Ministry and Region of Ottawa-Carleton agreed on an abatement program with a scheduled return to compliance date of 1999. Any work on research programs should not interfere with the timing of the pipeline installation. Recent progress with respect to the contaminated groundwater at the Nepean Landfill site is unsatisfactory and must be resolved without further delay.”* Mr. Sheflin felt it was imperative to proceed with a solution, and noted staff’s strong recommendation to Committee and Council to do so. Because of this, the Commissioner requested that if any future action were to take place, that no member of staff would be charged because of a delay.

Joseph King, representing the Barrhaven Sewer Action Committee (BSAC) said BSAC remained opposed to a pipeline and believed using hybrids of existing technologies could result in an effluent at Trail Road that could easily be returned to the groundwater. Commenting on the anaerobic digester, Mr. King felt the digester had been proposed to be part of the Optimization Report and not simply considered within it. He recounted the 9 March 1999 Committee meeting where the off-site conveyance of leachate had been approved, in addition to the staff direction to undertake a route selection process.

He noted that beyond the two staff recommendations, two additional Motions were approved; one by Councillor Legendre, *“That staff explore options for a biological treatment pilot project of leachate and contaminated groundwater, including partnering with the research community, the private sector and interested communities and that a report be brought to Committee within a year at most.”*; and one by Councillor Stewart, *“That staff prepare a report on the feasibility of using a constructed wetland to manage contaminated groundwater for the Nepean Landfill site and that RMOC seek participation with the private sector, Environment Canada or the National Research Council in a pilot project to assess new and emerging technologies to treat leachate with a constructed wetland and that the study be forwarded to the Committee considering the Landfill Optimization.”*

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Mr. King was concerned that Councillor Legendre's Motion had not been acted upon. He noted that although the terms of reference for landfill optimization were being reviewed, the report requested by the Councillor had yet to be seen. Mr. King said the recommendations from the 9 Mar 99 Committee meeting were received by Council at its meeting of 14 Apr 99, and that there had been no subsequent Motions to dismiss the aforementioned recommendation. Mr. King also noted at the 28 Apr 99 Council meeting, as part of the reconsideration that occurred with regard to constructing a wetland, comments had been made that the 1996 Dylan report should be reviewed and brought back to Committee, and that information directly tied to the pipeline project be fully reviewed. Mr. King noted the present report only addressed the problem of leachate. He expressed the view that the relationship between staff and Council had resulted in Council being required to move quickly without the full information which had been requested over a year ago. He requested that Council defer ROPA 1 until the fullest information that Council and the community had already paid for was reviewed.

In response, Mr. McNally outlined the occurrences following the 14 Apr 99 Council meeting. He acknowledged the original staff recommendation had been augmented by two additional recommendations at Committee on 9 Mar 99. Mr. McNally noted the issues had been discussed at Council at great length, which resulted in a series of five or six Motions. He said included in those Motions, was a specific Motion to construct a wetland, which was voted on at Council and lost. He explained that staff took this as direction that the wetland issue had been looked at and was no longer going forward. He then noted there had been other amendments to the recommendations, which were reconsidered at Council's 28 Apr 99 meeting. The matter was subsequently referred back to the Planning and Environment Committee.

Mr. McNally went on to say on 13 Jul 99, the Committee received a report addressing the research project, and at the time, staff suggested to Council that if research was desired, funds had to be identified in the Capital budget. Approximately \$500,000 was identified in the budget, a research project was started, and members of different community organizations who wanted to participate in the research project were invited to do so. He explained that no one who wanted to participate was turned down. He also said this was why staff were back with the update on the pipeline project and the research project, also contained within the present agenda. Mr. McNally noted that unless the full sequence of the events and how they unfolded was studied, a misrepresentation of the original directions might result.

Brian Cummings, a resident in the area of proposed Route 4, said he was against the amendment. He said he preferred on-site optimization, but acknowledged that due to environmental urgencies, this was likely not a viable option at this time. He said he had lived in Munster Hamlet, and recounted how properties had been devalued as a result of Munster

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Hamlet's failing lagoons. He also noted at one time, working on the Economic Development Committee for the Township of Goulbourn, he had been told it was difficult to get development in the Richmond area. Mr. Cummings felt that common sense indicated leachate going to the R.O. Pickard Centre in the east end, should not be piped westward. He also noted the pipeline in Kanata between Richmond and Glen Cairn was 20 years old, and that a break in this pipe or in fact the mere presence of this pipeline, would lower property values in the area.

Noting there were about 20 residences and a number of different businesses in the area of Route 4, Mr. Cummings wondered why Route 3 had not been chosen. He stated his preference for a route toward the eventual Highway 417/Strandherd Drive development, noting a report coming to Committee in September might provide some answers.

Mr. Cummings then spoke to the issue of sandy soil in reference to the double lined pipe underneath the Jock River. He said if one were to travel along Cambrian Road from Moodie Drive, one would see that the area was completely sandy. He said a break in the pipeline in this vicinity would result in big problems. He also said that to double-pipe this distance would make Route 4 more expensive than Route 3.

The speaker also noted the reference to a peak flow of 13 litres per second. He suggested that in emergency situations, it might take between ten and fifteen minutes to discover a problem, resulting in a potentially large leak, of major concern to residents with nearby wells. Mr. Cummings recommended the option of Route 3, which he felt was a more direct route, even with its accompanying higher cost.

Lois K. Smith reinforced the view that as much treatment as possible should take place on-site to lower the concentration of contaminants in the leachate to a level which would allow almost pure water to flow into the drainage pipe following treatment. Miss Smith recommended a sealed system with monitoring and other safety capabilities, and suggested the use of a double-walled pipe when going past wells, for a certain distance on either side of the well. She explained these and other views were contained in a detailed letter sent to the Solid Waste Division, which she said she would revise and submit to all members of Council.

Victoria Mason noted Mr. Sheflin had read from a letter from the Ministry of the Environment (contained in the staff report at Annex B), which said the Region should move forward with this. She stated the history of this issue should be reviewed in that it is the Provincial Government that is the "cause of the mess in this area", as they continued to issue conditional Certificates of Approval to operate the dump, when they knew there was a problem.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

With leave of the Chair, Mr. Sheflin responded to a question posed by Ms. Mason with respect to the life expectancy of Trail Road Landfill site. He noted with diversion and other optimization strategies (e.g. mining of the existing area for reuse) which would reduce the total volume going into the landfill site, the potential of the site could be extremely long. He said currently they are projecting the life expectancy at ten years, however, with the optimization it could possibly be longer.

Ms. Mason expressed great concern that the landfill was located adjacent to a floodplain. She said although Nepean has very strict rules regarding building in the floodplain, she found it absurd they would allow a dump to be built in the floodplain. She felt that Route 3, which would tie in with the construction to be undertaken by Monarch, would be the logical choice. She said although it may cost a little more at the outset, it would serve a double purpose and would be more economical than spending \$2.5 million on pipeline to carry only leachate straight to R.O. Pickard Centre. Ms. Mason also expressed concern that the pipeline would go under the Jock River and pointed out the entire area is sand and gravel, a very porous substance. As well, she stated she was worried about Richmond because of the high groundwater levels.

Ms. Mason went on to state that because all residents of the Region will have to pay for this pipeline, the public meetings should have been better advertised and held at more convenient times for the public.

Ms. Mason concluded her remarks by saying she would provide staff with documentation she had concerning the history of the dump. She urged the Region to tell the Province, who she felt was responsible for the problems at the landfill site, that this project would be put off until a proper study is completed.

Nicholas Patterson began by stating he could not understand why the Capital cost of this project was not included in the financial implications. Chair Hunter explained the report did state it in an indirect way, in the Financial Implications section: "Funds for the proposed wastewater/leachate pipeline are contained in the Capital Budget for Landfill Leachate Management".

Mr. Patterson, referencing the "Trail Road Landfill Optimization Project" background paper (dated March 2000), noted it said on page 10, that the surface water was in full compliance with the Ministry of the Environment's surface water objectives and policies and that the quality of the groundwater leaving the Trail Road site is currently and has been, well within compliance of MOE Reasonable Use Guidelines. He questioned why, if these are in compliance, the Region would be considering this project.

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

The speaker opined this project should be deferred pending the completion of the Barrhaven sewer. He felt the flourishing economy in Ottawa would cause the Barrhaven sewer to be built sooner than expected (i.e. within five years) and it would be capable of handling the entire product proposed to be in this new pipeline. He said this would save the \$3 to \$4 million anticipated cost of the leachate pipeline. Mr. Patterson felt it was the failure to act on these kinds of deferrals and potential savings, that contribute to the terrible tax situation that exists in Ottawa-Carleton.

Chair Hunter pointed out that both Mr. Pyper and Mr. Patterson had raised a concern that there was a contradiction about the groundwater. He stated once the delegations were finished, he would want an explanation from staff concerning this contradiction.

D. A. Moodie stated he was not overly concerned about the design of sewers under the Jock River or even the exact location of the sewer. He said with modern technology, he believed the sewers would be reasonably well built and safe. However, he said he was very much concerned about the procedure. He noted there were three proposed routes for the pipeline and only after strong objections were received concerning these routes did Route 4 enter into the picture. Mr. Moodie said he did not believe the same attention, that was given to the first three routes, was given to Route 4 by the engineers.

The speaker noted Route 4 would come down under the Jock River to Eagleson Road, and down Eagleson Road to the Glencairn pumping station, where it is all old sewer. Mr. Moodie advised that at a meeting of the Richmond Structural Committee, held a few weeks earlier, residents expressed great concern about this route and the potential for breakage in the old sewers and resulting pollution. He noted the proposal included no provision for repairing the old sewer or for putting in double sewers at crossings.

Mr. Moodie then had questions concerning a statement contained in the Amendment that said connections to the wastewater/leachate pipeline, other than from the Trail Road facility and the Nepean landfill site, would not be permitted.

At Chair Hunter's request, Mr. Tunnacliffe responded this passage was contained in the Amendment itself and it is saying it is Council's policy that this pipeline will only be used to transfer the wastewater and leachate from Trail Road to the connection with the forcemain at Eagleson. There will be no other connections permitted.

Chair Hunter pointed out this would be a forcemain and it is very difficult and expensive to hook into a forcemain in mid-section. Mr. Sheflin advised it would be "liquid under pressure", which

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

means something of a higher pressure could be injected into it, but one could not connect into the section from Trail Road to where it connects to the sewer line at Eagleson and Hazeldean.

In concluding his remarks, Mr. Moodie advised that, should Route 4 be approved, Nepean rural residents would appeal it to the Ontario Municipal Board, mainly because it was not part of the initial study. He stated he supported the deferral of this matter pending further study.

Councillor Legendre asked for staff comment with respect to Mr. Moodie's statement that Route 4 "had come in rather late in the day". Mr. Miller advised the route selection process "took off with vigour" in February, 2000 and Route 4 had been part of the process, since it was tabled at a public meeting held on 26 February 2000.

Councillor Legendre then asked staff to address Mr. Moodie's concern about a modern, pressure pipeline going into an older system. Mr. McCartney stated he assumed Mr. Moodie was referring to the existing Richmond Forcemain, which was installed approximately twenty-five years ago. He said some of the valving needs maintenance work but the pipeline itself is in good condition and its integrity is not in question. He confirmed the material used in that pipeline was similar to the pipe to be used in the proposed pipeline (i.e. plastic pipe). He also added an expert had examined the pipe and the constituents of the leachate and gave the opinion there would not be a problem.

At Chair Hunter's request, Mr. Sheflin then addressed the concern raised by two previous speakers with respect to the perceived contradiction concerning the groundwater and surface water. Mr. Sheflin stated he believed the confusion was as a result of there being two sites. The Nepean landfill site is a completed site which does not have a bottom liner and there is groundwater contamination. The Region has purchased some property around the site to contain the groundwater contamination but the contamination must be addressed. Mr. Sheflin said he felt the presenters were referring to the active site which does not have a groundwater or a surface water problem but it does have leachate.

Having heard from all public delegations, the matter returned to Committee.

Chair Hunter noted he had received three motions for consideration. The first was from Councillor Hill to defer consideration of the route selection (i.e. recommendation 2) until the City of Nepean sewer servicing study is available (expected in September, 2000). The second motion was from Councillor Hume to defer the item (both recommendations 1 and 2) so the Citizens Review Committee and interested parties could meet with Regional staff to resolve the issue of anaerobic digestion pretreatment of leachate. The third motion, from Councillor Hill,

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

was to approve Route 3 as the pipeline route. Councillor Hill noted this motion was to be considered if her motion for deferral failed.

Chair Hunter indicated Councillor Hume's motion would be dealt with first. If that failed, then Councillor Hill's motion for deferral would be dealt with and failing approval of that motion, finally Councillor Hill's motion to approve Route 3 would be considered.

Speaking to his motion, Councillor Hume noted the first delegation spoke of the potential of anaerobic digestion pretreatment, which the Councillor believed had merit. He said the Committee had not heard whether the digester has a role to play in the ultimate solution of the leachate problem and he felt it warranted examination before a final decision on the route selection for the pipeline was made.

Responding to questions from Councillor Legendre, Mr. McNally confirmed an anaerobic digester could potentially improve the quality of the water leaving the site but it would not reduce the quantity of water and so trucking or some other way of removing the fluid would still be required. Further, anaerobic digestion would remove the carbon based contaminants but it would not remove other contaminants (e.g. metallic contaminants).

Councillor Hume stated he wanted to make it clear to the Committee, that he was not proposing anaerobic digestion as a replacement for the pipeline but rather that it be part of the solution. He expressed concern that if Committee and Council were to approve the pipeline at this stage, anaerobic digestion would be forgotten about. He said the Committee did not currently have sufficient information to direct staff to include anaerobic digestion as part of the solution but he felt if the two sides sat down to resolve the issue of how anaerobic digestion would fit into the process, it would not take long. He suggested the matter could be back to Committee at its next meeting of 8 August.

Councillor Legendre noted that anaerobic digestion could remove carbon-based contaminants, but would be of little use for the removal of elements such as heavy metals. Mr. McNally confirmed this was correct. He also confirmed it had been staff's belief since the project commenced, that although anaerobic digestion could improve the situation on-site, the need for a pipeline would still exist.

Councillor Hume wanted assurance that when the project went forward and was implemented, the framework to allow for anaerobic digestion to fit into the pipeline process would still exist. He warned that if this was not assured in advance, the pipeline would be built and anaerobic digestion would subsequently be forgotten. He proposed that staff meet with concerned parties and return to Committee with an assurance that anaerobic digestion could either be

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

incorporated now or in the near future, but ultimately that it would form part of the solution. The Councillor felt Committee could possibly receive information in this regard by the Committee's 8 Aug 2000 meeting.

Councillor Stewart said she did not oppose an anaerobic digester, but did not feel the amendment and preferred solution should be deferred while deciding how to go about the process. She believed Committee should pick the route, and said she was inclined to support Councillor Hill's amendment to choose Route 3 over Route 4. She said she believed Route 4 was a less logical choice than Route 3, and even more so after listening to Mr. Munro's presentation. Councillor Stewart said it was sometimes easier to do the wrong thing to people who had less of a voice or presence, but to do so did not make it right. She said she would support Councillor Hill's amendment, and urged Committee to defeat the Motions for deferral.

Mr. Sheflin suggested if it was Committee's intent to look at anaerobic digestion outside of optimization, this should be added to the research project.

Councillor van den Ham said he too was leaning towards supporting Route 3 and noted a review of the report indicated that in some instances, there were minute differences between Routes 3 and 4, some of which he felt were questionable. However, in light of the need for a substantial reason for Committee to choose an alternate route, he asked for a legal opinion regarding potential problems arising from such a decision.

Mr. Marc suggested the second Recommendation was different in nature from those normally received from staff. He outlined that normally, the recommendations follow from process or items that have been identified by staff, or process or subject that Regional Council has asked for recommendations on. These are brought forward and can be adopted or amended. However, in this instance, the recommendation flows from the EA process, which is not part of Council's process. Mr. Marc explained the EA process is one established under the *Environmental Assessment Act*, and approved by the Province. As part of this process, there are steps that must be followed, criteria that must be established, and the various routes are identified against those criteria.

Mr. Marc said, although the Committee was not bound to accept the results of the process, in his view, it was not appropriate for Committee to simply opt for Route 3 as opposed to Route 4. He said if Committee and Council were inclined to take this approach, it was necessary to indicate their reasons for deviating from the result of the EA process (e.g. problems in the way certain criteria were weighted, etc.). Mr. Marc said this was not something that was often necessary for Committee and Council to do, but in order to have a result that could be taken to

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

the Ministry and shown to have been a valid process and properly analyzed, he believed this was necessary.

Chair Hunter asked if some of the points Councillor van den Ham had noted when referring to the weighting of certain criteria, hydraulics, etc., in support of Councillor Hill's Motion would suffice to this end. Mr. Marc suggested if this was the path Committee wished to follow, it would be prudent to put this into writing.

Councillor van den Ham said he supported Route 3 and was prepared to draft appropriate wording to back his view. He pointed out Route 4 had been preferred environmentally because only 0.08 of a hectare (ha) had been disturbed as opposed to 0.3 ha in Route 3. He felt the difference was minuscule, making the environmental preference ridiculous.

Councillor van den Ham also had questions with regard to the Planned Land Use (PLU). He said he understood Route 4 would affect 12 residences while Route 3 seemingly affected none. He said he appreciated the necessity to consider future land use, but he disagreed with the figures being used, and felt it was more important to deal with people currently living in the area. The Councillor suggested that people moving in at a future date could be made aware of the pipeline's presence.

Mr. Marc suggested if it was Committee's intent to take the time to articulate its reasons and postpone the decision to Council, Committee might simply decline to make a recommendation with respect to Item 2 at this point, and defer Recommendation 2 to Council without a recommendation.

Mr. Miller suggested staff could arrange a meeting between Councillor van den Ham, other interested Councillors and the team that had put the report together in order to provide the analysis required to form a Motion that would reflect support for Councillor van den Ham's preferred route.

Councillor McGoldrick-Larsen referred to a recommendation contained within a Motion approved by the Committee at its meeting of 9 Jun 99, that read, "*That staff be directed to include the proposal from the Citizens Review Committee (anaerobic digester and poplar forest capping) in their consideration of options for optimization of the Trail Road Landfill site.*" She asked whether these specific words had been used in the terms of reference for the Optimization Study.

Mr. McNally explained the draft terms of reference at this point did not contain these words, but said he had spoken with the consultant to ask that they be included. Mr. McNally said he

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

was assured they would be included in the final revision, along with other comments received for consideration before the terms of reference are finalized. He explained that at this point, the department has been circulating a draft EA terms of reference, the main purpose of which is to seek more air space. He noted the question of how to deal with leachate, anaerobic digestion, etc., are operational issues to be dealt with based on the assumption staff are successful in getting the air space. He said a meeting between the Region's consultants and the CRC had been held to explain this issue, and Mr. McNally had been working under the impression that this had been completely understood. He assured Councillor McGoldrick-Larsen staff would clarify the wording in the final terms of reference.

For the record, Councillor McGoldrick-Larsen recounted the history of the 9 Jun 99 Motion. She said the Motion had been drafted partly by herself, but moved by Councillor Munter on her behalf. She explained she wanted Committee and staff to understand what her desire was at that time and what she believed was the direction given.

Councillor McGoldrick-Larsen explained the direction had been that anaerobic digestion be studied not just for the pre-treatment for leachate and leachate management, but also for landfill optimization. She believed an anaerobic digestion system could be used to "mine" Cells One and Two of the landfill as part of an optimization of these cells. She acknowledged these were notions at present, but felt they need to be evaluated in the optimization of the landfill. The Councillor felt that unless this was specified in the terms of reference, anaerobic digestion would not be considered as a part of optimization.

The Councillor noted the City of Guelph was also examining the potential benefits of anaerobic digestion and she felt the Region should be studying this process for possible future use at the landfill and as a part of the optimization process. She asked for assurance this would be in the terms of reference, and stated she expected to see these results in the optimization report.

Mr. McNally suggested the best way to resolve this issue would be for staff to arrange a meeting with the consultant and Councillor McGoldrick-Larsen to address her concerns. He noted the report had not been finalized, and that only a *draft* terms of reference had been circulated. He said the commitment had been made to include these directions in the *finalized* terms of reference.

As Councillor Hume's Motion spoke to deferral, Chair Hunter felt it would be prudent to discuss this matter prior to consideration of questions regarding route selection.

Councillor McGoldrick-Larsen felt there were merits in supporting deferral because of a number of ongoing studies, such as the City of Nepean's sewer servicing study, and the Corel

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

Area Study, which might help determine the potential for the advancement of Highway 416 and Strandherd Drive in terms of a need for serviced land to support economic growth. She suggested a delay until September was not significant, and that all information should be considered prior to making a decision on the route.

Chair Hunter urged Committee not to support the deferral. He pointed out the evidence showed that even if the anaerobic digestion pre-treatment of leachate took place, there would still be a need for a pipeline. He further noted the MOE directions to proceed with work on a pipeline to deal with groundwater that would not be satisfactorily treated with anaerobic digestion. The Chair reminded members of Councillor Legendre's reference to substances in leachate that would not be treated by the anaerobic digestion process. He said it would never be satisfactory to discharge such substances into surface waters, a further illustration of the need for a pipeline. Chair Hunter said this did not mean the issue of anaerobic digestion should not be discussed. He said the CRC had a right to meet with staff and with interested Councillors with a view to resolving this issue. However, he did not feel this was cause for deferral of these particular recommendations.

Committee then considered the following Motion:

Moved by P. Hume.

That Recommendations 1 and 2, Draft Regional Official Plan Amendment No. 1 be deferred to allow opportunity for the CRC and interested parties to meet with Regional staff to resolve the issue of anaerobic digestion pre-treatment of leachate.

LOST

NAYS: M. Bellemare, B. Hill, G. Hunter, J. Legendre, W. Stewart and R. van den Ham.....6.

YEAS: P. Hume.....1

The Committee then turned their attention to Councillor Hill's motion for deferral.

Councillor Stewart urged Committee to turn down this Motion for deferral as well, and to proceed with Councillor Hill's Motion regarding the approval of Route 3. She said she would like Committee to forward the latter Motion to Council, basing the decision on the following reasons, contained within the report:

- Fewer number of wells within the likely zone of influence than along Route 4;
- Route 4 pipeline intersects the longest section of permeable sands, whereas Route 3 intersects only a short section;

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

- Less impact on agricultural operations;
- Less impact on property values (two dwellings along Route 3 vs. eight dwellings along Route 4);
- Less impact on business activity (no accesses crossed along Route 3, vs. three crossed along Route 4; no businesses within 100 metres of Route 3, vs. three businesses within 100 metres of Route 4);
- Health and safety - Route 3 impacts no dwellings, whereas Route 4 impacts nine dwellings.

Councillor Stewart felt these reasons would be sufficient to support a rejection of Route 4 in favour of Route 3. She noted this choice would result in less habitat disruption and less environmental impact.

Councillor Legendre noted Councillor Hill's Motion for deferral asked that Committee await a servicing study from Nepean. He noted this was only a *study*, and asked if it was known when the actual *pipeline* would be installed. Mr. Miller explained the servicing study would look at sanitary sewer servicing for the lands in the Cedarview Road / Strandherd Drive area south of Fallowfield Road. He said Nepean was studying the matter from an interim servicing point of view for the area, pending the final sewer system which was expected to be constructed several years hence. He said this was why staff were recommending proceeding with the selection of a route.

Councillor Legendre said he failed to see the logic of deferring a Committee decision to await the Nepean study, and said he would not support deferral.

Chair Hunter pointed out the study was looking at a slightly shorter alignment, and would use existing excess capacity through an existing part of Barrhaven. He suggested other Barrhaven neighbourhoods might then be addressing Committee in a fashion similar to that of Mr. King. The Chair noted the advantage of either Routes 3 or 4 was that they traversed *relatively* virgin territory as far as housing developments.

Committee then considered the Motion from Councillor Hill.

Moved by B. Hill

That the pipeline route selection (Recommendation No. 2 of the report) be deferred until the City of Nepean Sewer Servicing Study is available (which is expected in September of 2000), outlining flow capacity in the Barrhaven sewer system.

LOST

Extract of Draft Minute
Planning and Environment Committee
11 July 2000

NAYS: M. Bellemare, G. Hunter, J. Legendre, W. Stewart and R. van den Ham.....5
YEAS: B. Hill and P. Hume.....2

Chair Hunter then read the remaining Motion from Councillor Hill:

That Committee recommend that Council approve pipeline route selection Route 3 as the preferred location for a pipeline to convey leachate from Trail Road Waste Facility and contaminated groundwater from Nepean Landfill Site to the R.O. Pickard Environmental Centre for treatment and disposal.

The Chair noted that legal counsel had recommended against putting forward a Motion without substantive reasoning.

Councillor Legendre asked Mr. Marc to explain his original suggestion that Committee decline to make a recommendation to Council regarding the selection of a route, and have the matter debated at Council. He said he could see no advantage of doing so, and felt that any decision made at Committee could be changed at Council. Mr. Marc said he had assumed Committee members might want to take time to articulate their reasons, and thus it would be appropriate to postpone the decision to Council. He said that if Committee felt it was in a position to mention its reasons now, and wished to choose Route No. 3 for clearly defined reasons, his concerns were fully addressed.

Councillor Hill accepted Councillor Stewart's suggested wording as a friendly amendment.

Councillor Stewart noted more reasons could be added by the time the matter came before Council after a more thorough analysis, and she urged fellow Committee members to support the Motion.

Councillor Legendre indicated he would not support the Motion. However, he said he would take up staff's offer of a briefing on the route selection process. He said he would support the staff recommendation, but indicated that his vote at Council might change, depending on the information presented at the briefing. He urged other Committee members to do the same.

Councillor McGoldrick-Larsen asked Committee to support the selection of Route 3. She felt the community's environmental concerns regarding present and future impacts spoke to Route 3 as the best option. The Councillor noted this was not a perfect solution, but she said the debate had been going on long enough, and it was time to try to resolve the decades-old problem regarding the landfill and its associated environmental impacts. She said the pipeline would be a solution for today, and the Landfill Optimization report would help to identify future solutions.

In closing, she said she believed Committee should move forward with a recommendation and proceed with the project.

Councillor Bellemare said that barring compelling reasons to change his mind on the matter, he would support the staff recommendation of Route 4 as the preferred option. He noted a briefing might help to better illustrate the differences between Routes 3 and 4. He cited contradictory information and insufficient detail in the report as the basis of his support for the staff recommendation, along with legal counsel's explanation that Committee needed a good rationale for changing the recommended route.

There being no further discussion, the Committee then considered the first part of the staff recommendation.

That Planning and Environment Committee recommend that Council:

- 1. Subject to a public meeting, enact a By-law to adopt Regional Official Plan Amendment 1 to the 1997 Regional Official Plan, attached in Annex 'A';**

CARRIED
(P. Hume dissented)

Committee then considered the following recommendation as a substitution to the original staff recommendation:

- 2. Approve pipeline route selection (Route 3) as the preferred location for a pipeline to convey leachate from Trail Road Waste Facility and contaminated groundwater from Nepean Landfill Site to the R.O. Pickard Environmental Centre for treatment and disposal, for the following reasons:**
 - Fewer number of wells within the likely zone of influence than along Route 4;**
 - Route 4 pipeline intersects the longest section of permeable sands, whereas Route 3 intersects only a short section;**
 - Less impact on agricultural operations;**
 - Less impact on property values (two dwellings along Route 3 vs. eight dwellings along Route 4);**
 - Less impact on business activity (no accesses crossed along Route 3, vs. three crossed along Route 4; no businesses within 100 metres of Route 3, vs. three businesses within 100 metres of Route 4);**

- **Health and safety - Route 3 impacts no dwellings, whereas Route 4 impacts nine dwellings.**

CARRIED

YEAS: B. Hill, P. Hume, G. Hunter, W. Stewart and R. van den Ham.....5
NAYS M. Bellemare and J. Legendre.....2

Committee then approved the staff recommendations, as amended.

That the Planning and Environment Committee recommend that Council:

1. **Having held a public meeting, enact a by-law to adopt Regional Official Plan Amendment 1 to the 1997 Regional Official Plan, attached in Annex ‘A’;**
2. **Approve pipeline route selection (Route 3) as the preferred location for a pipeline to convey leachate from Trail Road Waste Facility and contaminated groundwater from Nepean Landfill Site to the R.O. Pickard Environmental Centre for treatment and disposal, for the following reasons :**
 - **Fewer number of wells within the likely zone of influence than along Route 4;**
 - **Route 4 pipeline intersects the longest section of permeable sands, whereas Route 3 intersects only a short section;**
 - **Less impact on agricultural operations ;**
 - **Less impact on property values (two dwellings along Route 3 vs. eight dwellings along Route 4);**
 - **Less impact on business activity (no accesses crossed along Route 3, vs. three crossed along Route 4; no businesses within 100 metres of Route 3, vs. three businesses within 100 metres of Route 4);**
 - **Health and safety - Route 3 impacts no dwellings, whereas Route 4 impacts nine dwellings.**

CARRIED as amended