

# REPORT

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## CENTRAL LAKE ONTARIO CONSERVATION AUTHORITY

**DATE:** April 12, 2010  
**FILE:** ACAD7  
**S.R.:** 4874-10  
**MEMO TO:** Chair and Members, CLOCA Board of Directors  
**FROM:** R. Perry Sisson, Director, Engineering & Field Operations  
C. Darling, Director, Development Review & Regulation  
D. Hope, Special Projects Coordinator  
**SUBJECT:** CLOCA – DRAFT Protocol for Large Fill Sites

APPROVED BY C.A.O. \_\_\_\_\_

The purpose of this report is to present a protocol for the review of applications for large fill sites. Throughout the development of this protocol various methods of administering this protocol were discussed by Authority staff and have been incorporated into this report for consideration by the Authority Board.

### **1.0 The Conservation Authorities Act and Ontario Regulation 42/06**

Ontario Regulation 42/06 (O.Reg.42/06) is this Authority's Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. O.Reg.42/06 made under the Conservation Authorities Act (*CA Act*) empowers CLOCA to prohibit, restrict and regulate development activity in or adjacent to watercourses, valleylands, Lake Ontario and inland lake shorelines, hazard lands and wetlands.

Section 28(25) of the Conservation Authorities Act defines *development* as

- a) The construction, reconstruction, erection, or placing of a building or structure of any kind;
- b) Any change to a building or structure that would have the effect of altering the use or potential use of the building or structure, increasing the size of the building or structure, or increasing the number of dwelling units in the building or structure;
- c) *Site grading; or*
- d) *The temporary or permanent placing, dumping or removal of any material, originating on the site or elsewhere.*

In accordance with the requirements of the *CA Act* and Ontario Regulation 97/04, Conservation Authorities and their respective Board of Directors possess regulatory authority associated with *development* and may grant permission, with conditions, for development oriented activities (described above).

*Section 20* of the *CA Act* describes the objects of a Conservation Authority, which are to establish and undertake, in the area over which it has jurisdiction, a program designed to further the conservation, restoration, development, and management of natural resources other than gas, oil, coal, and minerals.

*Section 21* of the *CA Act* lists the powers which Conservation Authorities have for the purpose of accomplishing their objects. Some of the objects identified in the *CA Act* relevant to this protocol include:

- (a): to study and investigate the watershed and to determine a program whereby the natural resources of the watershed may be conserved, restored, developed and managed;
- (m.1): to charge fees for services approved by the Minister (see Policies and Procedures manual chapter on CA fees);
- (n): to collaborate and enter into agreements with ministries and agencies of government, municipal councils, local boards and other organizations.

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Other applicable legislation may include, but not be limited to the following: Environmental Protection Act, Municipal Fill / Site Alteration By-Laws, the Clean Water Act, Ontario Regulation 153/04 (Brownfield's legislation), Ontario Regulation 511/09 (New Brownfield's legislation), Provincial Policy Statement (PPS), Planning Act, Oak Ridges Moraine Act, Municipal Act, Species at Risk Act (Ontario Regulation 230/08), Public Lands Act, Drainage Act, Federal Fisheries Act, etc.

## **2.0 Fill Sites Within CLOCA's Jurisdiction**

Since the late 1990's within the CLOCA jurisdiction, the number of applications received regarding proposals for large scale fill operations has increased significantly, with the Authority experiencing a spike over the past 2-3 years. The proximity of CLOCA's jurisdiction to the Greater Toronto Area (GTA), the construction of the Hwy. 407, and the numerous large- scale residential and industrial/commercial developments within and adjacent to the Regional Municipality of Durham has contributed to the movement of fill into and around our watershed. The proposed Darlington Nuclear expansion is expected to add a significant volume of fill that will be seeking temporary or final resting places. An excerpt from the Environmental Impact Study regarding the Darlington New Build in the Municipality of Clarington states "The bounding site development layout involves the excavation and handling of approximately 12.4 million m<sup>3</sup> of soil and rock. Of this, 4.5 million m<sup>3</sup> will be placed in the Northeast Landfill Area and approximately 1.2 million m<sup>3</sup> placed in and adjacent to the existing Darlington Nuclear Generating Station soil stockpile in the northwest quadrant of the Darlington Nuclear site. Approximately 3 million m<sup>3</sup> will be placed as lake in-fill, and the remainder, **about 3.7 million m<sup>3</sup>, will be transported to off-site disposal within 25 km of the Darlington Nuclear site.**"

In addition, the Ministry of the Environment (MOE) estimates the following annual tonnages of fill were being generated as far back as the early 1990's:

<b>Material</b>	<b>Estimated Annual Tonnage</b>
<b>Dredged material</b>	<b>340,000 to 460,000</b>
<b>Excavated soil and rock</b>	<b>1.5 to 4 million</b>
<b>Old concrete, bricks and masonry</b>	<b>800,000 to 1,500,000</b>
<b>Foundry sand</b>	<b>105,000 to 195,000</b>
<b>Old asphalt</b>	<b>280,000 to 460,000</b>
<b>Total Annual Tonnage</b>	<b>3.025 – 6.675 million</b>

**Source: Soil, Groundwater and Sediment Quality Criteria in Ontario (Technical Report prepared for the Office of the Environmental Commissioner of Ontario), January, 2010**

MOE has created numerous guidelines and pieces of legislation associated with various categorizations of waste, classifications of fill and soil quality that date back to the 1990's. Regardless of their classifications, the most important thing to note for the sake of this protocol is that the generation (and subsequent relocation) of all types and classifications of fill has been a market that has been growing for decades.

Dating back to the early 1990's "MOE noted that illegal dumping had increased and many municipalities had placed restrictions or bans on accepting soil at landfill sites." Over time as regulatory standards associated with fill have evolved, so too has the marketability of fill as a commodity and the creation of large fill sites. Given the apparent increase in demand for the creation of large fill sites within and adjacent to the Greater Toronto Area (GTA), contractors are getting paid to remove fill and property owners in our jurisdiction are currently being offered as much as \$15-\$60 per truck load to accept fill. The generation and movement of fill is often associated with development oriented activities such as residential subdivisions, commercial developments, redevelopment activities (ie. site restoration, demolition, Brownfield redevelopment sites etc.), soil harvesting / recycling / marketing and so on.

Given the competitiveness of the trucking industry, haulers are being pressured to transport fill of any nature. Less credible haulers are resorting to whatever tactics necessary to move fill, which is tarnishing the image of the credible trucking companies. For landowners, the offer of getting paid up to \$60 per triaxle load to accept fill material often clouds their judgement / awareness of the quality of material that they may be receiving.

Table 1 and Figure 1 show the impact in CLOCA's watershed for the years 2007, 2008 and 2009.

**Table 1: Large Fill Sites in CLOCA Jurisdiction (2007-2009)**

Year	Site #	Address	Approximate Volume
2007	1	746 Columbus Road East, Oshawa	1,000,000 m <sup>3</sup>
	2	1442 Coates Road, Scugog	2,000,000 m <sup>3</sup>
	3	Northeast corner Lakeridge Rd./Hwy. 7, Whitby	2,000,000 m <sup>3</sup>
	4	2677 Audley Road, Pickering	50,000 m <sup>3</sup>
	5	10301 Hwy.12, Scugog	10,000 m <sup>3</sup>
	6	Northwest Corner Langmaid/Conlin, Oshawa	1,000,000 m <sup>3</sup>
	7	1587 Taunton Road, Clarington	10,000 m <sup>3</sup>
	8	639 Kingston Road, Ajax	600,000 m <sup>3</sup>
	9	140 Myrtle Road, Whitby	40,000 m <sup>3</sup>
	10	3190 Holt Road, Clarington	1,200 m <sup>3</sup>
	11	5400 Halls Road, Whitby	60,000 m <sup>3</sup>
	12	7632 Ashburn Road, Whitby	3,000 m <sup>3</sup>
	13	7861 Cochrane Road, Whitby	4,500 m <sup>3</sup>
	14	2405 Audley Road, Pickering	33,000 m <sup>3</sup>
	15	3201 Rundle Road, Clarington	50,000 m <sup>3</sup>
	16	4646 Courtice Road, Clarington	80,000 m <sup>3</sup>
	17	3700 Hancock Road, Clarington	225,000 m <sup>3</sup>
2008	1	Durham College/VOIT, Oshawa	10,000 m <sup>3</sup>
	2	Holt Road, Clarington (Lot 20, Con. 2)	100,000 m <sup>3</sup>
	3	Part Lot 29, Concession 9, Pickering	10,000 m <sup>3</sup>
	4	3242 Solina Road, Clarington	60,000 m <sup>3</sup>
	5	4690 Lakeridge Road, Pickering	40,000 m <sup>3</sup>
	6	5400 Halls Road, Whitby	100,000 m <sup>3</sup>
	7	618 Columbus Road, Oshawa	100,000 m <sup>3</sup>
2009	1	3380 Hwy. #7, Pickering	250,000 m <sup>3</sup>
	2	2529 Concession Road 8, Clarington	5,000 m <sup>3</sup>
	3	3315 Hwy. #7, Pickering	100,000 m <sup>3</sup>
	4	5400 Halls Road, Whitby	30,000 m <sup>3</sup>
<b>Total</b>			<b>7,971,700 m<sup>3</sup></b>

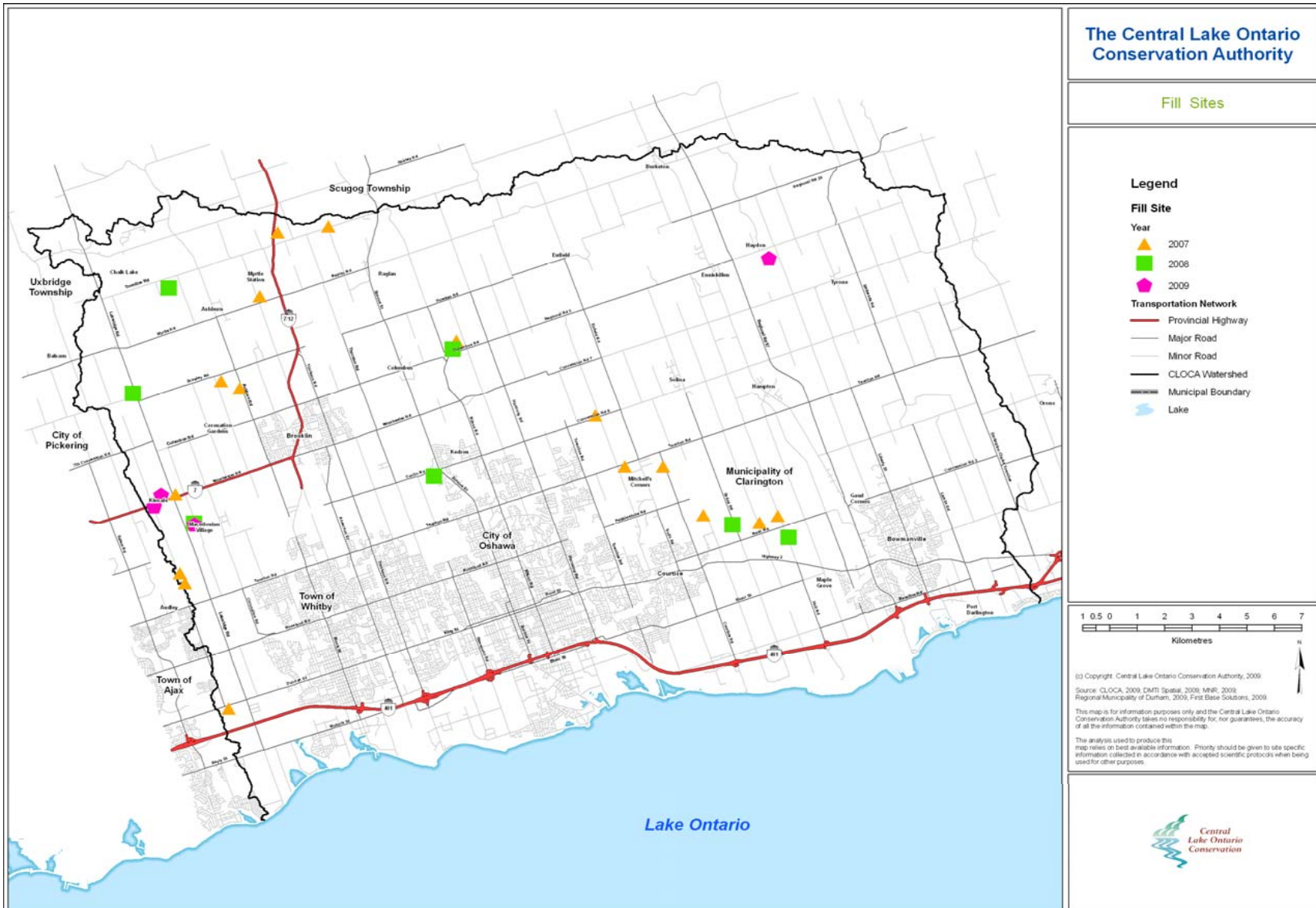


Figure 1:

Municipalities in Durham Region have tried to keep up with the fill industry by passing By-laws to regulate and place controls on site alteration, the dumping of fill, removal of fill, grade alteration, as well as fill and topsoil disturbance. Within CLOCA's jurisdiction all area municipalities, have some form of Site Alteration / Fill By-law or are in the process of establishing such By-laws. The creation of these By-laws has placed additional pressures on municipal staffing, enforcement and resources. The issuance of permits for municipalities in our jurisdiction is often inconsistent from one municipality to the next given various exemptions (ie. agricultural lands, condition of approval in accordance with an application submitted under the Planning Act, Ontario Drainage Act, Tile Drainage Act, Building Code Act etc.) that have been incorporated into their respective By-laws. Some municipalities issue 5 – 10 permits on an annual basis for large fill sites given the structure of their By-law, while permit issuance for others is relatively non – existent. This has resulted in municipal enforcement that is often uneven and inconsistent from one municipality to the next. Municipalities that are actively enforcing these By-laws are finding out very quickly that dealing with this issue is very demanding, time consuming and costly to staff and enforce.

It is the opinion of the CLOCA that it is the responsibility of our agency to ensure that when issuing development related permits for large fill sites in accordance with Ontario Regulation 42/06, that we exercise our own due diligence by taking reasonable steps to communicate with our partner agencies and incorporate reasonable conditions where necessary, in order to ensure that the placement of fill material will not have a negative or adverse impact on the environment.

## **2.1 Review of Existing Section 28 Procedures**

Currently, Authority staff will receive an application for development at the front counter. The application for development is often accompanied by a plan or plans that are submitted in support of the application. Applications may range in scope from development activities associated with the placement of fill to construct a swimming pool or a habitable addition, to development activities associated with the placement of 1,000,000 cubic metres of fill.

### **Strengths of Existing Program:**

- Hands on knowledge of watershed.
- There is consistency within the Regulations program as there is only one full time officer dealing with Section 28 applications / permits submitted under O. Reg. 42/06.
- Regulations program will issue approximately 200 - 250 permits for development activities on an annual basis, 100 – 150 property / solicitor's inquiries (where formal written responses are required) and approximately 200 – 300 more informal email and telephone oriented inquiries.
- The program functions as a "one stop shop." CLOCA has strong working relationships with our municipalities, the Department of Fisheries & Oceans, the Ministry of Natural Resources and the Ministry of the Environment.
- CLOCA Regulations staff often facilitates the application and approval of a number of different types of development oriented permits (ie. filling, alteration to watercourse, additions, swimming pools etc).
- Applications are generally issued in a timely manner as a permit under O.Reg 42/06 (usually within one week of receipt of the application).
- Section 28 staff are fully trained Provincial Offences Officers in accordance with the Provincial Offences Act and the Conservation Authorities Act.

**Weaknesses:**

- There are inconsistencies and there is a general lack of adequate information in drawings / plans that are submitted by applicants.
- Officers are often uncertain as to the origin, nature and quality of the fill that is being placed.
- For Section 28 of the CA Act, the customer service and educational aspect of the position is often extremely time consuming.
- Large fill sites generate a large number of complaints from adjacent property owners resulting in additional staff time for enforcement officers.
- Prosecutions that proceed to trial can occupy approximately 4 – 6 weeks of time of a Provincial Offences Officer.
- Expenses associated with the prosecution of an offence are paid for in full by CLOCA. The recovery of these expenses through the courts is often a challenge to receive through sentencing given the structure of the legislation. Penalties through sentencing often end up with other Provincial Offences (in Provincial coffers).
- CLOCA Regulations fees are significantly less than most adjacent Conservation Authorities. Cost recovery of staff time and resources is estimated at approximately 5% when compared against the average cost of a permit.

**Recommendations:**

- A large fill site protocol and additional staffing is required to appropriately deal with large fill sites within the CLOCA jurisdiction.
- A fee schedule be adopted that deals solely with large fill sites and cost recovery for Authority staff time.
- Incorporate additional requirements / conditions as part of the permit approval process in order to ensure that the placement of fill material will not have a negative or adverse impact on the environment.

**3.0 Proposed Protocol for Large Fill Sites**

The provisions of this protocol only apply to those lands that are situated within the regulatory jurisdiction of the Central Lake Ontario Conservation Authority, as specified within the Conservation Authorities Act and Ontario Regulation 42/06. The Protocol establishes a thorough review procedure in order to ensure that the placement of fill will not negatively affect the control of flooding, erosion, dynamic beaches, pollution or the conservation of land and to ensure that there are clear and consistent information requirements with our partner area municipalities.

**Large fill sites are classified by the Authority as those sites that meet the definition of development and involve 500 cubic metres of fill or more.**

- 1) Upon receipt of an application submitted under O. Reg. 42/06 for development activities associated with the placement of fill in excess of 500 m<sup>3</sup>, Authority staff will ensure that the application is complete and all necessary supporting documentation has been submitted. Supporting documentation will include:
  - An application in writing may be provided by an authorized agent acting on behalf of the property owner provided that the authorized agent has been granted permission in writing by the property owner (copy of permission shall be provided with application). The permit will not be issued until it is signed by the registered property owner(s) and / or principle of the numbered company.
  - Four copies of a plan of survey prepared by a certified Ontario Land Surveyor showing the subject property and the specific location(s) on the subject property where development activities are being proposed. The certified plan shall show a minimum of the following:

- Location of subject property including property lines, north arrow and nearest roadways/intersections.
  - Existing topography. Elevations and proposed elevations within and adjacent to the area where development is being proposed. The plan must show the subject property and each fill envelope being proposed.
  - **A total fill quantity must be shown on the plans in cubic metres.**
  - No filled slopes are to exceed a gradient of 3 (horizontal): 1 (vertical).
  - Sediment and erosion control measures.
  - Drainage patterns pre and post development.
  - Location of all environmentally sensitive features that may include, but not be limited to the following: watercourses (i.e. ditches, streams, rivers, lakes), wetlands, valleys/valley walls, hydrogeologically sensitive features (i.e. springs, seeps, etc). A setback/radius of no less than 30 m around the perimeter of each of the aforementioned features must be shown on the plan.
  - The Authority's regulatory limit as prescribed by Ontario Regulation 42/06.
  - The regulatory flood plain of a watercourse with a 30 m setback.
  - Other known site features and structures such as access roads, culverts, utilities, poles, pavement, curbs, etc.
  - Restoration details (i.e. detail site stabilization measures such as topsoil, seed, sod, hydroseed and associated timing, etc.)
- Completion in full of form entitled "Schedule A" (Copy Attached)
  - A soil report prepared by a qualified environmental/geotechnical engineer and/or Professional Geoscientist shall be provided for each location where fill is being imported from. The soil report(s) shall consist of a minimum of the following:
    - Municipal address of site where soil is originating from
    - A soil report prepared by a qualified person that has been prepared in accordance with pertinent Ministry of the Environment guidelines (ie. Ontario Regulation 347, Ontario Regulation 461/05).
  - It is the responsibility of the authorized agent/owner to provide written authorization/consent from the respective municipality in which the proposed fill site is located (i.e. Town of Ajax, City of Oshawa, City of Pickering, Municipality of Clarington, Township of Scugog, Township of Uxbridge, Town of Whitby) regarding their approval of the large fill site, prior to permit issuance. Municipal partner agencies may be concerned with one or more of the following:
    - Oak Ridges Moraine Conservation Plan, Greenbelt Plan
    - Condition of municipal roadways and site entrance
    - Haul route from fill removal location to proposed fill site location
    - Mud mat, dust control schematics for fill site and fill removal location
    - Where fill is being imported from one municipality to another, it will be the responsibility of the authorized agent/owner to provide written authorization/consent from both municipalities
  - Where site specific conditions/concerns are warranted, the Authority may require that an Environmental Impact Study (EIS) be completed in support of the subject application. Once an application is submitted by the authorized agent/owner, the Authority will review the proposal and if deemed necessary, a Terms of Reference will be provided outlining the requirements of the study. It will be the sole responsibility of the authorized agent/owner to pay for and complete the EIS. Site specific issues may include, but not be limited to, proximity to or presence of one or more of the following:
    - hydrogeologically sensitive features i.e. springs, seeps
    - features identified by the Clean Water Act (2006) (i.e. intake protection zones, wellhead protection areas, significant groundwater recharge areas, and the highly vulnerable aquifers)
    - environmentally sensitive features
    - natural heritage features
    - species at risk

- 2) An application will not be deemed complete until all information has been submitted in support of the application. If information is missing from the application submission, it will be the responsibility of the owner and/or authorized applicant to ensure that the information is provided.
- 3) Where proposed fill site locations are regulated jointly by both CLOCA and a municipal fill By-Law, the proponent shall prepare comprehensive plans/reports for both agencies.
- 4) Only one active CLOCA permit per municipal address can exist at any one time.
- 5) Written permission from the Authority consenting to a large fill operation will only be granted to a maximum of 1 year from the date of Authority Board approval specified on the permit.
- 6) In accordance with the Conservation Authorities Act and Ontario Regulation 42/06, there will be no renewals or extensions.
- 7) A new application for development can be submitted prior to the expiry date specified on the permit. The new application will be subject to the requirements and stipulations of Section 3.0 and the same fee structure will apply.
- 8) Following the issuance of a permit from the Authority, CLOCA enforcement staff will conduct routine site inspections of large fill sites in order to ensure compliance with permit conditions subsequent to this protocol.
- 9) It will be the responsibility of the owner and / or authorized agent to ensure that a final inspection with Authority enforcement staff is coordinated. A final site inspection and review of permit conditions shall be completed prior to the expiration date on the permit.
- 10) The Authority may apply the following conditions to any permit issued under O. Reg. 42/06:
  - a) The submission of a post development plan (as built) prepared by a certified Ontario Land Surveyor;
  - b) A specified limit on the volume of fill that is permitted;
  - c) A specified limit of the depth of fill material that is permitted; and
  - d) A requirement for testing of fill and / or groundwater to ensure that the material is inert

#### **4.0 Exceptions**

In accordance with the Conservation Authorities Act:

(10) No regulation made under subsection (1),

- (a) shall limit the use of water for domestic or livestock purposes;
- (b) shall interfere with any rights or powers conferred upon a municipality in respect of the use of water for municipal purposes;
- (c) shall interfere with any rights or powers of any board or commission that is performing its functions for or on behalf of the Government of Ontario; or
- (d) shall interfere with any rights or powers under the *Electricity Act, 1998* or the *Public Utilities Act, 1998*, c. 15, Sched. E, s. 3 (8); 1998, c. 18, Sched. I, s. 12.

(11) A requirement for permission of an authority in a regulation made under clause (1) (b) or (c) does not apply to an activity approved under the *Aggregate Resources Act* after the *Red Tape Reduction Act, 1998* received Royal Assent. 1998, c. 18, Sched. I, s. 12.

#### **5.0 Denial of Permit Application:**

- If, in the opinion of the Authority the application would result in a negative and / or adverse impact on the control of flooding, erosion, dynamic beaches, pollution, or the conservation of land, the permit may be denied by Authority staff.
- Following a denial, the applicant will have the right to a hearing before the Authority Board. The Authority Board may refuse the permission; or grant the permission with or without conditions.



- In accordance with the CA Act S.15, “A Person who has been refused permission or who objects to conditions imposed on a permission may, within 30 days of receiving the reasons under subsection (14), appeal to the Minister who may,
  - a) Refuse the permission; or
  - b) Grant the permission, with or without conditions

**6.0 Cancellation of permission:**

- The Authority may cancel a permission, if it is of the opinion that the conditions of the permission have not been met.
- Before cancelling a permission, the Authority shall give a notice of intent to cancel to the holder of the permission indicating that the permission will be cancelled unless the holder shows cause at a hearing why the permission should not be cancelled.
- Following the giving of the notice, the Authority shall give the holder at least five days notice of the date of the hearing.

**7.0 Education and Awareness**

Authority staff will also examine the merits of developing an education and awareness program targeted to contractors, haulers and land owners. Such a program would raise awareness of the applicable laws and potential for things that can go wrong with accepting large volumes of fill.

**8.0 Regulation Fees**

**8.1 Existing CLOCA Fee Schedule**

<b>ENVIRONMENTAL REGULATION FEES</b>		
<b>Applications under Ont. Reg. 42/06(Auth. Res. #46/06, dated March 21, 2006)</b>		
Property Inquiry	150.00	Solicitor’s inquiry or other requests for detailed property info
Minor & Major (Located outside of the hazard limit but within the allowance)	100.00	Any minor or major application located outside of a hazard limit, but within the allowance are associated with the hazard or wetland
Minor Application (Located within a hazard limit)	250.00	Minor applications would be ancillary structures(decks, sheds, garages and pools), additions less than 40% of the original gross floor area of a structure, interior renovations, alterations to shorelines or watercourses less than 10 metres in length or re-grading of an area no larger than 100sq.m. \$250 is the base fee; where an individual application requires unusual review costs, compensation up to and including \$1500 may be requested prior to the issuance of an Authority permit.
Major Application (Located within a hazard limit)	500.00	Major applications would be new structures, additions equal to or greater than 40% of the original gross floor area of a structure, alterations to shorelines and watercourses 10 metres in length or greater or re-grading an area larger than 100 sq. m. \$500 is the base fee; where an individual application requires unusual review costs, compensation up to and including \$1500 may be requested prior to the issuance of an Authority permit.
Paper Reg Limit 1:10000	50.00 1,500.00	each paper copy; set of 31 sheets (Resolution 46/2006)
PDF Reg Limit 1:10000	35.00 1,000.00	each sheet set of 31 sheets (Resolution 46/2006)
Digital Reg Limit	100.00 3,000.00	per tile set of 31 tiles (Resolution 46/2006)

**8.2 Other Conservation Authority Approved Fee Schedules**

Based on our surveyed responses from other Conservation Authorities and to the best knowledge of Authority staff, there are no large fill site protocols currently in place and as such, existing Conservation Authority fee schedules are not structured to appropriately deal with the cost recovery of Authority staff time associated with large fill sites.

**8.3 Proposed CLOCA Fee Schedule for Large Fill Sites**

Authority staff recommends that this Authority Board approve a new fee schedule specifically for large fill sites within our jurisdiction. The proposed fee schedule has been developed in an effort to ensure the cost recovery of Authority staff time and resources for these applications given the comprehensive review and monitoring that is being proposed. Authority staff has met with staff from some of our area municipalities who have cautioned that even with average permit costs into the \$1000 - \$2000 range, cost recovery of their staff resources and time is only in the order of approximately 10%. The following fee structure is proposed.

VOLUME OF FILL (m <sup>3</sup> )	FEE (\$)
50 or less	\$250
50 – 500	\$500
> 500	\$500 PLUS 5 cents per m <sup>3</sup>

**NOTE** - Fees do not include the costs associated with any special studies and / or plans that may be required as a condition associated with the permit. All costs are the responsibility of the owner / applicant.

If you refer back to Table 1 in this report, had the above fee schedule been in effect for 2007, 2008, and 2009, the following cost recovery measures would have occurred over the last 3 fiscal years.

**Table 2:**

Year	Site #	Approximate Volume	Cost
2007	1	1,000,000 m <sup>3</sup>	\$50,500
	2	2,000,000 m <sup>3</sup>	\$100,500
	3	2,000,000 m <sup>3</sup>	\$100,500
	4	50,000 m <sup>3</sup>	\$3,000
	5	10,000 m <sup>3</sup>	\$1,000
	6	1,000,000 m <sup>3</sup>	\$50,500
	7	10,000 m <sup>3</sup>	\$1,000
	8	600,000 m <sup>3</sup>	\$30,500
	9	40,000 m <sup>3</sup>	\$2,500
	10	1,200 m <sup>3</sup>	\$560
	11	60,000 m <sup>3</sup>	\$3,500
	12	3,000 m <sup>3</sup>	\$650
	13	4,500 m <sup>3</sup>	\$725
	14	33,000 m <sup>3</sup>	\$2,150
	15	50,000 m <sup>3</sup>	\$3,000
	16	80,000 m <sup>3</sup>	\$4,500
	17	225,000 m <sup>3</sup>	\$11,750
2008	1	10,000 m <sup>3</sup>	\$1,000
	2	100,000 m <sup>3</sup>	\$5,500
	3	10,000 m <sup>3</sup>	\$1,000
	4	60,000 m <sup>3</sup>	\$3,500
	5	40,000 m <sup>3</sup>	\$2,500
	6	100,000 m <sup>3</sup>	\$5,500
	7	100,000 m <sup>3</sup>	\$5,500
2009	1	250,000 m <sup>3</sup>	\$13,000
	2	5,000 m <sup>3</sup>	\$750
	3	100,000 m <sup>3</sup>	\$5,500
	4	30,000 m <sup>3</sup>	\$2,000
<b>Total</b>			<b>\$412,585</b>

This fee schedule would fund the enforcement effort necessary to appropriately monitor and enforce large scale fill operations throughout our jurisdiction.

**9.0 Options for Consideration:**

1. Carry on with the current regulatory procedures and continue to implement the same fee structure.
2. Authority regulations staff could prohibit any large scale fill sites within our regulatory jurisdiction that has been established by Ontario Regulation 42/06 (subsequent to the CA Act).
3. Recommend approval of the proposed “Large Fill Site” protocol (inclusive of fee schedule).
4. Recommend approval of the proposed “Large Fill Site” protocol (inclusive of fee schedule) and CLOCA could investigate a “pilot project” with an area municipality situated within our jurisdiction. Authority staff would be directed to complete an Agreement with municipal staff that would empower Authority officers to regulate the municipal Site Alteration By-Law, as well as the Authority’s O. Reg. 42/06. This approach would encourage further synergy with one of our municipal partners, while resulting in a significant reduction in duplication of resources.

**RECOMMENDATION:**

***THAT Staff Report #4874-10 be received for information; and,  
THAT Option #3 be approved for immediate implementation, and  
THAT staff be directed to explore the feasibility of a pilot project as recommended in Option #4 and report back to the Board of Directors.***

**ONTARIO REGULATION 42/06**  
made under the  
**CONSERVATION AUTHORITIES ACT**

Made: September 15, 2005

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**CENTRAL LAKE ONTARIO CONSERVATION AUTHORITY: REGULATION OF DEVELOPMENT,  
INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES AND WATERCOURSES**

**Definition**

1. In this Regulation,

“Authority” means the Central Lake Ontario Conservation Authority.

**Development prohibited**

2. (1) Subject to section 3, no person shall undertake development, or permit another person to undertake development in or on the areas within the jurisdiction of the Authority that are,

(a) adjacent or close to the shoreline of the Great Lakes-St. Lawrence River System or to inland lakes that may be affected by flooding, erosion or dynamic beaches, including the area from the furthest offshore extent of the Authority’s boundary to the furthest landward extent of the aggregate of the following distances:

(i) the 100 Year flood level, plus the appropriate allowance for wave uprush shown in the column headed “100 Year Flood Limit” found in Table 7.1 of the document entitled “Lake Ontario Shoreline Management Plan”, December 1990, which is available at or through the Authority at its head office located at 100 Whiting Avenue, Oshawa, Ontario, L1H 3T3,

(ii) the predicted long term stable slope projected from the existing stable toe of the slope or from the predicted location of the toe of the slope as that location may have shifted as a result of shoreline erosion over a 100-year period,

(iii) where a dynamic beach is associated with the waterfront lands, the appropriate allowance inland to accommodate dynamic beach movement shown in the right-hand column of Table 7.1 of the document entitled “Lake Ontario Shoreline Management Plan”, December 1990, which is available at or through the Authority at the address given in subclause (i), and

(iv) 15 metres inland;

(b) river or stream valleys that have depressional features associated with a river or stream, whether or not they contain a watercourse, the limits of which are determined in accordance with the following rules:

(i) where the river or stream valley is apparent and has stable slopes, the valley extends from the stable top of bank, plus 15 metres, to a similar point on the opposite side,

(ii) where the river or stream valley is apparent and has unstable slopes, the valley extends from the predicted long term stable slope projected from the existing stable slope or, if the toe of the slope is unstable, from the predicted location of the toe of the slope as a result of stream erosion over a projected 100-year period, plus 15 metres, to a similar point on the opposite side,

(iii) where the river or stream valley is not apparent, the valley extends the greater of,

(A) the distance from a point outside the edge of the maximum extent of the flood plain under the applicable flood event standard, plus 15 metres, to a similar point on the opposite side, and

(B) the distance from the predicted meander belt of a watercourse, expanded as required to convey the flood flows under the applicable flood event standard, plus 15 metres, to a similar point on the opposite side;

(c) hazardous lands;

(d) wetlands; or

(e) other areas where development could interfere with the hydrologic function of a wetland, including areas within 120 metres of all provincially significant wetlands and wetlands greater than 2 hectares in size, and areas within 30 metres of wetlands less than 2 hectares in size, but not including those where development has been approved pursuant to an application made under the *Planning Act* or other public planning or regulatory process.

(2) The areas described in subsection (1) are the areas referred to in section 12 except that, in case of a conflict, the description of the areas provided in subsection (1) prevails over the descriptions referred to in that section.

### **Permission to develop**

3. (1) The Authority may grant permission for development in or on the areas described in subsection 2 (1) if, in its opinion, the control of flooding, erosion, dynamic beaches, pollution or the conservation of land will not be affected by the development.

(2) The permission of the Authority shall be given in writing, with or without conditions.

### **Application for permission**

4. A signed application for permission to undertake development shall be filed with the Authority and shall contain the following information:

1. Four copies of a plan of the area showing the type and location of the development.
2. The proposed use of the buildings and structures following completion of the development.
3. The start and completion dates of the development.
4. The elevations of existing buildings, if any, and grades and the proposed elevations of buildings and grades after development.
5. Drainage details before and after development.
6. A complete description of the type of fill proposed to be placed or dumped.

### **Alterations prohibited**

5. Subject to section 6, no person shall straighten, change, divert or interfere in any way with the existing channel of a river, creek, stream or watercourse or change or interfere in any way with a wetland.

### **Permission to alter**

6. (1) The Authority may grant a person permission to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or to change or interfere with a wetland.

(2) The permission of the Authority shall be given in writing, with or without conditions.

### **Application for permission**

7. A signed application for permission to straighten, change, divert or interfere with the existing channel of a river, creek, stream or watercourse or change or interfere with a wetland shall be filed with the Authority and shall contain the following information:

1. Four copies of a plan of the area showing plan view and cross-section details of the proposed alteration.
2. A description of the methods to be used in carrying out the alteration.
3. The start and completion dates of the alteration.
4. A statement of the purpose of the alteration.

### **Cancellation of permission**

8. (1) The Authority may cancel a permission if it is of the opinion that the conditions of the permission have not been met.

(2) Before cancelling a permission, the Authority shall give a notice of intent to cancel to the holder of the permission indicating that the permission will be cancelled unless the holder shows cause at a hearing why the permission should not be cancelled.

(3) Following the giving of the notice, the Authority shall give the holder at least five days notice of the date of the hearing.

### **Validity of permissions and extensions**

9. (1) A permission of the Authority is valid for a maximum period of 24 months after it is issued, unless it is specified to expire at an earlier date.

(2) A permission shall not be extended.

### **Appointment of officers**

10. The Authority may appoint officers to enforce this Regulation.

### **Flood event standards**

11. (1) The applicable flood event standards used to determine the maximum susceptibility to flooding of lands or areas within the watersheds in the area of jurisdiction of the Authority are the Hurricane Hazel Flood Event Standard, the 100 Year Flood Event Standard and the 100 Year flood level plus wave uprush, described in the Schedule.

(2) The Hurricane Hazel Flood Event Standard applies to all watersheds within the area of jurisdiction of the Authority except for,

- (a) Pringle Creek and Darlington Creek where the 100 Year Flood Event Standard applies; and
- (b) Lake Ontario in the Great Lakes-St. Lawrence River System where the 100 Year flood level plus wave uprush applies.

### **Areas included in the Regulation Limit**

12. Hazardous lands, wetlands, shorelines and areas susceptible to flooding, and associated allowances, within the watersheds in the area of jurisdiction of the Authority are delineated by the Regulation Limit shown on maps 1 to 31 dated

May 2005 and filed at the head office of the Authority at 100 Whiting Avenue, Oshawa, Ontario under the map title “Ontario Regulation 97/04: Regulation for Development, Interference with Wetlands and Alterations to Shorelines and Watercourses”.

#### SCHEDULE

1. The Hurricane Hazel Flood Event Standard means a storm that produces over a 48-hour period,
  - (a) in a drainage area of 25 square kilometres or less, rainfall that has the distribution set out in Table 1; or
  - (b) in a drainage area of more than 25 square kilometres, rainfall such that the number of millimetres of rain referred to in each case in Table 1 shall be modified by the percentage amount shown in Column 2 of Table 2 opposite the size of the drainage area set out opposite thereto in Column 1 of Table 2.

TABLE 1

73 millimetres of rain in the first 36 hours
6 millimetres of rain in the 37th hour
4 millimetres of rain in the 38th hour
6 millimetres of rain in the 39th hour
13 millimetres of rain in the 40th hour
17 millimetres of rain in the 41st hour
13 millimetres of rain in the 42nd hour
23 millimetres of rain in the 43rd hour
13 millimetres of rain in the 44th hour
13 millimetres of rain in the 45th hour
53 millimetres of rain in the 46th hour
38 millimetres of rain in the 47th hour
13 millimetres of rain in the 48th hour

TABLE 2

Column 1	Column 2
Drainage Area (square kilometres)	Percentage
26 to 45 both inclusive	99.2
46 to 65 both inclusive	98.2
66 to 90 both inclusive	97.1
91 to 115 both inclusive	96.3
116 to 140 both inclusive	95.4
141 to 165 both inclusive	94.8
166 to 195 both inclusive	94.2
196 to 220 both inclusive	93.5
221 to 245 both inclusive	92.7
246 to 270 both inclusive	92.0
271 to 450 both inclusive	89.4
451 to 575 both inclusive	86.7
576 to 700 both inclusive	84.0
701 to 850 both inclusive	82.4
851 to 1000 both inclusive	80.8
1001 to 1200 both inclusive	79.3
1201 to 1500 both inclusive	76.6
1501 to 1700 both inclusive	74.4
1701 to 2000 both inclusive	73.3
2001 to 2200 both inclusive	71.7
2201 to 2500 both inclusive	70.2
2501 to 2700 both inclusive	69.0
2701 to 4500 both inclusive	64.4
4501 to 6000 both inclusive	61.4
6001 to 7000 both inclusive	58.9
7001 to 8000 both inclusive	57.4

2. The 100 Year Flood Event Standard means rainfall or snowmelt, or a combination of rainfall and snowmelt, that has a probability of occurrence of one per cent during any given year.

3. The 100 Year flood level means the peak instantaneous still water level plus an allowance for wave uprush and other water-related hazards that has a probability of occurrence of one per cent during any given year.

Made by:

CENTRAL LAKE ONTARIO CONSERVATION AUTHORITY:

J. R. POWELL

*Chief Administrative Officer*

DAN WHITE

*Director of Corporate Services*

Date made: September 15, 2005.

I certify that I have approved this Regulation.

DAVID JAMES RAMSAY

*Minister of Natural Resources*

Date approved: February 6, 2006.