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**UPPER YORK SEWAGE SOLUTIONS PROJECT
ADVANCED TREATMENT DEMONSTRATION FACILITY UPDATE
PROJECT 74270**

The Environmental Services Committee recommends:

- 1. Receipt of the communication from Erin Mahoney, Commissioner, Environmental Services, dated June 20, 2012;**
- 2. Receipt and referral to staff of the following communications:**
 - a) Carolyn Lance, Administrative Assistant to the Town Clerk, Town of Georgina, dated May 16, 2012;**
 - b) Fernando Lamanna, Deputy Clerk, Town of East Gwillimbury, dated May 14, 2012, May 17, 2012, and May 28, 2012; and**
- 3. Adoption of the recommendation contained in the following report dated June 6, 2012, from the Commissioner of Environmental Services.**

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report provides an update on the advanced treatment demonstration facility currently being operated as part of the Upper York Sewage Solutions environmental assessment study.

3. BACKGROUND

Regional Council received the Upper York Sewage Solutions Project Update report February 2012

At its meeting of February 16, 2012, Regional Council received the Upper York Sewage Solutions Project Update report (Clause 3 of Environmental Services Committee Report No. 2), previously deferred from October 4, 2011, Environmental Services Committee. The purpose of the report was to provide an update on the status of the Individual

Environmental Assessment and to notify Regional Council that the Lake Simcoe Water Reclamation Centre with York Durham Sewage System Improvements was confirmed through a comprehensive assessment process as the preferred alternative for the Upper York Sewage Solutions Project.

Advanced treatment demonstration facility currently in operation at the Region's Mount Albert Water Pollution Control Plant

A key component of the Individual Environmental Study is demonstrating that the advanced technology proposed for use in the Lake Simcoe Water Reclamation Centre will be effective and produce anticipated results. As such, the Ministry of the Environment issued a Certificate of Approval to the Region to construct and operate a demonstration facility at the Region's Mount Albert Water Pollution Control Plant (WPCP). This facility will primarily demonstrate the effective removal of phosphorus, as required by the Ministry of the Environment, through the advanced treatment stages of microfiltration and reverse osmosis over a 12 month period.

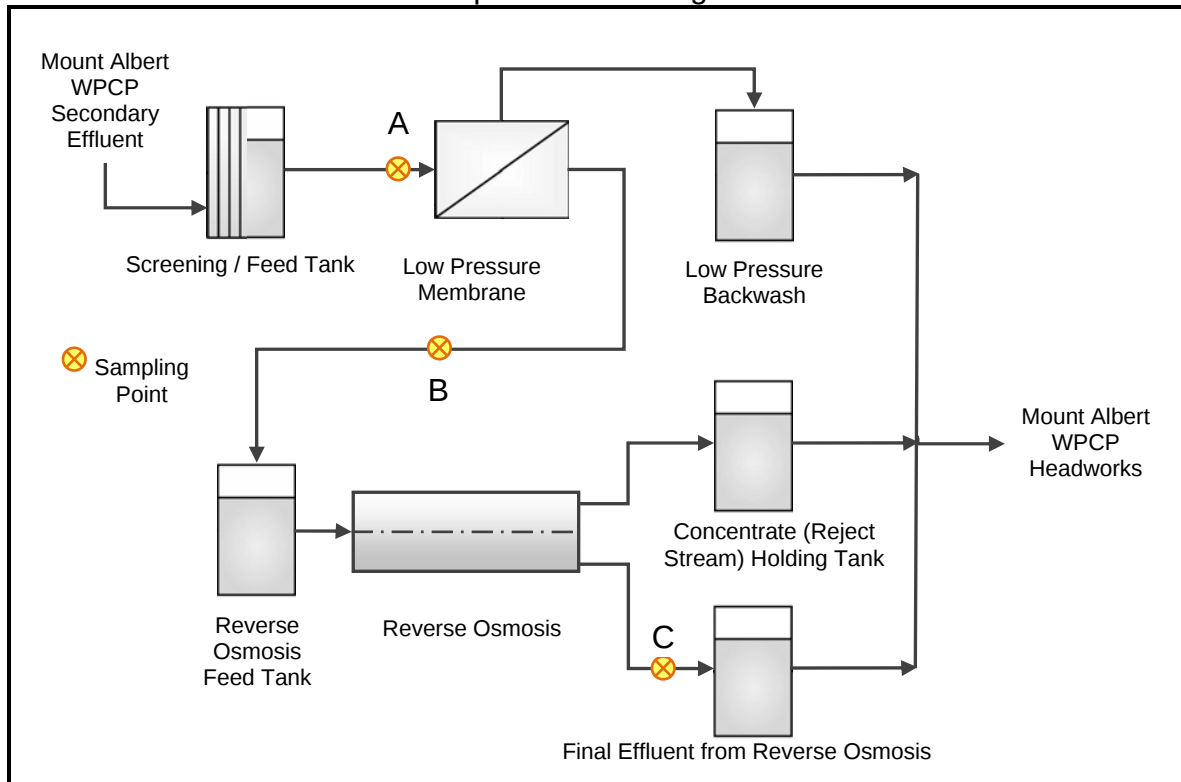
The demonstration facility was constructed this past winter and has been in full operation since late March 2012.

4. ANALYSIS AND OPTIONS

Advanced treatment demonstration facility commissioned March 19, 2012

The demonstration facility was constructed to treat secondary effluent produced at the Mount Albert Water Pollution Control Plant. The demonstration facility is operating as a closed loop system with all process streams returned to the influent of the Mount Albert Water Pollution Control Plant. Advanced treatment processes to achieve low effluent concentration of total phosphorus are tertiary treatment by microfiltration (low pressure membranes) followed by reverse osmosis as quaternary treatment. A schematic of the full treatment process is provided in Figure 1.

Figure 1
Upper York Sewage Solutions Advanced Treatment Demonstration Facility
Simplified Flow Diagram



The facility will operate continuously for 12 months to demonstrate performance when operated under representative conditions occurring in all four seasons. The key goals of the facility are to:

- Confirm performance of the advanced treatment systems capable to meet the average required effluent total phosphorus concentration of 0.015 mg/L consistently for all seasons
- Determine and verify full scale design and operating parameters for the advanced treatment systems
- Provide public, agency and key stakeholder outreach and education of the advanced treatment system through facility tours

The total phosphorus removal performance of the advanced treatment system is monitored by sample collection and analysis by a commercial laboratory (Maxxam Analytics) with quality assurance and control provided by Wilfrid Laurier University.

Initial results show phosphorus reduced by 97 per cent after reverse osmosis treatment

Following a stringent work plan protocol and in cooperation with representatives of regulatory agencies and Regional operations staff, the facility has been operational for two and a half months with success in terms of the ability of the advanced treatment process to remove phosphorus.

Some points of reference:

- Ministry of the Environment currently considers 0.07 mg/L total phosphorus as the limit of existing technology
- Provincial Water Quality Objective (to prevent nuisance growth of algae) for total phosphorus is 0.03 mg/L
- Phosphorus concentration in East Holland River ranges between 0.1 mg/L (January) through 0.2 mg/L (June) as a 15-year monthly average
- Upper York Sewage Solutions total phosphorus plant discharge objective is 0.01 to 0.02 mg/L

Ninety-seven per cent removal of total phosphorus is being achieved in secondary effluent from the Mount Albert Water Pollution Control Plant following reverse osmosis (based on Maxxam Analytics Reportable Detection Limit of 0.002 mg/L). The majority of the results were recorded as non-detect, confirming a very high level of phosphorus removal. A comprehensive list of all testing conducted to May 16, 2012 is provided in Table 1.

Table 1
Total Phosphorus Concentrations Measured at Sampling Points

Date 2012	Secondary Effluent mg/L (A)	Reverse Osmosis Feed mg/L (B)	Reverse Osmosis Final Effluent mg/L (C)
Mar 19	0.130	0.013	Non detect*
Mar 20	0.180	0.016	Non detect
Mar 21	0.130	0.016	Non detect
Mar 23	0.120	0.025	Non detect
Mar 26	0.190	0.026	Non detect
Mar 27	0.140	0.026	0.006
Mar 28	0.120	0.031	0.003
Mar 29	0.190	0.026	0.009
Mar 30	0.180	0.024	0.004
Apr 2	0.160	0.017	Non detect
Apr 3	0.140	0.016	Non detect
Apr 4	0.140	0.020	Non detect
Apr 5	0.140	0.019	Non detect
Apr 9	0.200	0.017	0.004
Apr 10	0.170	0.019	0.007
Apr 11	0.300	0.018	0.003

Report No. 6 of the Environmental Services Committee
Regional Council Meeting of June 28, 2012

Apr 12	0.230	0.016	0.002
Apr 13	0.220	0.017	Non detect
Apr 16	0.240	0.020	0.003
Apr 17	0.200	0.019	Non detect
Apr 18	0.210	0.022	0.002
Apr 19	0.190	0.021	Non detect
Apr 20	0.180	0.021	0.003
Apr 23	0.190	0.018	0.003
Apr 24	0.170	0.020	Non detect
Apr 25	0.200	0.022	0.003
Apr 26	0.180	0.022	Non detect
Apr 27	0.170	0.020	0.003
Apr 30	0.190	0.018	Non detect
May 1	0.220	0.016	Non detect
May 2	0.170	0.019	0.005
May 3	0.120	0.007	Non detect
May 4	0.098	0.012	Non detect
May 7	0.130	0.013	Non detect
May 8	0.200	0.013	Non detect
May 9	0.180	0.130	Non detect
May 10	0.092	0.012	0.004
May 11	0.130	0.007	Non detect
May 14	0.150	0.028	0.005
May 15	0.110	0.021	0.009
May 16	0.130	0.017	0.005
Average	0.169	0.021	0.003**

Notes: Units milligrams per litre (mg/L) are equivalent to parts per million

*Below method detection limit of 0.002 mg/L per Maxxam Analytics ** As per EPA guidance for analyzing data with non detects, average conservatively calculated assuming non detects equal to method detection limit of 0.002 mg/L

Link to Key Council-approved Plans

The Upper York Sewage Solutions project is a critical component of the Region's wastewater infrastructure, both now and into the future. Development of the Region's approved northern urban growth centre is dependant on approval and implementation of the Upper York Sewage Solutions project as is the decommissioning of the Holland Landing Sewage Lagoons. This project also supports a significant provincial investment to extend Highway 404 to Ravenshoe Road for servicing approved growth in the Region's northern growth centre and in the Town of Georgina. The Upper York Sewage Solutions project is a key project that aligns with the Region's 2011 to 2015 Strategic Planning objective of continuing to deliver and sustain critical infrastructure.

5. FINANCIAL IMPLICATIONS

Future Development Charges Bylaw and Ten Year Capital Plans will be updated as project costs are refined

The current Development Charges Bylaw includes \$505.7 million for the Upper York Sewage Solutions project. The approved 2012 Ten Year Capital Plan includes \$25.15 million in Total Project Budget Authority for planning/Environmental Assessment and preliminary design phases of the project, as well as an identified detailed design and construction budget of \$479 million. After completion of the individual environmental assessment, and as the Upper York Sewage Solutions project progresses, cost estimates and the project budget will be updated and included in the next Development Charges Bylaw update as well as in future Ten Year Capital Plans.

6. LOCAL MUNICIPAL IMPACT

The Upper York Sewage Solutions project is being conducted within defined parameters, guidelines and processes detailed in a Terms of Reference document as approved by the Minister of the Environment in March 2010. A fully documented environmental assessment report will be submitted for approval by the Minister of the Environment upon completion of this individual environmental assessment in 2013.

The purpose of the Upper York Sewage Solutions project, as approved by the Minister of the Environment, is to develop a sustainable sewage servicing solution to accommodate the planned growth of 153,000 residents and industry in the Towns of East Gwillimbury (91,500), Aurora (34,500) and Newmarket (27,000). All of these municipalities are located within the Lake Simcoe basin.

Moving forward on implementation of the Lake Simcoe Water Reclamation Centre with York Durham Sewage System Improvements as the preferred alternative, York Region is focused on providing servicing for this growth by as early as 2018. Implementation of the Water Reclamation Centre will also facilitate taking the Holland Landing Lagoons out of service.

7. CONCLUSION

The advanced treatment demonstration facility has been operational since March 2012 with considerable success in terms of the ability of the advanced treatment process to remove phosphorus.

The total phosphorus plant discharge objective is 0.01 to 0.02 mg/L. Following reverse osmosis, the average phosphorus concentration is 0.003 mg/L, an order of magnitude

below the water reclamation centre discharge objective. These results clearly demonstrate the efficiency of reverse osmosis in removing phosphorus.

Moving forward on implementation of the Lake Simcoe Water Reclamation Centre with York Durham Sewage System Improvements as the preferred alternative is focused on providing servicing for this growth by as early as 2018.

It is recommended that this report be received for information.

For more information on this report, please contact Daniel Kostopoulos, Director, Capital Planning and Delivery, Environmental Services at (905) 830-4444 Ext. 5070.

The Senior Management Group has reviewed this report.



MEMORANDUM

TO: Environmental Services Committee

FROM: Erin Mahoney, Commissioner of Environmental Services

DATE: June 20, 2012

RE: **Upper York Sewage Solutions Project**

The purpose of this memo is to provide Council members with information regarding letters received from the Town of East Gwillimbury and Town of Georgina on the Upper York Sewage Solutions (UYSS) project. Copies of these letters are included in the Environmental Services Committee agenda of June 20, 2012.

The May 16 correspondence from the Town of Georgina requests the UYSS project team conduct a public meeting in Georgina concerning potential sites for the Water Reclamation Plant. Project staff will be in contact with Town staff to coordinate details and timing for a potential public meeting.

The May 14 and 28 correspondence are letters from East Gwillimbury residents received by the Town and then forwarded to the Region. In their letters, residents outline questions and concerns related to the Individual Environmental Assessment (IEA) underway for the Region's subject project. As with all correspondence received by the Region's UYSS project team, detailed responses are developed and provided directly to the applicable stakeholder.

The letter dated May 17, 2012 from the Town of East Gwillimbury is for the purpose of forwarding to the Region various Town Council resolutions applicable to the UYSS IEA project for information and future action. Of particular note, the Town is requesting an additional public meeting be held with local community residents to address their specific issues and concerns. Also, the Town is requesting York Region communications staff be available to work out of the Town's offices to facilitate access to information by local residents.

In response to the first request, the UYSS IEA project team will be holding a public meeting for local residents on June 28, 2012 at the East Gwillimbury Sports Complex in Sharon. Local residents are being advised of this meeting by way of a notification flier hand delivered to their homes and notices on the project website.

In response to the second request, the Town of East Gwillimbury and Region staff have developed formal terms and conditions to have a Regional Communications Specialist work out of the Town's offices on a part-time basis. Preparations are underway with the Town to provide a suitable workspace for this Regional staff person.

Region staff have been proactive throughout the IEA in providing timely documentation of each process step by way of postings to the project website and a large number of public and stakeholder presentations. A concerted effort has been made to inform stakeholders about this project. This has been the approach since the formal project "Notice of Commencement" was issued in March 2009. To increase public outreach, the communications strategy is multi-faceted: including mailings, emails, a dedicated website, public information centres, media interviews, meetings with municipal staff and representatives of municipal councils, open houses, newspaper ads, drop in "Tuesday Talks", demonstration facility tours and postings on bulletin boards at community centres. All correspondence received on this project will be posted on the project website, together with the appropriate response and will also be included in the final IEA study report documentation.

An informational report updating Committee and Council on the progress of UYSS IEA and the demonstration facility is also being brought forward to the June 20th Environmental Services Committee meeting.

Erin Mahoney
Commissioner, Environmental Services

BW/jf/MP

Copy to: Denis Kelly, Regional Clerk, York Region
Fernando Lamanna, Deputy Clerk, Town of East Gwillimbury

YORK-#4285684



TOWN OF GEORGINA

26557 Civic Centre Rd., Keswick, Ontario L4P 3G1

**REGION OF YORK
CLERK'S OFFICE**

FILE No. - *P17*

→ E. Mahoney

May 16, 2012

Regional Municipality of York,
Regional Clerk,
17250 Yonge Street,
NEWMARKET, Ontario
L3Y 6Z1



Attn: Denis Kelly, Regional Clerk

Dear Mr. Kelly:

Re: Upper York Sewage Solution project

Please be advised that Town Council passed a motion at its April 16th Council meeting, requesting the consultants for the Upper York Sewage Solution project to conduct a public forum in Georgina in which to make an updated presentation to Town of Georgina residents concerning potential sites for the Upper York Sewage Solution Water Reclamation Plant.

Accordingly, we respectfully request your assistance in contacting the consultants with this request.

If you require further information, please feel free to contact Winanne Grant, CAO, at wgrant@georgina.ca or via 905-476-4301, ext. 301.

Thank you in advance for your assistance.

Sincerely,
FOR THE TOWN OF GEORGINA,

Carolyn Lance
Administrative Assistant to the Town Clerk

cc: Winanne Grant, CAO



Town of
East Gwillimbury

Fernando Lamanna, BA

Deputy Clerk
Legal and Council Support Services
905-478-4282 x1240
flamanna@eastgwillimbury.ca

May 14, 2012

Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge St.
Newmarket, ON L3Y 6Z1



**REGION OF YORK
CLERK'S OFFICE**

FILE No. - P42

Dear D. Kelly:

For your information and records, at its regular meeting held on May 7, 2012, the Municipal Council of the Town of East Gwillimbury enacted as follows:

BE IT RESOLVED THAT all correspondence received from the East Gwillimbury Environmental Group, expressing concerns with regard to the Upper York Sewage System Water Reclamation Centre in Queensville, be received; and

THAT the Municipal Council of the Town of East Gwillimbury forward the correspondence to the Region of York.

For Regional Staff's information, please find enclosed a copy of East Gwillimbury Environmental Group form letter and a copy of the list of residents that were sent a reply. .

If you have any further questions feel free to contact the undersigned.

Yours truly,

Fernando Lamanna, BA
Deputy Clerk
Legal and Council Support Services

"Our town, Our future"

Date: April 27, 2012

The Town of East Gwillimbury,
19000 Leslie Street,
Sharon, Ontario, L0G 1V0

Re: Upper York Sewage System

Attention: Mayor Virginia Hackson

As residents, taxpayers and property owners in the Township of East Gwillimbury, we require the support of our Town Council regarding the Regional Municipality of York's undertaking to install the Upper York Sewage Solutions (UYSS) Water Reclamation Centre in Queensville.

We DO NOT SUPPORT the UYSS "short list" of site selections, all in the heart of Queensville, for the following reasons:

1. We all accept the well thought out Town of East Gwillimbury Consolidated Official Plan 2031, dated June 2010, which does not include a sewage treatment plant and industrial development in the core of the Queensville population centre. Incorporated in this plan, the residents of East Gwillimbury were to hook up to the York Durham Sewage Line when future development was to take place in our Municipality.
2. The proposed sites will inflict irreparable damage to our property values, quality of life, and enjoyment of our homes because all of the UYSS short list sites are within sight and smell of the existing core population area in Queensville. The inevitable devaluation of our properties, reduction of subsequent property taxes and the impact to the revenue for the town of East Gwillimbury cannot be ignored.
3. Environmental concerns regarding the short list sites have the potential to be the most severe and long lasting.
 - a. We have been unable to determine what engineering processes will be built into the facility to mitigate against a catastrophic failure despite numerous requests for the information from UYSS. Simply having the UYSS team assure us that, "there won't be a failure at the plant," is little consolation that it is being addressed properly. The UYSS team did inform us that in the event of a short term power loss (24-hours or less) they will be able to handle the sewage; however, a power outage in excess of 24-hours would result in some spillage. Of greater concern is a catastrophic equipment failure or human error at the plant. This type of event could potentially result in a widespread biohazard disaster in our town that will foul the Holland River and the surrounding area.

b. The phosphate reduction levels in the effluent (discharged, non-potable water) are a "design objective"¹ instead of complying with environmental best stewardship. In fact, the Ministry of the Environment (MOE) is concerned enough that the proposed sewage treatment plant will not be able to treat effluent to the design objective levels of 0.01 to 0.02 mg/L total phosphorus, that they plan to audit and stress test the sewage plant in increasing loadings before issuing final certification². Additionally, the Region is being "required to consider contingencies for implementation in the event that the sewage treatment plant does not achieve the proposed effluent quality for concentration or loading³." These points indicate that the MOE is not convinced that the UYSS sewage plant will apply state of the art best practices in this proposed facility. Of course, once this sewage treatment plant is built, even if it fails to meet the total phosphorus reduction targets, it will not be shut down. This will leave the citizens of Queensville, Holland Landing and Lake Simcoe left to deal with the environmental degradation.

4. The increased traffic in Queensville from the solid waste disposal trucks will add noise, odour and congestion to our town not to mention increased contamination risk in the event of a traffic accident. An even larger concern is the potential use of this sewage treatment plant for septic pumping truck dumping. This could result in greatly increased traffic given the number of septic systems in East Gwillimbury and the surrounding areas. The level of increased traffic is difficult to determine since repeated requests to UYSS on the expected number of bio solid and septic disposal trucks has been met with silence.

5. The UYSS failed to properly notify the residents of East Gwillimbury that this area was on the list for a proposed sewage treatment plant. A shortcoming they acknowledged during the UYSS workshop in Holland Landing on April 11th, 2012. This is unacceptable. In fact, the lack of communication has been a common theme during this entire process. They have not provided us with sufficient answers regarding our concerns and have been too vague failing to leave us with any confidence in this process.

It is disheartening that the community has been isolated from this initiative. Moreover, we as residents cannot accept any concept that is contrary to the East Gwillimbury Official Plan.

Based on the above points we implore the Members of East Gwillimbury Town Council to take a stand to support its residents against this proposed Sewage Treatment Plant.

We request that this issue be introduced at the next East Gwillimbury Council meeting ensuring that it becomes a matter of record. We trust that our Council Members will support the residents of our area in their desire to stand firm on the current Official Town plan of East Gwillimbury, and stop this sewage plant from being built so close to the heart of Queensville.

Additionally, we request that the East Gwillimbury Council forward letters to the Ministry of the Environment as well as the Region of York in which you state your support for the current Official Development Plan for East Gwillimbury, which does not include a sewage treatment plant and industrial site in Queensville. From a Risk Management perspective, the environmental risk associated with the proposed Queensville sites is too great.

Kindest regards,

Name:

Address:

Email:

Tel:

¹ Letter from Agatha Garcia-Wright, Director, Environmental Assessment and Approvals Branch, Ministry of the Environment, letter to the Environmental Services Department, The Region of York, 20 December 2010, 3.

² *Ibid.*, 4.

³ *Ibid.*, 4.

Kevin Bernard
Kirsten Bernard
Michelle Jordan Bernard

Christopher Wilvert
Lisa Boyle Wilvert

John Boyington
Marilyn Boyington

Margaret Fuss

Walter Buchanan

Gary Crawford
Audrey Crawford

Ellis and Liz Holmes

Angie Innamorato

Ron and Anita Vanderwees

Don Lewis
Flo Lewis

Michelle and Mark Nizio

Heather MacOwan

Bruce Newland
Pat Newland

Dianne Preece
Evan Preece

F. Kendle and L. Roberts

Steve and Lauri Ross

Lesile and Peter Summerfield

Heikki Nihtila

Alex Watters
Joan Watters

J. Wolfe



Town of
East Gwillimbury

Fernando Lamanna, BA

Deputy Clerk
Legal and Council Support Services
905-478-4282 x1240
flamanna@eastgwillimbury.ca

May 17, 2012

REGIONAL MUNICIPALITY OF YORK

Box 147
17250 Yonge St.
Newmarket, ON L3Y 6Z1

Attn: Denis Kelly, Regional Clerk



**REGION OF YORK
CLERK'S OFFICE**

FILE No. - *P42*

Dear Mr. Kelly:

For your information and records, at its regular meeting held May 7, 2012, the Municipal Council of the Town of East Gwillimbury adopted the following resolution:

BE IT RESOLVED THAT East Gwillimbury Council request that additional public information meetings between the York Region Upper York Sewage Solution (UYSS) project team and residents in our community be scheduled to ensure that all issues are addressed before a site is chosen for the Upper York Sewage Solution (UYSS) water reclamation centre; and

THAT York Region be requested to establish a communication staff available in the East Gwillimbury Town office to ensure our residents and other stakeholders, can have all issues and questions addressed and find out more information about the York Durham Sewage System (YDSS) and the Upper York Sewage Solution (UYSS) projects; and

THAT East Gwillimbury staff report back to Council respecting the Official Plan, Land Use and Zoning provisions relating to the Upper York Sewage Solution (UYSS); and

THAT all correspondence relating to the UYSS and YDSS received now and in the future be forwarded to the Region of York; and

THAT notification and a copy of this resolution be forwarded to all municipalities within the Lake Simcoe Watershed; and

THAT East Gwillimbury Council request that the Region take a more proactive role in notifying residents respecting any meetings or new information regarding UYSS or YDSS; and

THAT residents be notified when East Gwillimbury Council deals with matters related to the UYSS or the YDSS including those that left contact information today, sent letters and the East Gwillimbury Environmental Group; and

.../2

"Our town, Our future"

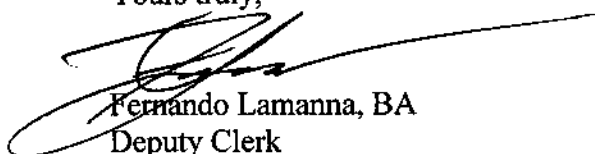
19000 Leslie Street, Sharon, Ontario L0G 1V0 Tel: 905-478-4282 Fax: 905-478-2808
www.eastgwillimbury.ca

THAT a notice be placed on the Town page and website; and

THAT Council consider ratification of this motion at the Council meeting to be held on May 7, 2012.

If you have any further questions feel free to contact the undersigned.

Yours truly,



Fernando Lamanna, BA
Deputy Clerk
Legal and Council Support Services

cc: All Municipalities within the Lake Simcoe Watershed



Town of
East Gwillimbury

Fernando Lamanna, BA

Deputy Clerk
Legal and Council Support Services
905-478-4282 x1240
flamanna@eastgwillimbury.ca

May 28, 2012

Denis Kelly
Regional Clerk
The Regional Municipality of York
17250 Yonge St.
Newmarket, ON L3Y 6Z1



**REGION OF YORK
CLERK'S OFFICE**

FILE No. - **P42**

Dear D. Kelly:

For your information and records, at its regular meeting held on May 22, 2012, the Municipal Council of the Town of East Gwillimbury enacted as follows:

BE IT RESOLVED THAT the three (3) items of correspondence received from the East Gwillimbury Environmental Group (O. Woll, J. Power, D. Woll), expressing concerns with regard to the Upper York Sewage System Water Reclamation Centre in Queensville, be received; and

THAT the Municipal Council of the Town of East Gwillimbury direct the correspondence to Community Programs and Infrastructure for review and to be forwarded to the Region of York for review and consideration.

In addition, please find enclosed a copy of East Gwillimbury Environmental letter from D. & O. Woll, J. Power, J & D Ballard and an email from H. Wright that were sent a reply. .

If you have, any further questions feel free to contact the undersigned.

Yours truly,

Fernando Lamanna, BA
Deputy Clerk
Legal and Council Support Services

"Our town, Our future"

19000 Leslie Street, Sharon, Ontario L0G 1V0 Tel: 905-478-4282 Fax: 905-478-2808

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- www.twitter.com/EGEnvironmental
- EGEnvironmentalGroup@gmail.com

Town of East Gwillimbury,
19000 Leslie Street,
Sharon, Ontario, L0G 1V0.

Re: Upper York Sewage System

Attention Council Members: Mayor Virginia Hackson, Councillors Cathy Morton, Marlene Johnston, Tara Roy-DiClemente, John Eaton

As residents, taxpayers and property owners in the Township of East Gwillimbury, we require the support of our Town Council regarding the Regional Municipality of York's undertaking to install the Upper York Sewage Solutions (UYSS) Water Reclamation Centre in Queensville.

We DO NOT SUPPORT the UYSS "short list" of site selections, all in the heart of Queensville, for the following reasons:

1. We all accept the well thought out, Town of East Gwillimbury Consolidated Official Plan 2031, dated June 2010, which does not include a sewage treatment plant and industrial development in the core of the Queensville population centre. Incorporated in this plan, the residents of East Gwillimbury were to hook up to the York Durham Sewage Line when future development was to take place in our Municipality.
2. The proposed sites will inflict irreparable damage to our property values, quality of life, and enjoyment of our homes because all of the UYSS short list sites are within sight and smell of the existing core population area in Queensville. The inevitable devaluation of our properties, reduction of subsequent property taxes and the impact to the revenue for the town of East Gwillimbury cannot be ignored.
3. Environmental concerns regarding the short list sites have the potential to be the most severe and long lasting.
 - a. We have been unable to determine what engineering processes will be built into the facility to mitigate against a catastrophic failure despite numerous requests for the information from UYSS. Simply having the UYSS team assure us that, "there won't be a failure at the plant," is little consolation that it is being addressed properly. The UYSS team did inform us that in the event of a short term power loss (24-hours or less) they will be able to handle the sewage; however, a power outage in excess of 24-hours would result in some spillage. Of greater concern is a catastrophic equipment failure or human error at the plant. This type of event could potentially result in a widespread biohazard disaster in our town that will foul the Holland River and the surrounding area.



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- www.twitter.com/EGEnvironmental
- EGEnvironmentalGroup@gmail.com

b. The phosphate reduction levels in the effluent (discharged, non-potable water) are a “design objective”¹ instead of complying with environmental best stewardship. In fact, the Ministry of the Environment (MOE) is concerned enough that the proposed sewage treatment plant will not be able to treat effluent to the design objective levels of 0.01 to 0.02 mg/L total phosphorus, that they plan to audit and stress test the sewage plant in increasing loadings before issuing final certification². Additionally, the Region is being “required to consider contingencies for implementation in the event that the sewage treatment plant does not achieve the proposed effluent quality for concentration or loading³.” These points indicate that the MOE is not convinced that the UYSS sewage plant will apply state of the art best practices in this proposed facility. Of course, once this sewage treatment plant is built, even if it fails to meet the total phosphorus reduction targets, it will not be shut down. This will leave the citizens of Queensville, Holland Landing and Lake Simcoe left to deal with the environmental degradation.

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5. The UYSS failed to properly notify the residents of East Gwillimbury that this area was on the list for a proposed sewage treatment plant. A shortcoming they acknowledged during the UYSS workshop in Holland Landing on April 11th, 2012. This is unacceptable. In fact, the lack of communication has been a common theme during this entire process. They have not provided us with sufficient answers regarding our concerns and have been too vague failing to leave us with any confidence in this process.

It is disheartening that the community has been isolated from this initiative. Moreover, we as residents cannot accept any concept that is contrary to the East Gwillimbury Official Plan.

Based on the above points we implore the Members of East Gwillimbury Town Council to take a stand to support its residents against this proposed Sewage Treatment Plant.

We request that this issue be introduced at the next East Gwillimbury Council meeting ensuring that it becomes a matter of record. We trust that our Council Members will support the residents of our area in their desire to stand firm on the current Official Town plan of East Gwillimbury, and stop this sewage plant from being built so close to the heart of Queensville.



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- www.twitter.com/EGEnvironmental
- EGEnvironmentalGroup@gmail.com

Additionally, we request that the East Gwillimbury Council forward letters to the Ministry of the Environment as well as the Region of York in which you state your support for the current Official Development Plan for East Gwillimbury, which does not include a sewage treatment plant and industrial site in Queensville. From a Risk Management perspective, the environmental risk associated with the proposed Queensville sites is too great.

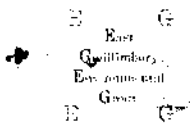
Kindest regards,

Dee
Deborah A. Wae
20380 Leslie St
Queensville, ON
L0R 1K0

¹ Letter from Agatha Garcia-Wright, Director, Environmental Assessment and Approvals Branch, Ministry of the Environment, letter to the Environmental Services Department, The Region of York, 20 December 2010, 3.

² *Ibid.*, 4.

³ *Ibid.*, 4.



www.EGEnvironmentalGroup.ca
www.facebook.com/EGEnvironmentalGroup
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Town of East Gwillimbury,
19000 Leslie Street,
Sharon, Ontario, L0G 1V0.

Re: Upper York Sewage System

Attention Council Members: Mayor Virginia Hackson, Councillors Cathy Morton, Marlene Johnston, Tara Roy-DiClemente, John Eaton

As residents, taxpayers and property owners in the Township of East Gwillimbury, we require the support of our Town Council regarding the Regional Municipality of York's undertaking to install the Upper York Sewage Solutions (UYSS) Water Reclamation Centre in Queensville.

We DO NOT SUPPORT the UYSS "short list" of site selections, all in the heart of Queensville, for the following reasons:

1. We all accept the well thought out, Town of East Gwillimbury Consolidated Official Plan 2031, dated June 2010, which does not include a sewage treatment plant and industrial development in the core of the Queensville population centre. Incorporated in this plan, the residents of East Gwillimbury were to hook up to the York Durham Sewage Line when future development was to take place in our Municipality.
2. The proposed sites will inflict irreparable damage to our property values, quality of life, and enjoyment of our homes because all of the UYSS short list sites are within sight and smell of the existing core population area in Queensville. The inevitable devaluation of our properties, reduction of subsequent property taxes and the impact to the revenue for the town of East Gwillimbury cannot be ignored.
3. Environmental concerns regarding the short list sites have the potential to be the most severe and long lasting.
 - a. We have been unable to determine what engineering processes will be built into the facility to mitigate against a catastrophic failure despite numerous requests for the information from UYSS. Simply having the UYSS team assure us that, "there won't be a failure at the plant," is little consolation that it is being addressed properly. The UYSS team did inform us that in the event of a short term power loss (24-hours or less) they will be able to handle the sewage; however, a power outage in excess of 24-hours would result in some spillage. Of greater concern is a catastrophic equipment failure or human error at the plant. This type of event could potentially result in a widespread biohazard disaster in our town that will foul the Holland River and the surrounding area.

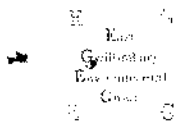


- b. The phosphate reduction levels in the effluent (discharged, non-potable water) are a "design objective"¹ instead of complying with environmental best stewardship. In fact, the Ministry of the Environment (MOE) is concerned enough that the proposed sewage treatment plant will not be able to treat effluent to the design objective levels of 0.01 to 0.02 mg/L total phosphorus, that they plan to audit and stress test the sewage plant in increasing loadings before issuing final certification². Additionally, the Region is being "required to consider contingencies for implementation in the event that the sewage treatment plant does not achieve the proposed effluent quality for concentration or loading³." These points indicate that the MOE is not convinced that the UYSS sewage plant will apply state of the art best practices in this proposed facility. Of course, once this sewage treatment plant is built, even if it fails to meet the total phosphorus reduction targets, it will not be shut down. This will leave the citizens of Queensville, Holland Landing and Lake Simcoe left to deal with the environmental degradation.
4. The increased traffic in Queensville from the solid waste disposal trucks will add noise, odour and congestion to our town not to mention increased contamination risk in the event of a traffic accident. An even larger concern is the potential use of this sewage treatment plant for septic pumping truck dumping. This could result in greatly increased traffic given the number of septic systems in East Gwillimbury and the surrounding areas. The level of increased traffic is difficult to determine since repeated requests to UYSS on the expected number of bio solid and septic disposal trucks has been met with silence.
5. The UYSS failed to properly notify the residents of East Gwillimbury that this area was on the list for a proposed sewage treatment plant. A shortcoming they acknowledged during the UYSS workshop in Holland Landing on April 11th, 2012. This is unacceptable. In fact, the lack of communication has been a common theme during this entire process. They have not provided us with sufficient answers regarding our concerns and have been too vague failing to leave us with any confidence in this process.

It is disheartening that the community has been isolated from this initiative. Moreover, we as residents cannot accept any concept that is contrary to the East Gwillimbury Official Plan.

Based on the above points we implore the Members of East Gwillimbury Town Council to take a stand to support its residents against this proposed Sewage Treatment Plant.

We request that this issue be introduced at the next East Gwillimbury Council meeting ensuring that it becomes a matter of record. We trust that our Council Members will support the residents of our area in their desire to stand firm on the current Official Town plan of East Gwillimbury, and stop this sewage plant from being built so close to the heart of Queensville.



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Additionally, we request that the East Gwillimbury Council forward letters to the Ministry of the Environment as well as the Region of York in which you state your support for the current Official Development Plan for East Gwillimbury, which does not include a sewage treatment plant and industrial site in Queensville. From a Risk Management perspective, the environmental risk associated with the proposed Queensville sites is too great.

Kindest regards,

[Handwritten signature]

*Deanna Cull
Regional Council
Queensville, Ont.
Canada*

¹ Letter from Agatha Garcia-Wright, Director, Environmental Assessment and Approvals Branch, Ministry of the Environment, letter to the Environmental Services Department, The Region of York, 20 December 2010, 3.

² *Ibid.*, 4.

³ *Ibid.*, 4.

May 4/12

Jane Bauer
104 Belmont Heights
PO Box 12
Queensville, Ont
L0G 1R0

Town of East Gwillimbury,
19000 Leslie Street,
Sharon, Ontario, L0G 1V0.

Re: Upper York Sewage System

Attention Council Members: Mayor Virginia Hackson, Councillor Cathy Morton,
Marlene Johnston, Tara Roy-DiClemente, John Eaton.

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3. Environmental concerns regarding the short list sites have the potential to be the most severe and long lasting.
 - a. We have been unable to determine what engineering processes will be built into the facility to mitigate against a catastrophic failure despite numerous requests for the information from UYSS. Simply having the UYSS team assure us that, "there won't be a failure at the plant," is little consolation that it is being addressed properly. The UYSS team did inform us that in the event of a short term power loss (24-hours or less) they will be able to handle the sewage; however, a power outage in excess of 24-hours would result in some spillage. Of greater concern is a catastrophic equipment failure or human error at the plant. This type of event could potentially result in a widespread biohazard disaster in our town that will foul the Holland River and the surrounding area.

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It is disheartening that the community has been isolated from this initiative. Moreover, we as residents cannot accept any concept that is contrary to the East Gwillimbury Official Plan.

Based on the above points we implore the Members of East Gwillimbury Town Council to take a stand to support its residents against this proposed Sewage Treatment Plant.

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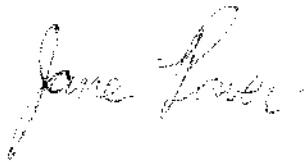
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Additionally, we request that the East Gwillimbury Council forward letters to the Ministry of the Environment as well as the Region of York in which you state your support for the current Official Development Plan for East Gwillimbury, which does not include a sewage treatment plant and industrial site in Queensville. From a Risk Management perspective, the environmental risk associated with the proposed Queensville sites is too great.

Kindest regards,

A handwritten signature in cursive script, appearing to read "Jane Power".

Jane Power
905-475-3014

**JAY & DALE
BALLARD**

8 May 2012

Councillor Marlene Johnston
The Town of East Gwillimbury
19000 Leslie Street,
Sharon, Ontario, L0G 1V0

*IN
MRS - FADER*

Dear Madame Councillor,

We do NOT support the Upper York Sewage Solutions' (UYSS) proposal to build a sewage treatment plant adjacent to the heart of Queensville and directly upwind of Queensville proper.

The lack of Regional transparency and poor notification job by UYSS prior to short listing all sites in Queensville was egregious, but since you are aware of them we won't cover them again. The reason for this letter is that we wanted to identify the immediate and future issues of the most concern to us:

1. Drop in Property Values - Real Estate Agents are now required to inform all potential buyers that Queensville has been short listed to receive the UYSS sewage treatment plant. This will adversely impact the sales price and time of sale for all properties in Queensville. We bought our home in 2009 after having researched the Official Town Plan and, we can assure you, there was no sewage plant identified for Queensville in February 2009, but there was a university identified close by. We had long-term plans to upgrade our property over the years to improve its value, but those plans are being abandoned because we are facing a 25 percent drop in the value of our property. We have since been informed that the university will likely be moved south of Queensville. You can imagine how happy we are that Queensville will lose the post-secondary institution, but gain a sewage treatment plant.
2. Expansion - The UYSS presentations have mentioned that the short list sites must allow for expansion. This proposed plant is being designed to handle 47,000,000 liters of raw sewage per day. That seems like a lot of capacity for a plant that will only handle East Gwillimbury and "a small part of Newmarket's" sewage. We find it highly unlikely that the Region would build a \$500 million dollar sewage treatment facility and run it at less than capacity for a couple of decades until the area population grows enough to push the facility to maximum capacity. We speculate that as soon as the UYSS facility receives Ministry of the Environment (MOE) certification to operate at maximum capacity, all of Newmarket's and most of Aurora's sewage will be shifted north for processing. That would free up approximately 50,000 building permits south of Pine Ridge, which Richmond Hill and Markham would be free to issue with the now reduced demand on the York Durham sewage line. The result will be that any future growth in Aurora, Newmarket or East Gwillimbury will require an expansion of the site. This explains

the desire to have "expandable" short list sites, and that the expansion will occur sooner rather than later.

3. **Industrial Area Creep** - If the proposed sewage site in Queensville becomes a reality, the zoning will have to be changed from agricultural / future residential to industrial in order for the plant to be built. Once the zoning changes to industrial there will be nothing to stop the flood of zoning change requests for that area. This will foul the view and the air for all Queensville residents. For clarity, the proposed sites are all directly upwind of Queensville residents and within two kilometers from those neighborhoods. We find it hard to imagine that Queensville will be the centre of smart growth and jobs with the gentle scent of sewage treatment and industrial plants being blown right into the heart of the planned population growth.
4. **Cultural Migration** - We both own small, Queensville based businesses. Dale's is a successful and expanding, artisan glassware company and mine is an International Military Consulting firm. If the sewage treatment plant is built in Queensville, we may be forced to move our businesses to another location. Our clients will not be impressed with the view or smell and this industrial environment will adversely affect our sales. Many business owners we have talked to will move from East Gwillimbury if this plant is built in Queensville, and this will permanently change the cultural layout of our community.
5. **Water Quality** - The UYSS advertise that their plant will reduce phosphates of the effluent (treated sewage that is non-potable and is to be dumped into the Holland River) down to 0.01-0.02 mg/liter. UYSS have identified the Orange County (OC), California Water Treatment facility as a model for the type of plant they will build. I spoke to Mr Patel, Ground Water Reclamation System Program Manager at the OC Water District regarding the total phosphate levels in their reclaimed water. He stated that phosphate levels are taken down to, "near non-detect levels due to the use of reverse osmosis." Mr. Patel further added that, "Phosphates are an important concern when the water containing phosphates is being discharged to a natural water body such as a lake or stream as it can decrease oxygen levels for aquatic life." Of course, this begs the question that if the UYSS plant is based on the OC tertiary water reclamation plant, and they can reduce phosphates to non-detectable levels AND phosphates are bad for natural water bodies, then why isn't the UYSS plant being designed to reduce phosphates to non-detectable levels? We asked this question of Adrian Coombs, UYSS Senior Project Manager. She would not directly answer the question, but did mention that the effluent would be picked up by the various water treatment plants around Lake Simcoe and treated for drinking.
6. **Biosolids and Trucks** - On May 1st at the UYSS location we also asked Ms. Coombs about biosolid treatment and the number of trucks required to dispose of it at the proposed plant. She did mention that there were several alternatives being reviewed and that an estimate on truck traffic would be impossible to determine until the team

had settled on a preferred biosolid disposal method. During this discussion with Ms. Coombs, we asked her about septic truck ("honey wagons") dumping their loads at the proposed site and Ms. Coombs informed us at that time that septic trucks would not empty septic tank discharge at this plant. We received a follow up email on 7 May from her in which she backs away from her earlier statement that septic trucks would not empty their cargo at the proposed plant. This is a MAJOR concern. There are thousands of septic tanks in East Gwillimbury and the surrounding region. Receiving a daily "conga line" of honey wagons at the proposed plant will greatly escalate the traffic and odour associated with this facility. Additionally, we asked about biosolid incineration at this plant and were informed that this has not been ruled out.

Of note, we were in attendance during the May 7th Committee of the Whole Council meeting. During Mr. Buchanan's Deputation for the East Gwillimbury Environmental Group, he asked that the Council support the Official Town Plan, which does not include a sewage treatment plant in Queensville. He requested that you inform the Region and MOE of this fact and that you support your Official Town Plan. It was not lost on those of us in attendance that you did not respond to these requests. You were rightfully indignant at the Region's lack of communication with the local residents and resolved to pressure the Region to communicate with us more effectively. We are not looking for more effective communications on the part of the Region, but rather the removal of the four short listed sites from Queensville. Pressuring the Region to communicate more effectively with us after they have determined the short list site is like posting a doorman at the barn to close the door after all of the horses have already gotten out.

One final point, is that just because an engineering consultancy has determined that a particular site is ideal for this proposed plant doesn't mean that it will contribute to the holistic and smart growth of our Town.

This issue will directly determine how we (and all of our friends) vote in the next election.

Sincerely,

Jay Ballard & Dale Ballard

May 7, 2012

Dear Ms. DiClemente:

I am writing on behalf of myself and my family to voice my opposition to the proposed construction of a sewage treatment plant north of the Queensville sideroad.

My reasons for this are as follows:

1. The entire process has been handled in an underhanded manner by the Region who modified the wording of our Official Plan without explaining the implications even to our own elected representatives. It is apparent that Council has been as much surprised as the general public by the shortlisting of four sites in Queensville earlier in the year that weren't even on the "long list" mooted in 2011.
2. No proper consultation or notice was given and written notice was confined to only those properties that were in or adjacent to the proposed sites. For a project of this magnitude and the potential impact it would have on a considerable segment of the population of East Gwillimbury, this is entirely unacceptable and undermines the very core of the process of public consultation.
3. Much has been made of the fact that 2 "willing hosts" exist in East Gwillimbury who would be quite happy make land available for the project. This point is entirely irrelevant as the Province and Region have never shown any reluctance in the past to expropriate whatever land they deemed fit for whatever use they saw fit to put it to.
4. The Treatment plant is based on what YRSS has termed "Innovative Technology". To my mind this is merely a euphemism for "untested". As such, it would not be prudent to allow this technology to be used where a miss-step could end up contaminating the entire southern Lake Simcoe watershed.
5. Phosphate level-reduction supposedly leading to the proposed sale of "credits" to other Municipalities is not an environmentally sound strategy. This leads to a "status quo" on pollution as those whose efforts lead to an actual reduction are nullified by the sale of the right for others to over-pollute.
6. No satisfactory answer has yet been forthcoming with respect to the disposal of the bio-solids that will be produced by the plant. How will it be disposed of and where?
7. Representations have been made by UYSS that the plant will not produce any odour and there has even been a suggestion that the "air" could be treated. There has never been an instance to my knowledge of a sewage treatment plant not producing odour and the suggestion to "treat the air" in the event that it does is not only ludicrous, but an insult to our intelligence.

Given the above, I would respectfully request that you take whatever measures lie within you power as the elected representatives of the citizens of East Gwillimbury to put a halt to this project immediately.

Regards,

Howard A. Wright

Howard A. Wright, MBA, CMA
Vice-President Finance
Zedd Customer Solutions LP
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Toronto, ON
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