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# A New Approach to Managing ESC Inspections and Environmental Compliance



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TRIECA Conference  
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# Background

- Halton Region recognized that the Contract Administrator ESC inspection services provided on a *compliance with contract* basis may not support the principle of adaptive environmental management.
- The Region began using third party environmental compliance and inspection monitors on some linear infrastructure projects in 2015.

# Background

- The Primary objectives of the third party inspection program were to:
  - Prevent environmental impacts
  - Improve overall site conditions
  - Minimize the risk of lengthy delays related to environmental compliance
- A Secondary objective was to provide a key communication and engagement role between the regulatory agencies (mainly the Conservation Authority) and project team.

# Identified ESC and Compliance Issues

- Installation and maintenance of *ESC measures*
- Type and capacity of *discharge treatment systems*
- *Contract setup* and compliance with Specifications
- Complex *regulatory requirements* from MNRF, MOECC and CA
- *Communication and reporting* between the Contractor, Contract Administrator and the Region



# ESC Measures

- Responsive and Reactive
- Performance-based → replace and supplement
- Multi-barrier





# Discharge Treatment Systems



# Contract Setup and Control

- ESC Measures paid Unit Rate Basis vs. Lump Sum
- Must Specify that a Third Party Inspector will be on Site – Insurance and Expectations
- Manage Costs through Provisional Items, Contingencies & Quantitative Risk Management
- CA job to ensure project delivered on budget
  - Costing of ESC measures as a % → 0.7%
  - Shut down costs for compliance



# Complex Regulatory Compliance Requirements

- Projects have monitoring and mitigation requirements typically from MOECC PTTW, Conservation Authority, MNRF, and DFO.
- Large number of commitments made within environmental reporting, emails, design drawings, and permits.
- Little coordination among agencies and differing monitoring conditions result in a lack of clarity around compliance.



Conservation Halton logo: 2598 Britannia Road West, Burlington, ON L7P 0G3, Telephone: 905-336-1155, Fax: 905-336-6684

PERMIT # : 4616  
FILE # : A/12/O/28

**PERMIT**

IN ACCORDANCE WITH SECTION 3 OF REGULATION 162/06, PERMISSION HAS BEEN GRANTED TO:

Owner's Name: Halton Region Phone: 905-825-6000  
Mailing Address: 1075 North Service Road West, Oakville ON, L6M 2P7  
Agent/Contractor: P.V. Anderson Associates Ltd. Phone: 416-497-8600  
2001 Sheppard Ave. East, Toronto ON, M2J 4Z9



**MNRF File # AU-LOA-014-15 - amended**

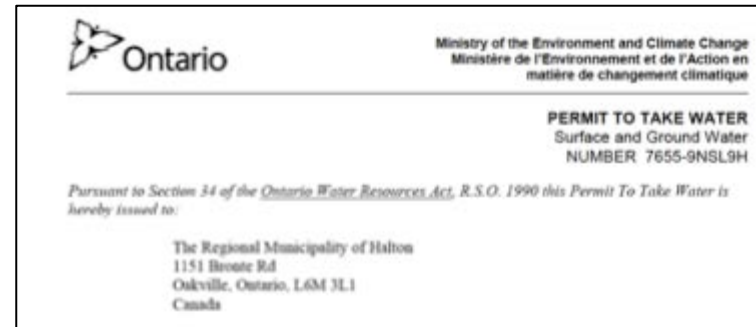
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Ministry of Natural Resources & Forestry / Ministère des Richesses Naturelles et des Forêts

Southern Region  
Aurora District Office  
50 Bloomington Road  
Aurora, ON L4G 0L8

March 23, 2015

Regional Municipality of Halton  
1151 Bronte Road  
Oakville, Ontario, L6M3L1



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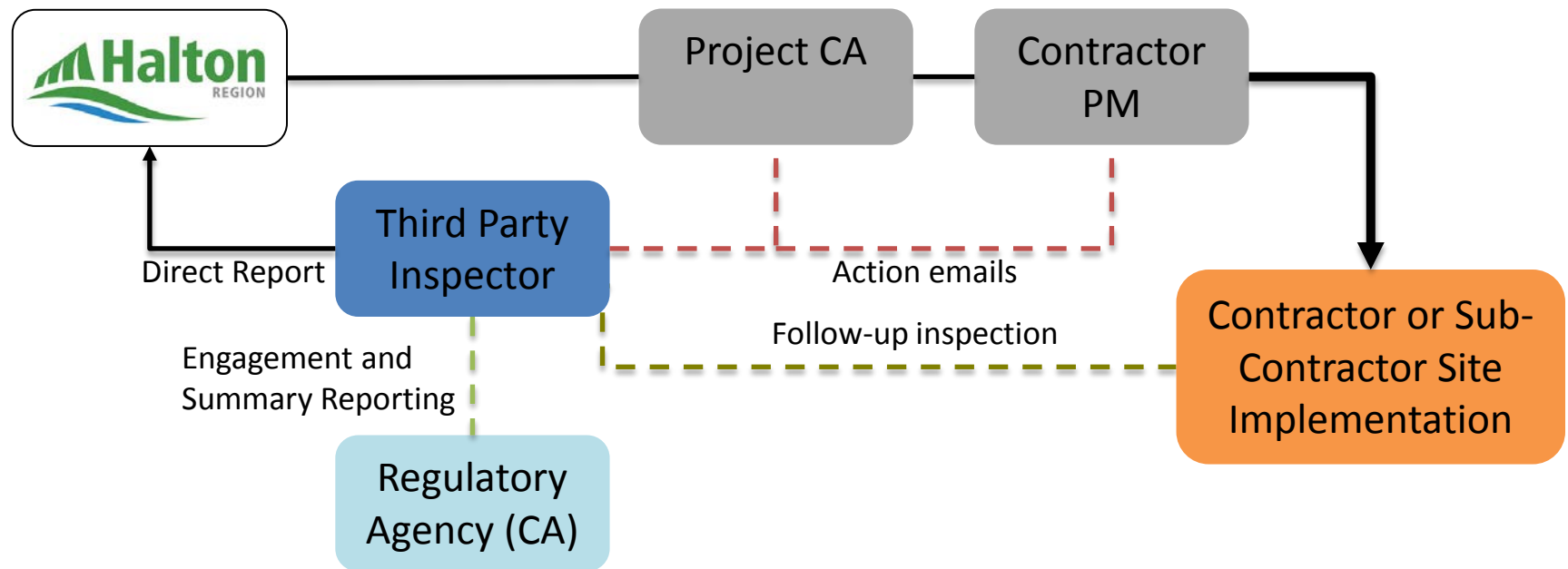
The Regional Municipality of Halton  
1151 Bronte Rd  
Oakville, Ontario, L6M 3L1  
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# Complex Regulatory Compliance Requirements (cont.)

- Develop and Implement an adaptive EMP as a contract document



# Reporting and Communication



## Inspection Reporting





# Conservation Authority

- Approach to third party inspections is also about relationship building
  - Improved trust and transparency on construction projects
  - Provide an audit function to help supplement CA inspections
- Ultimately hope to decrease permitting durations - CA will have confidence in adaptive and rigorous approach to ESC

# Conclusions

Third Party Inspection Role is to:

- Identify weaknesses in ESC measures and providing adaptive solutions;
- Help manage implementation and compliance with the project Environmental Management Plan (EMP).
- Improve overall site conditions through improved ESC and other environmental mitigation measures.
- Reduce Conservation Authority permitting times (*time will tell*) - increased transparency and accountability to environmental site inspections.

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