

## ***Introduction – Category 13***

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These Standards<sup>1</sup> have been developed to support the Aggregate Resources Act as amended by Bill 52, the Aggregate and Petroleum Resources Statute Law Amendment Act, 1996. There are three main headings:

- 1) Licences - subdivided into eight categories with respect to Class ‘A’. Class ‘A’ licence is to remove more than 20,000 tonnes of aggregate annually and a Class ‘B’ is to remove 20,000 tonnes or less of aggregate annually;
- 2) Aggregate permits - subdivided into six categories; and
- 3) Wayside Permits - one category.

These categories were developed to provide more concise, user friendly and understandable minimum requirements for the delivery of the Aggregate Resources Act.

Each category has a template of six major topics and all categories are developed to be proponent driven. The proponent will refer to the appropriate categories depending on the type of undertaking being contemplated. The reason for 15 categories is to reflect the numerous types of applications that can be applied for. In order to accomplish an easy-to-follow format, the standards and categories are repetitive in some cases or have slight modifications between categories based on whether the application is for a pit or quarry, and whether extraction will occur above or below the water table.

The enabling authority in Bill 52 allows for six major topic areas to be reflected in the standards. They are:

- ◆ Site Plan Standards;
- ◆ Report Standards;
- ◆ Prescribed Conditions;
- ◆ Notification and Consultation;
- ◆ Operational Standards; and
- ◆ Annual Compliance Reporting.

Each category includes Site Plan Standards, Report Standards, Prescribed Conditions and Notification and Consultation. Operational and Compliance Standards for all categories are found at the back of this document.

### ***Site Plan Standards***

These standards have been developed to reflect the type of undertaking: application for a licence (pit vs. quarry) or aggregate permit (pit vs. quarry). The site plan requirements are all encompassing for each category and no additional information will be required.

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<sup>1</sup> These standards will apply only to sites which go through the licensing or permitting process subsequent to the proclamation of Bill 52. The exceptions are the Annual Compliance Report requirement and compliance with Operational Standards which will apply to existing licences and permits.

### ***Report Standards***

The report standards have two components: a summary statement and technical reports. All categories of applications are required to submit these reports. The author of these reports may be:

- 1) the applicant for summary statements where the applicant possesses the qualifications or experience; and
- 2) qualified individuals for the technical reports.

For very unique issues on a site specific basis, additional information to that identified in the Report Standards may be requested.

### ***Prescribed Conditions***

The prescribed conditions are conditions that pertain to the individual category and cannot be varied or rescinded by either the Minister or the Ontario Municipal Board. However, on a site-by-site basis, additional conditions can be attached to the licence or site plan at the discretion of the Board or Minister, however, these conditions do not form part of the prescribed conditions.

### ***Notification and Consultation***

These standards identify the required steps for a proponent to process an application once an application has been accepted by the Ministry. It will be a requirement of the applicant to ensure that all aspects of the standards have been met. Ministry staff will no longer be facilitating and guiding proponents through the process.

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### ***Operational Standards***

These standards identify the day-to-day operational requirements that are not part of an existing site plan. If the site plan requirements already deal with the same factors but in a different way, the site plan provision prevails over these operational standards.

### ***Annual Compliance Reporting***

These standards place the responsibility of reporting non-compliance items and remedial work on the licensee and permittee to self-assess their operation on a yearly basis. The information gathered will be evaluated by the Ministry of Natural Resources to ensure compliance is being achieved. Although the “Guide to Completion of the Assessment Report” is not part of the standards, it is advisable to read this guide in order to assist in the completion of the assessment report.

### ***Terminology & Definitions***

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For the purpose of these standards reference should be made to the Provincial Policy Statement (Revised February 1, 1997) issued under Section 3 of the Planning Act for definitions and terms used in the Natural Environment Level 1 and 2 and Archaeology Resources Stage 1, 2 and 3.

***Established Groundwater Table***

For unconsolidated surficial deposits, the groundwater table is the surface of an unconfined water-bearing zone at which the fluid pressure in the unconsolidated medium is atmospheric. Generally the groundwater table is the top of the saturated zone.

For confined water bearing zones or consolidated bedrock materials, the groundwater table, or potentiometric surface, is a level that represents the fluid pressure in the water bearing zone and is generally defined by the level to which water will rise in a well.

***Sensitive Receptor***

Includes residences or facilities where people sleep (nursing homes, hospitals, trailer parks, camping grounds, etc.); schools; day-care centres.

***Mitigate***

To alleviate, moderate or reduce the severity of impacts.

***Recommended References***

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When applying for a licence or aggregate permit and depending on the location of the proposed site, the applicant may wish to pre-consult with the affected agencies that will be involved.

In searching and/or preparing reports to accompany an application, reference should be made to the following documents and agencies:

- a) Provincial Policy Statement and Associated Training Manuals;
  - b) Zoning by-law(s);
  - c) Official Plan(s);
  - d) Environmental Protection Act;
  - e) Ontario Water Resources Act;
  - f) Conservation Authorities Act;
  - g) Niagara Escarpment Commission;
  - h) Guide to Completion of the Compliance Assessment Report for licences and aggregate permits;
  - i) Flow chart for the Notification and Consultation Standards for licences, aggregate permits, wayside permits, Category 13 and the annual compliance reporting;
  - j) MOEE Guidelines including:
    - MOEE Guideline NPC-205, Sound Level Limits for Stationary Sources in Class 1 & 2 Areas (Urban);
    - MOEE Guideline NPC-232, Sound Level Limits for Stationary Sources in Class 3 Areas (Rural);
    - MOEE Guideline NPC-233, Information to be Submitted for Approval of Stationary Sources of Sound;
    - MOEE Guideline NPC-119, Blasting.
- The above list serves only as a guide and should not be interpreted as all-inclusive.
- k) Provincial and Federal references to endangered species;
  - l) Federal Fisheries Act and Associated Guidelines;
  - m) Environmental Assessment Act and Exemptions.

For further enquiries, please contact:

Ministry of Natural Resources  
Aggregate and Petroleum Resources Section  
P.O. Box 7000  
Peterborough, Ontario K9J 8M5  
Telephone: (705) 755-1258  
Fax: (705) 755-1206

## Application Standards for

**Category 13:** Aggregate Permit for an operation which intends to extract aggregate materials from land under water.

- ◆ Application Standards
  - ◇ Site Plan Standards
  - ◇ Report Standards
- ◆ Prescribed Conditions
- ◆ Notification and Consultation Standards

## *Category 13*

### ***1.0 Site Plan Standards for Extraction from Land under Water***

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The site plan accompanying an application for an aggregate permit for an operation which intends to extract aggregate from land under water must show the required information on the site plan. Two (2) copies of the site plan and reports must be submitted with the application. The site plan can be prepared by the applicant or any other person.

#### ***1.1 Existing Features***

- 1.1.1 each drawing must be numbered and indicate the total number of drawings submitted (e.g. 1 of 4);
- 1.1.2 a key map showing the location of the site relative to land, and demarcation of any territorial boundaries including municipal, provincial or international boundaries located within .5 km of the proposed extraction area;
- 1.1.3 a general description of the site including the name of the water body from which extraction is proposed, boundaries of the proposed extraction area described by tract, latitude and longitude or by UTM coordinates. The lot(s) and concession, the name(s) of the municipality, county or region, within which the site is located, or which is closest to the site;
- 1.1.4 a scale reference using both ratio and graphic methods between a scale of 1:10,000 to 1:50,000 or using available topographic mapping and bathometric charts of a similar scale;
- 1.1.5 low water elevation or “chart datum” (m.a.s.l.);
- 1.1.6 if the proposed permit area is within 0.5 km of any shoreline, the topography (using 2m contour intervals) and drainage features for all land extending .5m inland of the shoreline areas must be shown;
- 1.1.7 the bathometry of the water bottom within 1km of the site (using 2m contour intervals);
- 1.1.8 the location and use of all shoreline, nearshore, offshore facilities or related structures (e.g. harbours, wharves, water intakes, sewage outfalls, pipelines, well heads etc.), and navigational aids and navigational channels located within 0.5 km of the proposed extraction area;
- 1.1.9 the boundary of the area to be permitted, including the dimensions and hectarage of the site;
- 1.1.10 significant natural or man made features within 0.5 km of the proposed extraction area;

- 1.1.11 location of cross section(s);
- 1.1.12 applicant's name, address and signature;
- 1.1.13 signature of a person under whose direction this plan was prepared, if different from the applicant;
- 1.1.14 a statement that "this site plan is prepared under the Aggregate Resources Act for an Aggregate Permit to Extract Aggregates from Land Below Water, Category 13;
- 1.1.15 north arrow, normally pointing towards the top of the page;
- 1.1.16 a section for recording site plan amendments;
- 1.1.17 a legend;
- 1.1.18 a statement summarizing ownership of the permit area (e.g. Crown or Private); and
- 1.1.19 a list of references that apply specifically to the preparation of the site plan.

## ***1.2 Operations***

- 1.2.1 a scale reference using both ratio and graphic methods between a scale of 1:10,000 and 1:50,000 or using available topographic mapping and bathometric charts of a similar scale;
- 1.2.2 the drawing number;
- 1.2.3 a legend and a north arrow, normally pointing toward the top of the page;
- 1.2.4 a legend;
- 1.2.5 a section to record any variations from the operational standards that relate to the site;
- 1.2.6 the boundary of the area to be permitted, including the dimensions and hectarage of the site;
- 1.2.7 the bathometry of the water bottom within the permit area using 2 metre contour intervals;
- 1.2.8 demarcation of the UTM grid and any identified offshore tracts or other territorial boundaries with the permit site;
- 1.2.9 clearly identify the sequence and direction of extraction including the area (in hectares) of each extraction area and the proposed depth of extraction below the normal water bottom;

- 1.2.10 details of how the aggregates are to be removed, including a listing of the types of equipment to be used (e.g. clam or suction dredge), and details of the extraction process, designed depth of extraction and discharge procedure and depth of discharge;
- 1.2.11 the sequence and direction of extraction including the proposed location of transects (e.g. random or grid pattern) across the proposed permit or extraction areas, particularly if a suction dredge is to be used;
- 1.2.12 the location, type and installation schedule of any structures to be established within the permit site (e.g. navigational aids, monitoring stations)'
- 1.2.13 describe the duration (seasons, months, days or hours) of extraction and any restrictions identified in the background reports;
- 1.2.14 location and design of any remedial measures required and composition of the post extractive substrate;
- 1.2.15 a statement that “no more than \_\_\_\_ tonnes shall be removed from the permit area in any calendar year”;
- 1.2.16 location of all cross-sections; and
- 1.2.17 details of the monitoring program as per 3.2, if applicable.
- 1.2.18 Shoreline destination(s) for off-loading.

### ***1.3 Cross-sections***

- 1.3.1 the low water elevation or “chart datum” (m.a.s.l.);
- 1.3.2 the location of natural features if applicable;
- 1.3.3 the location of man-made features if applicable;
- 1.3.4 horizontal and vertical scale references using both ratio and graphic methods;
- 1.3.5 the topography of the water bottom; and
- 1.3.6 location and design of any remedial measures required.

## ***2.0 Report Standards for Category 13 Applications***

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### ***2.1 Summary Statement***

**A summary statement accompanying an application for an aggregate permit to extract from land under water must provide information on the following and be signed by the author:**

- 2.1.1 the distribution, quality and quantity of aggregate resources within the site including particle sizes of materials to be extracted;
- 2.1.2 the natural environment that may be affected by the extraction operation and any proposed remedial measures that are considered necessary;
- 2.1.3 describe the potential impact on user groups (e.g. nearby residents, recreational, fishing, oil/gas industry etc.) that may be affected and describe proposed remedial measures that may be considered necessary; and
- 2.1.4 details of any proposed mitigation measures and monitoring programs.

### ***2.2 Technical Reports***

**Technical reports accompanying an application must provide information on the following:**

- 2.2.1 marine archaeology and presence of any historic wrecks within or adjacent to the permit area;
- 2.2.2 background turbidity levels and potential impacts on turbidity from the extraction operation;
- 2.2.3 the potential for the presence of contaminants which may be affected by aggregate extraction (dredged, extracted, disturbed, resuspended, moved, etc.);
- 2.2.4 contaminants detected at or above the “Lowest Effect Level” in the “Guidelines for the Protection and Management of Aquatic Sediment Quality in Ontario” may require detailed testing, management plans or specific disposal constraints, depending on background levels. Technical reports should consider:

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1. Nature and extent of contaminants relative to guideline levels;
2. Potential effects of aggregate extraction with regard to contaminated sediments (e.g. resuspension, mobilization, open water disposal site impacts, changes in bio-accumulation rates, etc.);
3. Effects of extraction on Total Suspended Solids and Total Dissolved Solids in the water column;
4. Background contaminant levels (especially at open water disposal sites);
5. Risk assessment of potential for plumes; and
6. Other project specific issues, depending on agency requirements.

- 2.2.5 existing currents and wave patterns, existing sediment transport, erosion and deposition (with emphasis on shoreline erosion);
- 2.2.6 if extraction will potentially have a detrimental effect on the physical processes noted, then an impact assessment is required to determine effects of extraction and remedial measures to mitigate these effects;
- 2.2.7 define the areal extent of potential affects from the proposal, drawing on information from technical reports, and:
  - a) assess potential impacts to natural features, habitat, and fisheries resources for this area;
  - b) specifically, assess impacts on the ability of fish and benthic organisms to utilize sediment surfaces which may be directly or indirectly affected by aggregate extraction; and
  - c) any necessary remediation or compensation.
- 2.2.8 if extraction facilities are within 300 metres of a receptor, a noise assessment is required to determine whether or not provincial guidelines can be satisfied; and
- 2.2.9 each report shall state the qualifications and experience of the individual(s) that have prepared the reports.

**The technical reports must be prepared by a person with appropriate training and/or experience.**

### ***3.0 Prescribed Conditions that Apply to Category 13 Aggregate Permits***

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The permit is subject to the following conditions:

- 3.1 The permittee is responsible for ensuring that daily records are maintained for each day the operation is active. These records shall consist of log(s) that contain the following:
  - 3.1.1 date and times of extraction;
  - 3.1.2 direction of prevailing winds and currents at the time of extraction;
  - 3.1.3 location of the dredging barge during extraction and depth of water at the site of extraction;
  - 3.1.4 tonnage (in tonnes) extracted;
  - 3.1.5 turbidity and current measurements; and
  - 3.1.6 Captain's signature.
- 3.2 Any recommendations and recommended monitoring program identified in the technical reports will be described on the site plan and all records retained by the permittee and made available upon request of the Ministry of Natural Resources for audit purposes.
- 3.3 A Spills Contingency Program will be developed prior to site preparation and implemented as necessary.
- 3.4 A Permit to Take Water may be required if any part of the operation utilizes ground and/or surface water.
- 3.5 Noise will be controlled at source with appropriate noise attenuation devices.

## ***4.0 Notification and Consultation Standards for Category 13 Applications***

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The applicant shall submit all required documentation to the Ministry of Natural Resources. Within fifteen (15) days, the Ministry of Natural Resources shall determine if the application is complete. Once the application is determined to be complete, the applicant may proceed with the following Notification and Consultation Standards.

### ***4.1 Notification***

- 4.1.1 If significant environmental impacts are recognized by the Ministry of Natural Resources, then additional consultation may be required (e.g. newspaper ads, open house, etc.) as per exemption 26/7 of the Environmental Assessment Act.
- 4.1.2 The applicant must provide by written notice delivered personally or by registered mail, to landowners within 120 metres of the proposed permit boundary according to the most recent assessment available at the time of application, the following:
  - 4.1.2.1 applicant's name, address and telephone number;
  - 4.1.2.2 proposed location of the site;
  - 4.1.2.3 describe the operation – whether a pit or quarry; and
  - 4.1.2.4 asking the landowner(s) to respond in writing to the applicant, copy to Ministry of Natural Resources, identifying any concerns with regard to the proposal.
- 4.1.3 The applicant must circulate the complete application package and information on the proposed consultation process (if required) to the agencies and stakeholders identified below for comments. It is the applicant's responsibility to determine the appropriate contact office and person.
  - 4.1.3.1 the local municipality in which the site is located;
  - 4.1.3.2 the Region/County in which the site is located;
  - 4.1.3.3 Ministry of Transportation (MTO);
  - 4.1.3.4 Ministry of Agriculture, Food & Rural Affairs (OMAFRA)(only if prime agricultural land is not being restored to the same average soil quality);
  - 4.1.3.5 Ministry of Northern Development and Mines (MNDM);
  - 4.1.3.6 Aboriginal organizations, as directed by the Ministry of Natural Resources;
  - 4.1.3.7 Forest companies, as directed by the Ministry of Natural Resources;
  - 4.1.3.8 utility corporations (if an easement exists on site or within 120 metres);
  - 4.1.3.9 Ministry of Environment and Energy.

NOTE: Issuance of Federal permits or authorizations automatically invokes the Canadian Environmental Assessment Act screening, which may require additional public notification and consultation.

- 4.1.4 Requirements under Sections 4.1.2 and 4.1.3 shall be conducted concurrently.
- 4.1.5 Comments must be received within 20 days of notification under Sections 4.1.2 and 4.1.3.

## ***4.2 Resolution of Concerns***

- 4.2.1 During the notification procedures, the applicant shall attempt to resolve any concerns.
- 4.2.2 If all concerns have been resolved, the applicant must:
  - 4.2.2.1 amend the permit application, site plans or reports, if required, in consultation with the Ministry of Natural Resources based on the results of the notification;
  - 4.2.2.2 Applicant is required to provide documentation that concerns have been addressed; and
  - 4.2.2.3 Submit documentation of landowner and stakeholder contacts and agencies circulation.
- 4.2.3 If all concerns are not resolved:
  - 4.2.3.1 the applicant shall submit to the Ministry of Natural Resources:
    - (a) documentation of attempts to resolve issues;
    - (b) list of unresolved issues; and
    - (c) documentation of landowner and stakeholder contacts and agencies circulation.
- 4.2.4 Once the Ministry of Natural Resources has received:
  - 4.2.4.1 agency comments, if any;
  - 4.2.4.2 applicants scoping and documentation as per section 4.2.3; and
  - 4.2.4.3 documentation of landowner and stakeholder contacts and agencies circulation

they shall process the application within 20 days, in accordance with Section 37 or 42 of the Aggregate Resources Act.
- 4.2.5 If the applicant does not submit the required information as noted in section 4.2.2 or 4.3.3 within six (6) months of the date the application has been accepted as complete by the Ministry of Natural Resources, or such other period of time as approved by the Ministry of Natural Resources, the application is considered to be withdrawn.

## ***5.0 Operational Standards that Apply to Aggregate Permits***

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**Unless the site plan provides otherwise through variations from these operational standards identified on the site plan, the permittee must comply with the following:**

- 5.1 the permittee shall identify and maintain all boundaries of the site including all corners (e.g. flagging tape, etc.);
- 5.2 a gate is erected and maintained at each entrance to, and exit from, the site and that all such gates are kept closed when the site is not in operation;
- 5.3 each entrance to, and exit from, the site is located so as to provide, at the point of intersection with any highway, a clear view of the highway in both directions;
- 5.4 all topsoil or overburden that is stripped during the operation of the site will be stored separately with vegetated stable slopes;
- 5.5 adequate vegetation is established and maintained to control erosion of any berm or stockpile of topsoil or overburden;
- 5.6 topsoil must be stripped sequentially prior to aggregate extraction;
- 5.7 within the area to be extracted, all trees within five (5) metres of the excavation face must be removed;
- 5.8 the site is kept in an orderly condition;
- 5.9 all scrap is removed on an ongoing basis, and scrap shall include refuse, debris, scrap metal or lumber, discarded machinery, equipment and motor vehicles. Scrap cannot be located within 30 metres of any body of water, and 30 metres from the boundary of the site;
- 5.10 “excavation setback areas” means the area within:
  - 5.10.1 fifteen metres from the boundary of the site;
  - 5.10.2 thirty metres from any part of the boundary of the site that abuts:
    - 5.10.2.1 a highway,
    - 5.10.2.2 land in use for residential purposes at the time the permit was issued, or
    - 5.10.2.3 land restricted to residential use by a zoning by-law when the permit was issued; or
  - 5.10.3 thirty metres from any body of water that is not the result of excavation below the water table;
- 5.11 no excavation can occur within the excavation setback area of the site;
- 5.12 all excavation faces are to be stabilized in so far as is necessary to prevent erosion into the excavation setback area;

- 5.13 no person shall pile aggregate, topsoil or overburden, locate any processing plant or place, build or extend any building or structure:
  - 5.13.1 within thirty metres from the boundary of the site; or
  - 5.13.2 within ninety metres from any part of the boundary of the site that abuts:
    - 5.13.2.1 land in use for residential purposes at the time the permit was issued, or
    - 5.13.2.2 land restricted to residential use by a zoning by-law when the permit was issued;
- 5.14 berms that are intended to screen the adjoining lands from the operation on the site are exempt from section 5.13;
- 5.15 all berms shall be located at least three metres away from the boundary of the site;
- 5.16 removal of topsoil from the site shall not occur;
- 5.17 all topsoil or overburden stripped in the operation of the site is used in the rehabilitation of the site;
- 5.18 adequate vegetation is established and maintained to control erosion of any topsoil or overburden replaced on the site for rehabilitation purposes;
- 5.19 when the site is finally rehabilitated, all excavation faces:
  - 5.19.1 of any pit has a slope that is at least three (3) horizontal metres for every vertical metre;
  - 5.19.2 of any quarry has a slope that is at least two (2) horizontal metres for every vertical metre;
- 5.20 no aggregate or overburden, except material in a berm, may be moved from the excavation setback area;
- 5.21 rehabilitation of the site shall ensure that:
  - 5.21.1 adequate drainage and vegetation of the site is provided; and
  - 5.21.2 any compaction of the site is alleviated;
- 5.22 no person may detonate any explosives on the site on a holiday or between 6 p.m. on any day and 8 a.m. on the following day;
- 5.23 every permittee shall ensure that, on the site, no person contravenes section 5.10, 5.11, 5.12, 5.13, 5.14, 5.15, 5.16 or 5.22; and
- 5.24 a response to emergencies is not limited by the hours of operation shown on the site plan.

## ***6.0 Annual Compliance Reporting for Aggregate Permits***

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- 6.1 every permittee must annually complete Form #590 known as the Compliance Assessment Report with respect to their compliance with the Act, regulations, operational standards, site plan and the conditions of the permit;
- 6.2 every permitted site must be assessed pursuant to section 40.1(1) of the Aggregate Resources Act once during the period May 1 to September 15 of each year;
- 6.3 the permittee shall ensure that a copy of the Compliance Assessment Report Form #590 is received by the local office of the Ministry of Natural Resources, and the clerk of each regional municipality or county and the local municipality in which the site is located, no later than September 30 of each year;
- 6.4 non-compliance with the Act, regulations, operational standards, site plan and the conditions of the permit must be noted on page 1 and 2 of the Report;
- 6.5 documentation of the action for non-compliance must be recorded on page 3 with the appropriate remedial action deadline date;
- 6.6 all remedial action documented on page 3 must be completed within a 90-day period from the date of filing, or such further period as may be allowed under subsection 40.1(4) of the Act;
- 6.7 the permittee must receive prior approval from the inspector to have the 90 day period extended before filing the report with the Ministry of Natural Resources;
- 6.8 every permittee must provide a sketch of the permitted site, with the Compliance Assessment Report documenting such standards as identifying boundaries, berms, tree screens, and setback requirements that require remedial corrective action as documented on page 3 of the Report;
- 6.9 the permittee must provide a sketch showing areas that have been progressively rehabilitated; and
- 6.10 pursuant to subsection 57(4) of the Aggregate Resources Act, it is an offence to furnish false information.