Ministry of the Environment, Conservation and Parks

Brownfields
RemTech East 2023

Ontario Environmental Industry Association

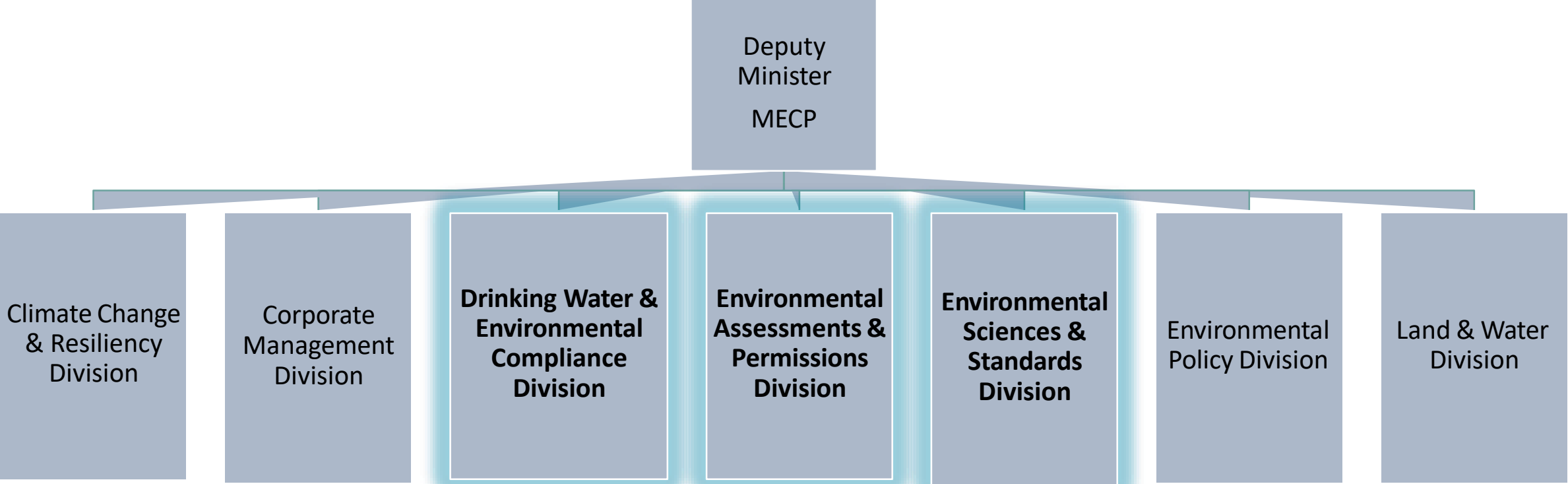May 30, 2023

Ontario

Outline

Ontario

Ministry of the Environment, Conservation and Parks

Deputy Minister MECP

Climate Change & Resiliency Division

Corporate Management Division

Drinking Water & Environmental Compliance Division

Environmental Assessments & Permissions Division

Environmental Sciences & Standards Division

Environmental Policy Division

Land & Water Division

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Ministry of the Environment, Conservation and Parks

Environmental Assessment and Permissions Division	**Client Services and Permissions Branch**	Leads transformation of environmental permissions programs, initial screening of applications, & electronic service delivery effort.
	Environmental Permissions Branch	Leads technical and engineering review of applications for environmental permissions and records of site conditions
Environmental Sciences and Standards Division	**Technical Assessment & Standards Development Branch**	Develops and supports generic site condition standards and the streamlined risk assessment model ("Approved Model") Manages technical and engineering review of risk assessments prepared by proponent to develop property specific standards
Drinking Water and Environmental Compliance Division	**Regional/District Offices & Eastern Region Program Services Unit**	Supports the development of Certificates of Property Use (CPU) Leads the compliance and enforcement of ministry issued CPU documents that require the owner to ensure that key risk management measures are undertaken

Environmental Permissions and Key Legislation

Context

- Many necessary activities can result in potential impacts to the environment by:
  - generating waste materials

  - discharging contaminants into the air and water

  - taking water out of the natural environment

  - negatively affecting endangered or threatened species

- The Ministry of the Environment, Conservation and Parks issues environmental permissions, or requires business to self-register, to ensure that companies take action to avoid and minimize potential negative impacts of their activities on the environment.

- Environmental permissions also help ensure transparency for communities and enable businesses to operate with certainty and predictability.

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MECP Environmental Permissions Programs

P E S T I C I D E

1. Endangered Species Act Permits and Agreements
2. Environmental Compliance Approvals
3. Permits to Take Water
4. Environmental Activity and Sector Registry
5. Brownfields and Records of Site Condition
6. Renewable Energy Approvals
7. Environmental Assessments
8. Pesticides Licences
9. Municipal Drinking Water Systems

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Key Legislation & Regulations

Environmental Protection Act

- The primary pollution control legislation in Ontario
- Prohibits discharge of any contaminants into the environment

O. Reg. 153/04 Records of Site Condition – Part XV.1 of the Act

- Regulates requirements for filing Records of Site Condi tion
- Protects land and water through generic and property specific standards

Ontario Water Resources Act

- Protects both groundwater and surface water in Ontario
- Regulates both municipal and industrial sewage and wastewater
- Prohibits the discharge of materials that may impair water quality or activities that may impact water quantity

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Legislative Mandate and Regulatory Framework

- Under the *Environmental Protection Act* (EPA) and *O. Reg 153/04*, brownfield properties that are changing from less sensitive to more sensitive uses (e.g., industrial/commercial/community to residential) are required to obtain and file a Record of Site Condition (RSC).

- An RSC requires the assistance and certification of a Qualified Person to summarize the environmental condition of a property, based on the completion of one or more environmental site assessments (ESAs).

- In some cases, the property may require remediation to align with the future intended land use, before an RSC can be filed.

- This RSC requirement is applicable law under the Building Code; a demonstration of an RSC being filed for that property use must be provided before a building permit may be issued by the local municipality.

  - This ensures compliance at a point in the process when necessary assessments and soil removal or remediation would be completed and prior to a new use commencing.

- Once an RSC has been filed, some limitation of liability is provided e.g., protection from certain orders under Part XV.1 of the EPA for key stakeholders e.g., municipalities, secured creditors, receivers, trustees in bankruptcy, fiduciaries and property investigators.

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Brownfields: What are they and why are they important?

What Are Brownfields and Why Are They Important?

- Brownfields are under-utilized, derelict, abandoned or vacant commercial or industrial lands that may be contaminated but have potential for redevelopment.

- Brownfields exist all over Ontario and include properties with a history of use as factories, gas stations, industrial ports, etc.

- Brownfields typically have potential or known existing environmental contamination that may pose a risk to a new use at a property, and may require remediation prior to reuse of the land.

- Concern over potential environmental liability from this potential or real contamination had historically been a major disincentive to brownfield redevelopment that the Record of Site Condition program has helped address.

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What Are Brownfields and Why Are They Important?

Benefits to addressing contamination and redeveloping brownfields (triple bottom line)

- Environmental protection and restoration
- Reduced health and safety risks
- Economic development and investment
- Urban renewal
- Cost-effective and efficient land use - smart growth

Even if the economic value of a brownfield is high, it will remain underutilized if that value is outweighed by the potential liabilities associated with the possibility of contamination ➡ Brownfields/Record of Site Condition Program

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Record of Site Condition (RSC)

Record of Site Condition (RSC)

RSCs are documents that summarize the environmental condition of a property, based on the completion of environmental site assessments. The purpose of an RSC is to help **facilitate the safe redevelopment of brownfield properties back into productive use**

- An RSC must be filed in the Environmental Site Registry (ESR) if a property owner wishes to change the use of a property from a less sensitive use to a more sensitive use, e.g., property owner wants to build a condo/houses on land previously used for industrial or commercial activities.

- Not required for land use changes to similar or less sensitive use, but many proponents voluntarily submit to obtain protection from future environmental orders on the property.

- Developers must have a qualified person undertake a series of investigations to assess the contamination and either clean it up to provincial standards or undertake a risk assessment to establish a site specific standard and identify any necessary mitigation.

- Once complete, the record of site condition can be submitted through the ministry's platform for online environmental permissions services. If deemed to have met all regulatory requirements, the ministry will file the RSC in the Environmental Site Registry.

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RSC Benefits

Supports MECP's mandate to protect human health and the environment by managing potential risks from contaminants at Brownfield sites. Ontario Regulation 153/04 also supports Ontario's efforts to build more homes and increase the housing supply in Ontario

Enhances municipal responsibility under the PPS by ensuring that sites changing land use are or will be safe for that new use, and that a Record of Site Condition is filed prior to issuing a building permit, where necessary
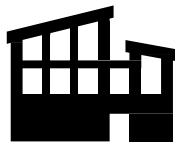
Developers are provided with a clear set of rules and process when taking on a brownfield redevelopment, and receive assurance that, once an RSC is filed, they would are protected from orders under the EPA for historical contamination, with few exceptions. They can complete a project without this ongoing liability.

Financial institutions, insurance companies and other parties supporting brownfields redevelopment receive assurance that the sites conditions are appropriate for development, reducing the risk to investments and of future additional remediation costs or liability, thus supporting transaction of properties and redevelopment.

RSC Process Overview

Brownfields RSC Process
How it Works

- The technical work for the filing of an RSC must be conducted by a Qualified Person (QP) (Professional Geoscientist or Professional Engineer)

- Property owners work with a QP to undertake a stepped approach to assess a property and manage any historical contamination.

  1. A Phase One Environmental Site Assessment (ESA) is completed to determine if historical activities <u>may</u> have resulted in contamination. If not, they may file an RSC based on this work alone.

  2. Should a risk of contamination be identified, a Phase Two ESA is completed where soil and/or groundwater is sampled to determine **if** contamination exists, and to delineate its location and concentrations.

  3. Where contamination is found, the regulation provides a range of options to facilitate redevelopment.

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How it Works
Options for Managing Contamination

1. **The Ministry has developed convenient tables of generic Site Condition Standards which a QP can use to confirm if a site already meets standards, and provides clear targets when remediation may be required**

    *   [Set out in a series of 9 tables in Ministry document entitled "Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act".](#)

2. **Where remediation is NOT feasible (e.g., high cost, or takes too long) a proponent can hire a specialist QP to develop Property Specific Standards through a Risk Assessment**

    *   Approximately 10-15% of all RSC submissions are based on a risk assessment.
    *   Risk Assessment allows much higher concentrations of contaminants to remain on site as property specific standards account for site-specific information as well as any risk management measures. However, they offer the same level of protection for human health and the environment as that provided by the Ministry's generic site condition standards.
    *   Given the increased complexity in managing these sites, and the resulting regulatory indemnity provided by the RSC, the Ministry reviews risk assessments.
    *   Ministry review helps to ensure that any contamination left on site will not pose risks to future site users, ensures that the liability indemnity provided is defensible, and to provide greater certainty that the ministry will not have to manage future contamination issues without the ability to issue standard orders.

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Risk Assessment (RA)

- A RA determines the potential risks to human health and the environment of contamination that remains at a property, based on the toxicity of the compounds and the amount of exposure to people or plants and animals that can occur at the property.

- Property specific standards can be developed through the preparation and Ministry acceptance of a **Risk Assessment**, using one of the following two approaches:

Tier 2: Streamlined "Modified Generic RA"

- Approved Model - Excel spreadsheet that allows a QP for risk assessment (QP_{RA}) to generate property specific standards by modifying parameters to reflect property conditions.

- Addresses common deviations from generic model and allows for incorporation of certain risk management measures developed by the Ministry.

Tier 3: Comprehensive RA

- Conducted for more complex sites and involves developing standards using a wide range of RA models and tools (various types of Comprehensive RAs).

- May involve the use of risk management measures to support the property specific standards.

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Tier 2: Modified Generic Risk Assessment

- Tier 2 RAs are appropriate for less complex and low risk sites that require property-specific standards to file an RSC. The Tier 2 RA approach is streamlined which results in time and cost savings.

- The submission and review process is iterative:
  - Review timeline is 8 weeks for each Tier 2 RA submission
  - The Pre-Submission form (the first step in the RA process) and the RA are submitted at the same time.
  - It typically takes about 2 submissions over a 6 to 18 month period before the RA has met regulatory requirements and the property specific standards can be used to support filing an RSC.

- It enables the user (i.e., QP_{RA}) to modify specific aspects of the risk assessment model that was used to develop the generic site condition standards:
  - Allows modification of specific parameters to better represent property-specific conditions (e.g., adjust distance to surface water from default assumption or change depth to groundwater).
  - Includes standardized risk management measures that can be selected (e.g., soil cap, hard cap, storage garage with vapour mitigation systems, etc.).
  - CPU (if required) does not need to be posted on Environmental Registry for comments which reduces the time needed to file an RSC.
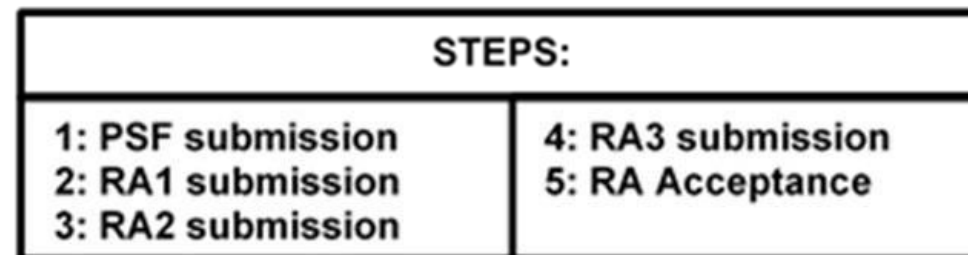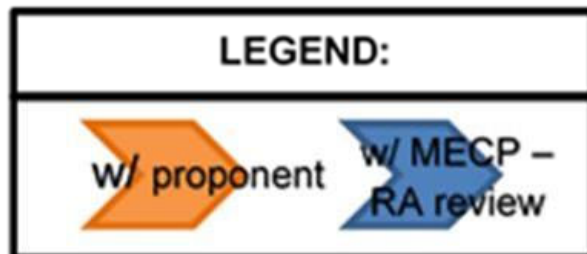
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Tier 3: Comprehensive RA

- Tier 3 RAs allow owners/proponents to develop their own property-specific standards through a comprehensive risk assessment process that considers the conditions at the site, the nature of the contaminants, possible receptors of concern (i.e., people, plants, animals), and the intended property use. They can use any inputs or models as long as they are considered appropriate through ministry review.

- The submission and review process is iterative:
  - Review timelines are either 16 or 22 weeks for each Tier 3 RA submission
  - It typically takes 3 RA submissions, in addition to the Pre-Submission Form, over an average of 2 to 3 years before the RA has met regulatory requirements and the property specific standards can be used to support filing an RSC.
  - The number of iterations depends on the complexity of the site (e.g., amount and types of contaminants, proposed use, proximity to water bodies), experience of the QP_{RA} and quality of work done.
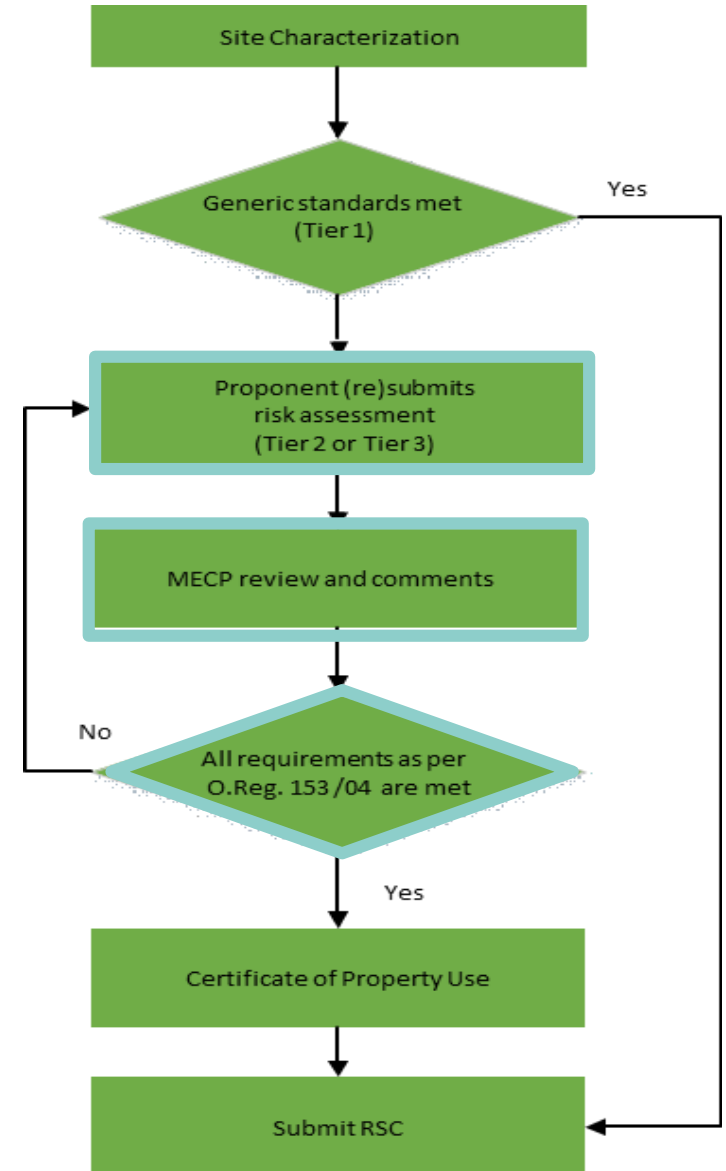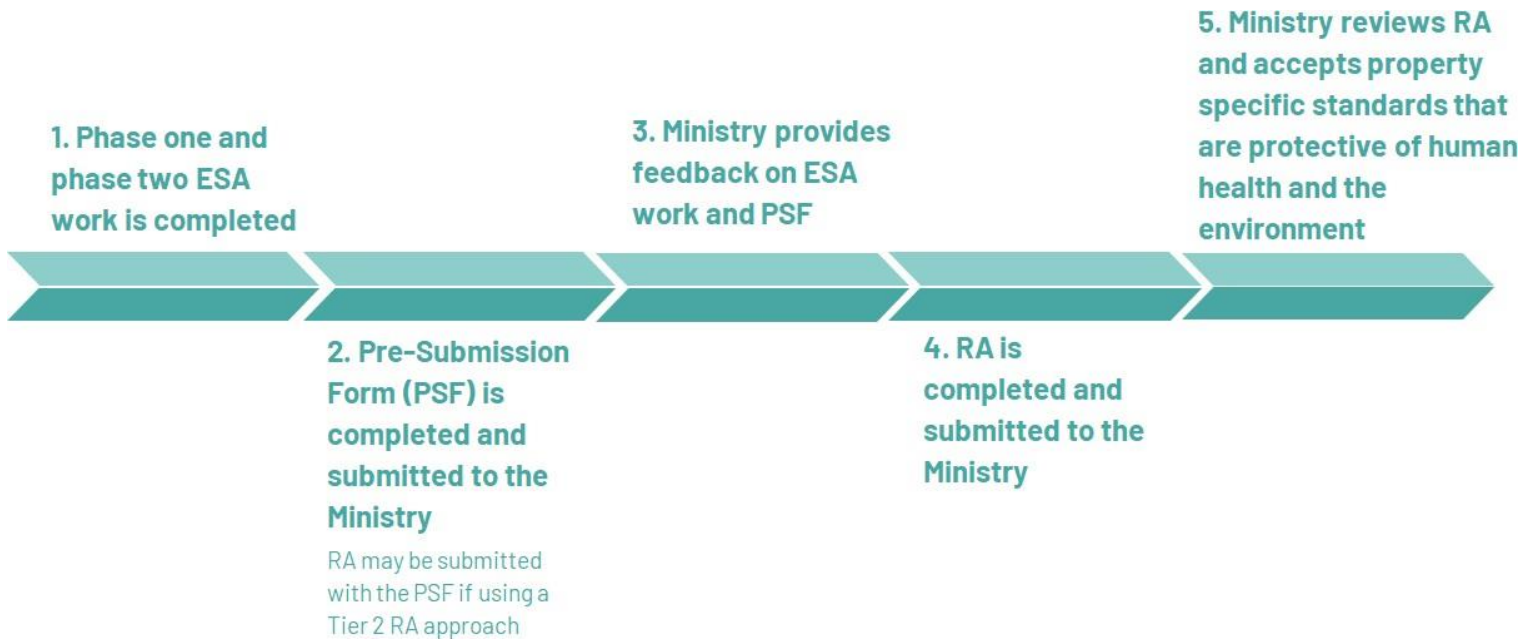
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Tier 3 Risk Assessments: Example Timeline

The ministry receives and reviews a steady stream of risk assessment submissions for both Tier 2 and Tier 3. As the RA process is complex and iterative, several submissions are typically needed before a decision can be made for a given site.

- The Ministry review time (blue colour) is a small proportion of the overall time required in approving a risk assessment. Most of time is with the proponent (orange colour).

- For the vast majority of sites, the Ministry is successful at meeting regulated review timelines (typically 16 weeks for most risk assessments).
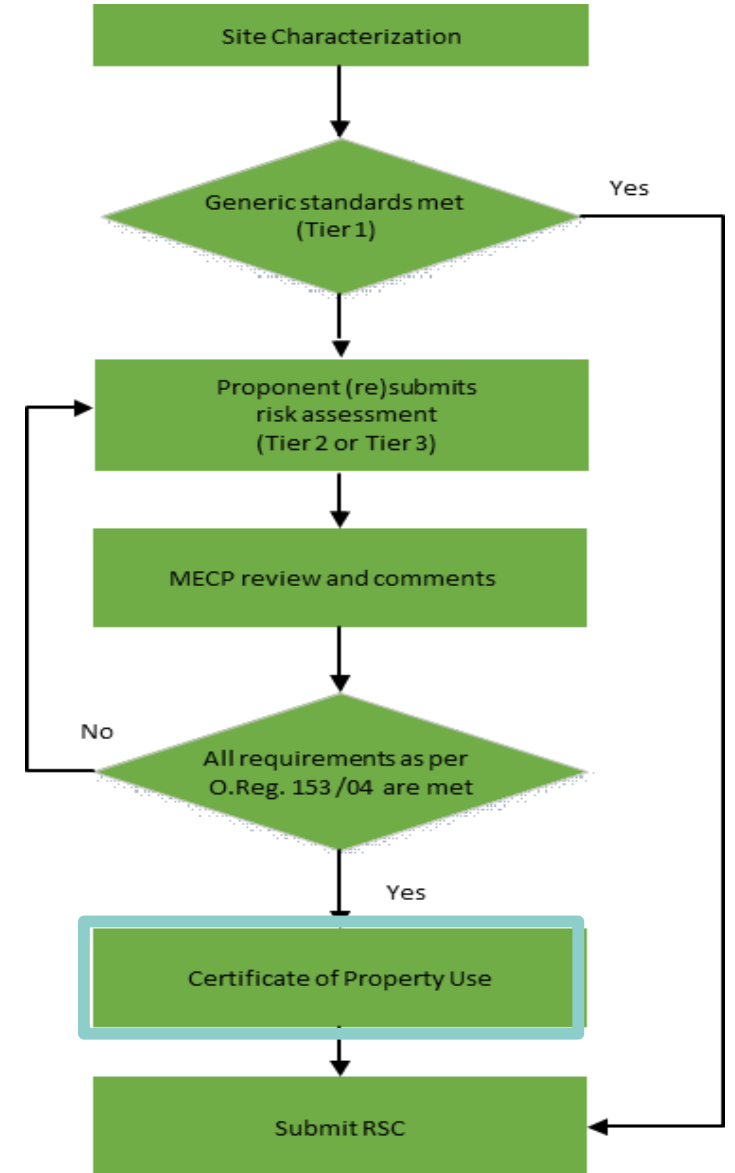

LEGEND:	
w/ proponent	w/ MECP – RA review

STEPS:	
1: PSF submission	4: RA3 submission
2: RA1 submission	5: RA Acceptance
3: RA2 submission	

Summary of RA Submission Process

1. Phase one and phase two ESA work is completed

2. Pre-Submission Form (PSF) is completed and submitted to the Ministry

RA may be submitted with the PSF if using a Tier 2 RA approach

3. Ministry provides feedback on ESA work and PSF

4. RA is completed and submitted to the Ministry

5. Ministry reviews RA and accepts property specific standards that are protective of human health and the environment

If you have questions regarding how to submit your RA, please contact the Ministry's Client Services and Permissions Branch at enviropresubmission@ontario.ca or 416-314-8001

If you have questions regarding the RA review process, please contact the Ministry's Technical Assessment and Standards Development Branch at paul.g.welsh@ontario.ca or 416-889-4388

Site Characterization

Generic standards met (Tier 1) — Yes

Proponent (re)submits risk assessment (Tier 2 or Tier 3)

MECP review and comments

All requirements as per O.Reg. 153/04 are met — No / Yes

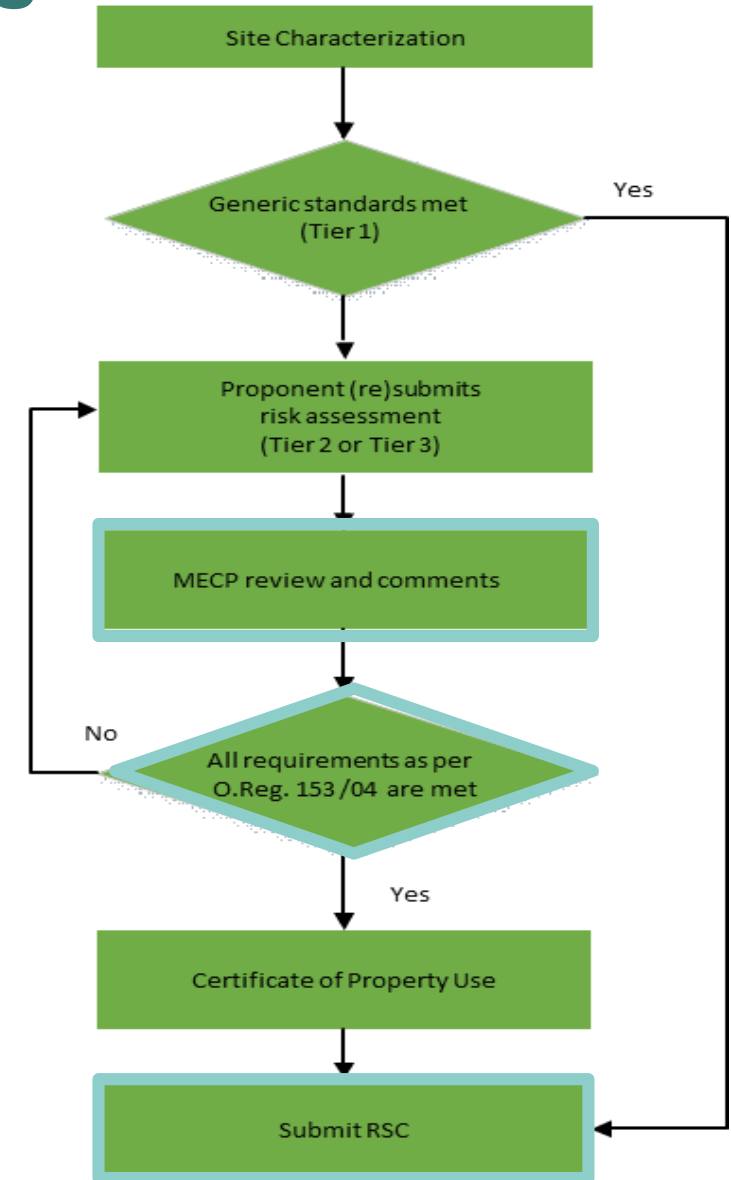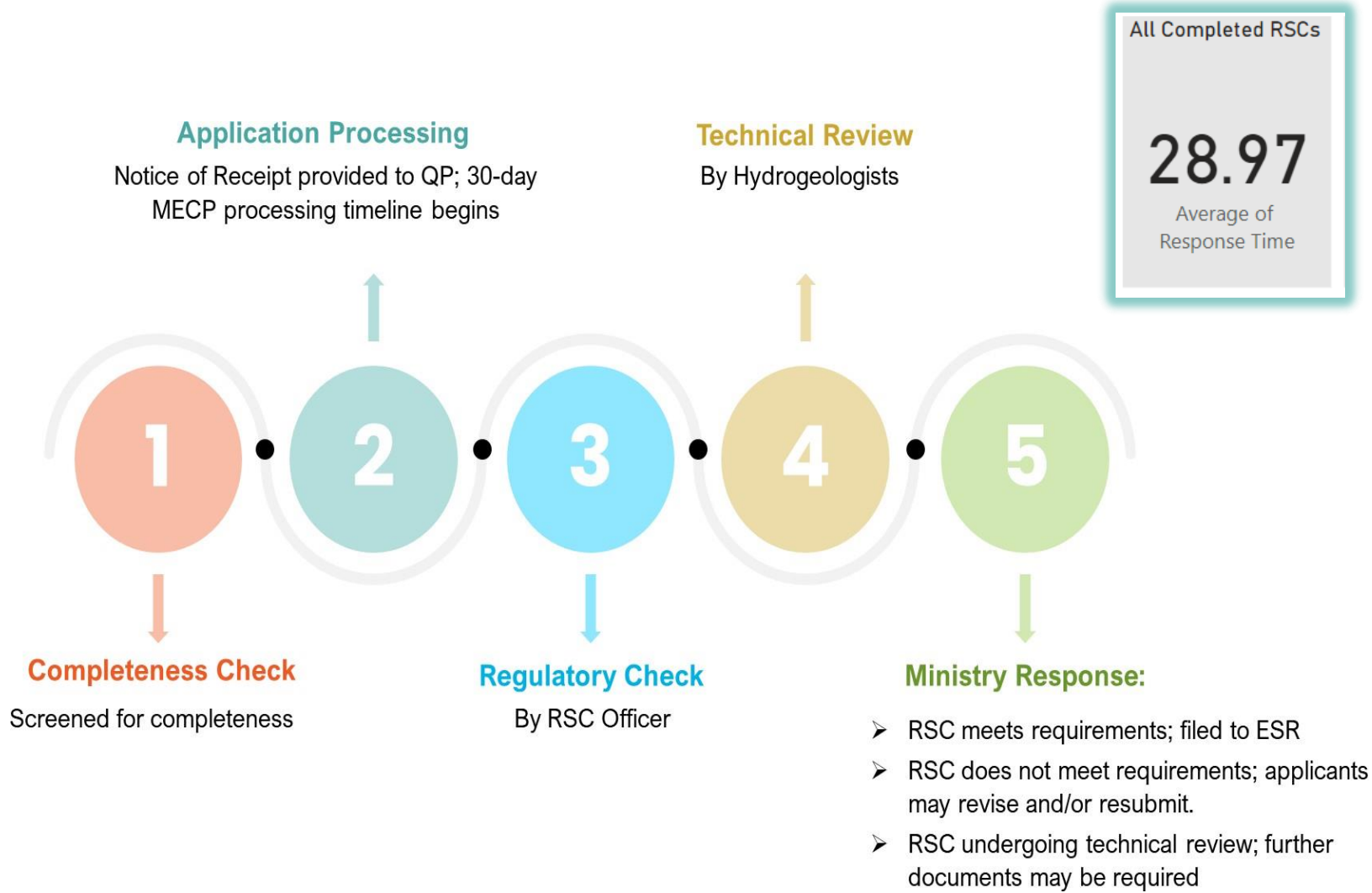Certificate of Property Use

Submit RSC

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Certificate of Property Use (CPU)

- Risk management measures, when proposed as part of an RA, are typically documented in a **Certificate of Property Use (CPU)** which is filed on title.

- CPUs are issued by the ministry and legally require the property owner to take certain risk management measures.
  - e.g., CPU can require that the owner refrain from using the property in specified ways or require the use strategies, controls or techniques to limit the movement of contaminants.

- Unlike a CPU for a Tier 2 RA approach, a CPU for a Tier 3 RA approach [must be posted for public comment on the Environmental Registry of Ontario.](#)

If you have questions about your CPU or the process, please contact the local district office of the Ministry

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RSC Submission & Ministry Review Process

Application Processing

Notice of Receipt provided to QP; 30-day MECP processing timeline begins

Technical Review

By Hydrogeologists

All Completed RSCs

28.97

Average of Response Time

1 **2** **3** **4** **5**

Completeness Check

Screened for completeness

Regulatory Check

By RSC Officer

Ministry Response:

➢ RSC meets requirements; filed to ESR

➢ RSC does not meet requirements; applicants may revise and/or resubmit.

➢ RSC undergoing technical review; further documents may be required

Site Characterization

Generic standards met (Tier 1) — Yes

Proponent (re)submits risk assessment (Tier 2 or Tier 3)

MECP review and comments

All requirements as per O.Reg. 153/04 are met — No / Yes

Certificate of Property Use

Submit RSC

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RSCs and the Brownfields Environmental Site Registry

Once complete and duly accepted by MECP, the RSC is filed on the online Environmental Site Registry

- An important purpose of the Registry is to facilitate public access to information contained in RSCs, especially information about the environmental condition and remediation, if needed, of a property.

- Through the Registry, the public can obtain information concerning environmental site assessments, using the conceptual site model, the standards that were applied to the property and any remedial action which may have been undertaken to meet these standards.

- The Registry also contains information about instruments that may have been issued to the owner in relation to the RSC property.

- The Registry has search capabilities to assist the public in finding RSCs which may have been filed for a particular property.

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Access Environment

[Access Environment](#) is a map-based search tool for permissions issued. Using Access Environment users can search for:

- Environmental Compliance Approvals

- Environmental Activity & Sector Registrations

- Renewable Energy Approvals

- Permits To Take Water

- Pesticide Licenses

- **Records of Site Condition***
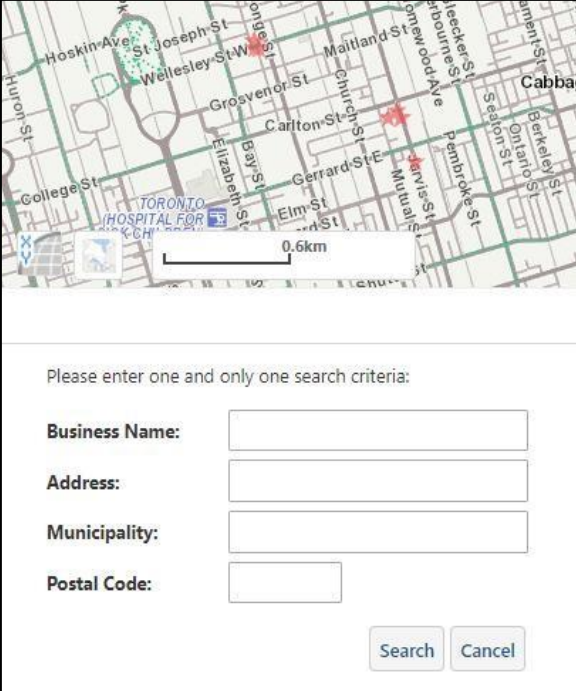
*For RSC, Access Environment can be used to search for records filed from April 29th, 2022.

For records filed between July 1st, 2011 and April 28th, 2022 – Records can be found using the [RSC Search Tool](#)

For records filed between October 1st, 2004 and June [30th, 2011 – Records can be found using the Brownfields Environmental Site Registry.](#)

The ministry is currently working to migrate all data to Access Environment.

Basic Search View

Advanced Search View

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Applying Online: Platform for online environmental permission services

Moving to the Ministry's Online Platform

- The ministry is moving toward an entirely online application process to improve service delivery of environmental permissions.

- The Service Ontario website where RSC applications are currently submitted is being phased out and will no longer be in use as of June 2, 2023.

- This change is being made to make the application process more user friendly, to reflect stakeholder feedback and to improve service delivery of environmental permissions. The new system will:
  - Reduce the chance for errors through built-in data validations
  - Enhance the overall user experience through automated features in site selection and improved GIS functionality
  - Allow for increased transparency in communication with the property owner
  - Enable increased file size limit for uploading documents
  - Allow you to complete your applications faster as the system auto-completes common applicant information
  - Provide access to a one-window application portal for all ministry permissions and registrations such as Permits to Take Water, Environmental Compliance Approvals and Environmental Activity and Sector Registrations

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Resources for submitting online

The ministry is offering account creation sessions and demonstrations to assist you in submitting online. Visit the booking page to set up a session.

- live assistance with creating your online ministry account
- live assistance with linking an authorized representative account to a business or individual
- a demonstration of the Permit to Take Water application process

If you wish to participate in user research and testing of the online environmental permission services in the future, sign up here.

Online Resources

Instructions to help you set up the accounts you need to access ministry services online:
https://www.ontario.ca/page/set-up-public-secure-ministry-account

Step-by-step video guidance on account creation and other details available here.

Should you have questions or need assistance, you may contact the Client Services and Permissions Branch by phone, Monday to Friday (8:30 a.m. to 5 p.m.) at 416-314-8001,Toll-free: 1-800-461-6290 or by email at enviropermissions@ontario.ca.

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High Quality Submissions - Common Application Mistakes

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Promoting High Quality Submissions

- The quality of application submissions has a direct impact on the time it takes for the ministry to undertake a review.

- Submissions that do not meet the requirements of O. Reg. 153/04 result in a substantial amount of time spent between the ministry and the client requesting the missing information before the application can be sent for technical review.

- The ministry has been taking a number of steps to drive higher quality submissions across all permission types, including Brownfields.

- The following section outlines common submission challenges with both RSCs and RAs and provides an overview of the steps the ministry has been taking to drive higher quality submissions across all permission types, including Brownfields.

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RSCs: Common Submission Challenges

Property ownership and legal description issues:
- Not providing owner's information correctly
- Not providing ownership types and legal description correctly
- Not providing correct deed and other beneficial owner info

Plan of Survey
- Not Identifying and labelling Phase one, two and RA properties correctly
- Survey plan and surveyor's certifications provided doesn't meet the Surveyor's Act's requirements

Current and Past Use Table
- Current owner's name not matching with the information in the RSC form
- Property uses not matching with the Reg. requirements (Vacant/unused industrial or commercial properties are identified as 'Agricultural or other'. (s. 2 of O.Reg 153/04)

APEC Table
- PCA Descriptions do not match the descriptions provided in Table 2 of Schedule D.
- Locations of APECs, which are supposed to be on-site only, are identified off-site

Phase 2 Conceptual Site Model (CSM) Incomplete site characterization and Delineation
- Missing site sensitivity information (ANSI, soil pH etc)
- Not having the minimum number of monitoring wells
- Missing or insufficient chemical data
- Not assessing APECs correctly
- Contamination not properly delineation

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Risk Assessments: Common Submission Challenges

No consultation with the District Office prior to submission:

- Non-Standard Delineation applicability for Tier 3 RAs
- MGRA suitability

Not consulting with the District Office early enough in the process for complex sites:

- Early identification of significant issues
- Better facilitation through the process
- Recommend including Owner (s)

Inadequate consultation prior to MGRA submission:

- Limited to no data/ figures or cross-sections
- One round of groundwater sampling
  - Highly problematic for sites with Volatile Organic Compounds and Hydrocarbons

Incomplete site characterization (Phase 2 Conceptual Site Model, P2CSM) at the time of submission (MGRA or the Pre-Submission Form for the Tier 3)

- Incomplete/inadequate delineation
- Site has not been adequately assessed
- One round of groundwater sampling / inadequate groundwater sampling of well network
- Inadequate data to support "flow through conditions"
- Ongoing commercial/industrial operations

Property ownership and legal description issues:

- Road conveyances
- Change in ownership after RA has been accepted and CPU issued
- Lack common ownership of multiply properties
- Legal descriptions not reflecting RA/RSC study area

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Environmental Compliance

- The ministry is responsible for ensuring compliance with Ontario's environmental [laws](#).

- Through its pro-active risk-based inspection program, the ministry assesses compliance with the Brownfields regulation and standards such as CPUs at sites that are selected based on compliance history as well as environmental and health-based risks.

- The ministry also conducts responsive inspections and site visits as part of its follow up to reports of incidents of pollution, notifications of spills, and complaints from the public.

- [In accordance with the ministry's Compliance Policy - Applying Abatement and Enforcement Tools, where non-compliance is found during a planned](#) or responsive inspections ministry staff employ a variety of tools to ensure that the responsible party is taking appropriate measures to bring their operations into compliance. These tools may include, violation notices, tickets, Orders and/or formal prosecutions.

- In the 2022/2023 fiscal year, MECP completed 52 inspections, including desktop audits, field visits, and report reviews to ensure compliance with CPUs across Ontario.

- 37 CPUs were issued in 2022-2023, and 176 have been issued in the last 5 years.

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Brownfields

Desired Outcomes

Where do we want to go?

Improved service delivery options (e.g. IT)

High quality submission

Greater certainty in approval timelines

Reduced number of RSC iterations

Closer working relationship with stakeholders

Greater focus on high risk RSCs

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Ongoing Effort to Achieve Desired Outcomes

Completed

Goal

Reduce number of RSC/CSM iterations

Improve timelines

Reduce backlog/limit future backlog

Short - Medium-Term

Goal

Reduce number of RSC/RA iterations

Improve timelines

Prevent future backlog

Long-Term

Goal

Streamline/reduce lower-risk RSCs

Improve timelines

- QP Community established in collaboration with ONEIA to improve communication with QP partners (QPCO)

- CSM backlog cleared; review turn-around target of 10-12 weeks for CSM comments on the PSF

- New streamlined NIA template rolled out on May 2021

- RSC iterations down from an average 2.4 to 2.1

- Soft launch of new eRSC conducted March, 2022 and final in June 2023
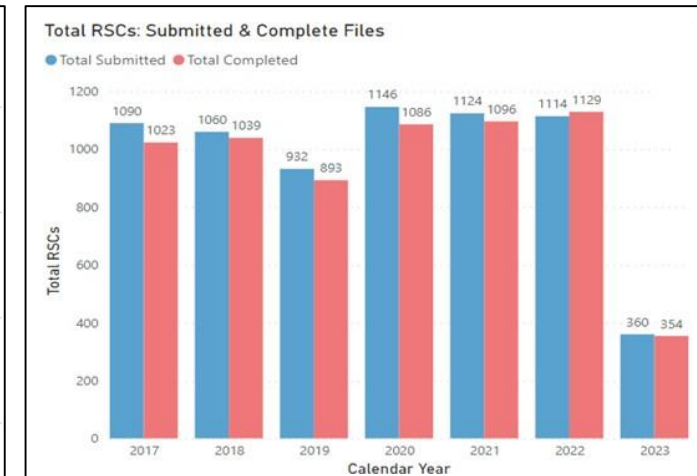
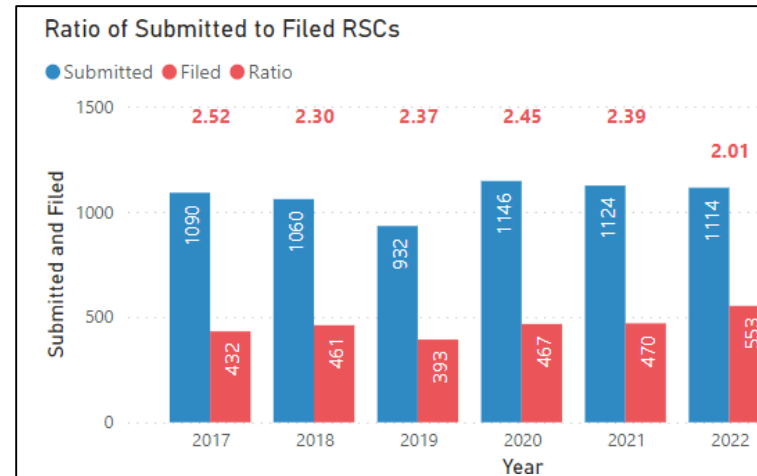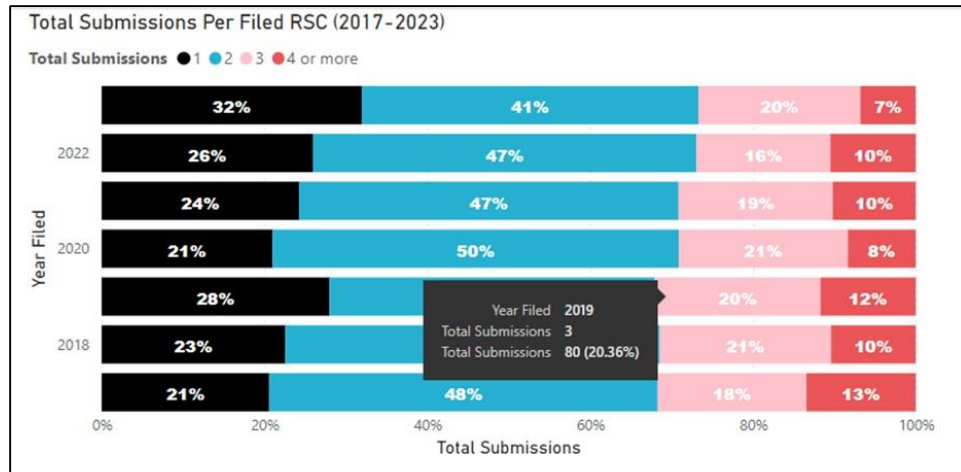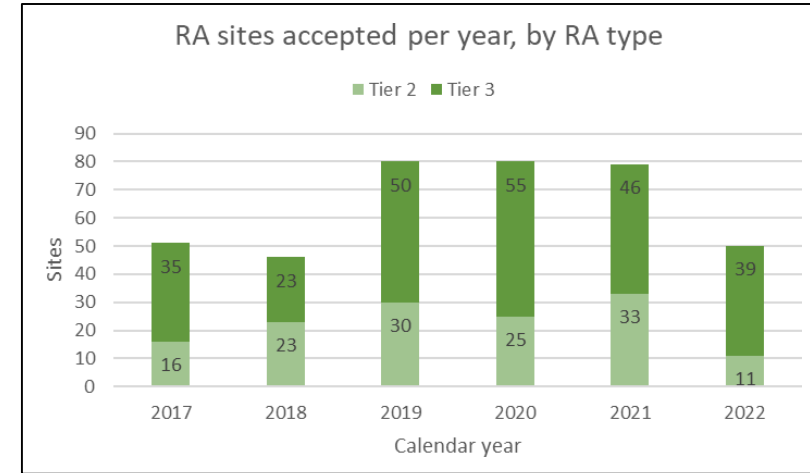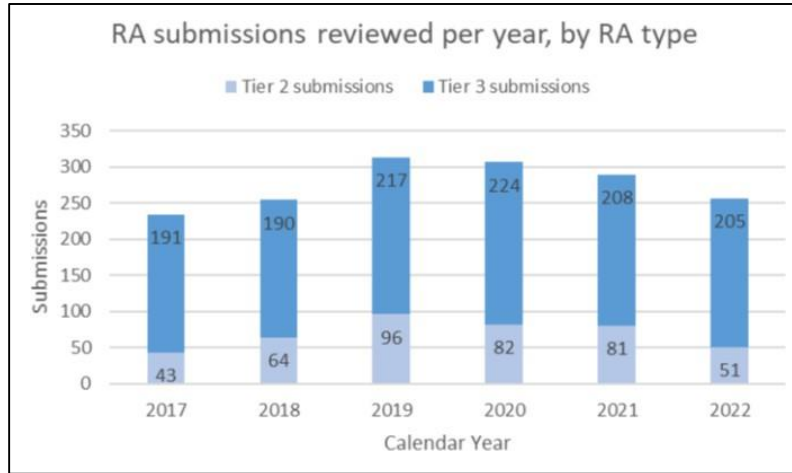- Consideration of Brownfield modernization is ongoing.

Working Together

- Since 2018, the ministry has worked with ONEIA to host annual Approvals Academy Sessions for its members to present our requirements and tips on how to submit high quality applications for our permissions

- The ministry has also been working on key initiatives such as brownfields and excess soil with ONEIA and QPCO to get their input on key policies for qualified persons.

- The ministry will continue to work with ONEIA and QPCO to ensure industry, qualified persons and consultants have up to date information on our permissions program and guidance to support them.

ONEIA
ONTARIO **ENVIRONMENT**
INDUSTRY ASSOCIATION

QPCO
QUALIFIED PERSONS
COMMUNITY OF ONTARIO

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Measuring Challenges & Progress
Statistics

RA submissions reviewed per year, by RA type

RA sites accepted per year, by RA type

Total Submissions Per Filed RSC (2017-2023)

Ratio of Submitted to Filed RSCs

Total RSCs: Submitted & Complete Files

Resources

Environmental Permissions
https://www.ontario.ca/page/environmental-permissions

Brownfields Redevelopment
https://www.ontario.ca/page/brownfields-redevelopment

Guide: Site Assessment, Cleanup of Brownfields, Filing of Record of Site Condition
https://www.ontario.ca/page/guide-site-assessment-cleanup-brownfields-filing-records-site-condition#section-0

Brownfields Technical Q&A Guide:
https://www.ontario.ca/page/brownfields-answers-technical-questions

Environmental Registry of Ontario
https://ero.ontario.ca/page/welcome

Access Environment
https://www.ontario.ca/page/list-environmental-approvals-and-registrations

MyOntario Account Login
https://www.clientaccount.ene.gov.on.ca/PepEnrolment/psland

Environmental Bill of Rights
https://www.ontario.ca/page/environmental-bill-rights

Compliance Policy Applying Abatement and Enforcement Tools
https://www.ontario.ca/page/compliance-policy-applying-abatement-and-enforcement-tools

Set up accounts to access ministry services online
https://www.ontario.ca/page/set-up-public-secure-ministry-account

Information about species at risk and permits, agreements and conditional exemptions
https://www.ontario.ca/page/species-risk

Step-by-step video guidance on account creation and other details
https://www.youtube.com/watch?v=LfHWj3idi1s&list=PL-3lBZ3-hn-cijH5dcYbdmG3lMRZzdvWl

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Questions

Ministry of the Environment, Conservation and Parks

Client Services and Permissions Branch
Monday to Friday, 8:30 a.m. to 5:00 p.m.

Local: 416-314-8001
Toll-free: 1-800-461-6290
Email: enviropermissions@ontario.ca

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