



March 8, 2024

The Township of Jocelyn  
3670 5th Road  
RR#1 Hilton Beach, ON P0R 1G0

E-mail: [admin@jocelyn.ca](mailto:admin@jocelyn.ca)

Attention: Ms. Janet Boucher

**Re: Proposal for 3 Year Annual Monitoring and Reporting Program**  
The Township of Jocelyn Landfill Site, Jocelyn Township, Ontario  
Pinchin File: 204232.011

Pinchin Ltd. (Pinchin) is pleased to provide The Township of Jocelyn (Client) with the following proposal to complete the Annual Monitoring and Reporting Program for a 3-year term in support of the on-going operation of the Township of Jocelyn Landfill Site (the Site).

The purpose of completing the monitoring program is to assess the hydraulic media for contaminants of concern as a compliance requirement under the Site Certificate of Approval (CofA) Number **A561001** and the applicable regulatory requirements for 2024, 2025 and 2026.

In support of the on-going operation of the Site, Pinchin proposes to provide field monitoring and annual reporting services as outlined herein. It is Pinchin’s opinion that a strengthened monitoring and reporting program will support the need for continual landfilling activities in an environmentally sustainable approach.

**1.0 PINCHIN PROFILE**

Pinchin Ltd. (Pinchin) is a multidisciplinary consulting firm that has been committed to Environmental Health and Safety for over 40 years and provides a wide range of engineering, building sciences, geosciences, environmental, and occupational health and safety solutions across Canada. We are committed to excellence and dedicated to addressing the needs of our Clients.

Pinchin was founded in 1981 by Dr. Don J. Pinchin to address the “new” issues regarding asbestos concerns in buildings and quickly expanded to address a wide variety of health and safety concerns. Pinchin expanded across Canada to deal with this increasing focus on health and safety.

From Victoria, British Columbia to St. John’s, Newfoundland, Pinchin is staffed by a team of over 900 skilled and experienced professional engineers, scientists, industrial hygienists, geologists, technologists, project managers and support staff in 40 offices\*

**1981**  
est.

**1100**  
total staff

**40**  
offices  
nation-wide



Pinchin can service all regions from coast to coast. The proximity of our offices to your site enhances our ability to provide an in-depth knowledge of local regulations, legislation, and market conditions, as well as an exceptional level of responsiveness and accountability. As such, Pinchin is well suited to offer localized solutions to complex problems.



Our company has grown over the past three decades but our commitment to our core values has remained strong.

\*Offices in Quebec are part of Le Groupe Gesfor Poirier Pinchin Inc. (Quebec), established in 1988.

Pinchin recognizes that fair and honest treatment, and the well-being of each employee, is of vital importance to our company’s successful operation. Each employee takes responsibility for contributing to a positive work atmosphere, being committed to teamwork and for demonstrating total respect for the public and for the environment in which we serve.

This commitment to our values flows through to our Clients and is reflected in our work, benefiting every relationship and every project in which we are involved.

**Pinchin’s Values**

Our values inspire us to achieve our goals and shared success

Act with honesty, integrity and accountability

Deliver exemplary quality and service

Conduct ourselves with respect

Empower employees through professional development

Promote the health and safety of all employees

Ensure corporate social responsibility



Pinchin provides consulting to Clients in the following core technical disciplines:

- Landfill Assessment and Compliance Monitoring;
- Hydrogeological Investigations;
- Environmental Sciences, Assessments, and Approvals;
- Environmental Due Diligence and Remediation;
- Environmental Laboratory Services (Asbestos, Lead, Mould, Legionella, Odour);
- Geotechnical Engineering;
- Building Science & Sustainability and Property Condition Assessments;
- Energy Management;
- LEED Construction Support;
- Hazardous Materials Management;
- Occupational Hygiene and Health and Safety;
- Emissions Reduction and Compliance (including noise);
- Indoor Environmental Quality;
- Radon Testing and Mitigation;
- Asset Retirement and Legacy Sites;
- Mechanical Engineering and Design; and
- Training.

For three decades, Pinchin has been providing clients with solution-focused services and training to:

- Government Institutions;
- Property Managers and Developers;
- Hospitals and Health Care Facilities;
- Educational Institutions;
- Private Equity and Institutional Investors;
- Financial Institutions;
- Insurance Companies and Adjusters;
- Commercial, Industrial and Residential Properties; and
- Contractors (General, Restoration, Hazardous Materials).



Pinchin continues to build on our reputation as a highly-trusted consulting firm that is responsive to our customers in today's rapidly shifting economic, environmental, social, and political terrain. From a thorough understanding of our indoor environments and the hazards that can affect both people and profits, to up-to-date expertise on assessing a company's environmental risks, Pinchin works with an increasingly diverse range of customers to provide innovative and effective services and solutions.

## **2.0 RELATED EXPERIENCE**

Pinchin has extensive experience conducting environmental sampling at landfill Sites across Canada. Over the past year, Pinchin has been involved with annual landfill monitoring projects for over 100 different landfill Sites located across the northeastern Ontario region alone. Pinchin clientele has included both the municipal and provincial sectors, as well as private landfill operators.

The scope of work that Pinchin routinely fulfills for our landfill projects includes:

- Sampling groundwater, surface water and leachate/condensate;
- Recording field observations, including water levels, surface water flow velocity and methane vapour readings;
- Comparing groundwater, surface water and potable sample results against applicable criteria, including applicable regulatory standards;
- Preparing interim reports that include description of sampling locations, sampling methodology, results, recommendations, figures and groundwater contour drawings;
- Preparing final reports that incorporate the information of the interim reports along with trend analysis and recommendations for future monitoring or a reduction in sampling programs;
- Stakeholder and public consultations; and
- Project management meetings and progress updates.

The project staff dedicated to this project has significant background in environmental monitoring projects, particularly for groundwater, surface water, leachate and landfill gas monitoring. In addition to landfill monitoring programs, Pinchin is routinely involved with landfill well installation programs, hydrogeological assessments, closure plans, design and operating plans, fill plans, waste capacity assessments and Environmental Compliance Approval (ECA) applications. Pinchin is also involved with implementing landfill training programs which have included field training and landfill operator training courses.



The following is a most-recent list of some of the landfills/Clients in which Pinchin has provided similar landfill deliverables for. Each of the following landfills operated within a Certificate of Approval or ECA:

#### **Township of Spanish & Sables Rivers**

**Address:** PO Box 70, 8 Trunk Road, Spanish, Ontario

**Client Contact:** Kim Sloss, 705-844-2300

**Contract Value:** \$107,000 (5 landfills annually, including analytical fees)

**Project:** 2016-2023 Spanish Sables Townships Annual Waste Disposal Site Monitoring & Reporting Project

**Project Description:** Pinchin was retained to sample groundwater and surface water for five waste management Sites located within Spanish Sable Townships. The five year monitoring program took place starting in 2016. Pinchin has provided annual monitoring reports for each landfill which documented the field program activities, methodologies and recommendations based on data collected at each Site. The monitoring program also included a well installation and repair program and liaison with the MECP and an assessment of waste capacity.

#### **Town of Englehart**

**Address:** PO Box 399, Englehart, Ontario

**Client Contact:** Ryan Vickery, 705-544-2244

**Contract Value:** \$10,000 / year (1 landfill annually, including analytical fees)

**Project:** 2015-2023 Englehart Annual Waste Disposal Site Monitoring & Reporting Project

**Project Description:** Pinchin was retained to sample groundwater and surface water for the Englehart landfill located within the Township of Englehart. The multi-year monitoring program took place starting in 2015. Pinchin has provided annual monitoring reports for the landfill which documented the field program activities, methodologies and recommendations based on data collected at each Site. The monitoring program also included a well installation and repair program and liaison with the MECP. Pinchin has also developed a Design and Operation Plan for the Site.

#### **Township of McGarry / Virginiatown**

**Address:** 27 Webster Street, McGarry, Ontario

**Client Contact:** Clermont Lapointe, 705-634-2145

**Contract Value:** \$12,500 / year (1 landfill annually, including analytical fees)

**Project:** 2015-2023 McGarry Annual Waste Disposal Site Monitoring & Reporting Project

**Project Description:** Pinchin was retained to sample groundwater and surface water for the McGarry landfill located within the Township of McGarry. The multi-year monitoring program took place starting in 2015. Pinchin has provided annual monitoring reports for the landfill which documented the field program activities, methodologies and recommendations based on data collected at each Site. The monitoring program also included a well installation and repair program and liaison with the MECP. Pinchin has also



developed a Design and Operation Plan for the Site, as well as a review of the waste capacity. Pinchin has also been involved with implanting a surface water monitoring program for the Site and providing a thorough review of the groundwater flow vectors and contaminant attenuation zone.

### **3.0 ROLES AND RESPONSIBILITIES**

#### **3.1 Project Team**

The proposed project team dedicated to this project has significant background in landfill projects, including, but not limited to Monitoring and Reporting Programs, Waste Capacity Assessments (WCA), Design and Operations (D&O) Plans, Waste Fill Plans, Closure Plans and Hydrogeological Assessments. The project team has extensive experience specifically in the waste management industry which will enable Pinchin to carry forward the project in a compliant and efficient manner. Furthermore, as presented in the select list of landfill experience provided above, it is important to note that the proposed Pinchin project team has previous site-specific landfill experience for the subject Site.

Over the past years, Pinchin has invested in recruiting seasoned and high-level environmental engineers and hydrogeologists. Pinchin has focused on investing and developing this team of highly qualified staff specifically structured to engage stakeholders on various waste management and hydrogeological requirements. The need for proper waste management strategies has allowed for Pinchin to be at the forefront of most landfill-related investigations across Ontario. As the team continues to grow, Pinchin's involvement in waste management projects has created a fluent service line for a number of clients in across Ontario.

Pinchin is capable of dispatching highly trained environmental technicians to conduct field work even at the most remote landfill sites. Pinchin's technicians are well-seasoned to complete these investigations effectively and efficiently to enable project deadlines to be met.

With over 50 years combined experience in groundwater and surface water monitoring and reporting, Pinchin's project team shall consist of the following environmental personnel:

***Tim McBride, B.Sc., P.Geo., QP<sub>ESA</sub>, Director, Landfill & Municipal Services***

Mr. McBride will be designated as the Senior Hydrogeologist for the project. Mr. McBride has over 25 years' experience and supervised and reviewed many different kinds of projects including waste management planning studies, federal environmental assessments, waste disposal site hydrogeological studies, Design & Operations Plans, landfill monitoring (municipal and wood-waste with comparison to Guideline B-7), large diameter well installations (for drinking water, process water and landfill leachate collection), hauled sewage site monitoring and reporting, well-head protection studies, industrial stack



testing, mine tailings assessments, designated substance surveys, geotechnical investigations, soil and ground water inspections and drinking water inspections in both residential and municipal settings.

As the Senior Hydrogeologist for the project, Mr. McBride will be responsible for reviewing the hydrogeological characteristics of the Site. In addition, Mr. McBride will be responsible for reviewing the current waste management operations and recommendations for future waste management options. Mr. McBride will be involved with developing the cost benefit analysis and will also play an instrumental part in recommending waste management solutions for the community. He will also be the lead liaison for the project.

**Alana Valle, B. Eng., EIT, Project Manager**

Alana Valle is a Project Manager in the Environmental Due Diligence and Remediation (EDR) group and has been employed by Pinchin Ltd. since 2019. Alana holds a Bachelor of Engineering in Environmental Engineering from the University of Guelph and is an Engineering Intern with Professional Engineers Ontario (PEO). Ms. Valle has approximately five years of environmental consulting experience and has completed many projects on behalf of Pinchin Ltd., including landfill compliance monitoring and reporting, hydrogeology assessments, waste capacity assessments, design & operations plans, landfill closure plans and waste management plans. This experience extends to industrial, commercial and government projects. Ms. Valle has been responsible for a variety of projects in which soil, ground water and surface water quality in relation to regulatory standards and compliance evaluations were investigated, analyzed and reported upon.

**Cody Wheten, B.E.S., Planning (Hons), Project Coordinator**

Mr. Cody Wheten is a Project Technologist in the Environmental Due Diligence and Remediation (EDR) group and has been employed by Pinchin Ltd. since 2021. Mr. Wheten has four years of environmental consulting experience and has been involved in a multitude of projects, including Environmental Site Assessments (ESAs), site investigations, compliance monitoring, landfill monitoring and hydrogeologic modelling. Mr. Wheten has been involved in field monitoring and data analysis for various landfills in Southern Ontario. He has also worked on a variety of projects that have included monitoring, analysis, and reporting and has played a part in writing technical documents. Cody has worked extensively with various groundwater and surface water monitoring programs, including large-scale programs such as the Algoma Steel Baseline/MECP programs, Waterloo landfill groundwater and surface water programs and reporting and various other landfill monitoring programs throughout Ontario.



#### 4.0 SCOPE OF WORK

##### 4.1 Groundwater Monitoring Requirements

As per the most recent annual monitoring report, the following groundwater monitoring recommendations were provided:

- Continue with routine monitoring of all the available groundwater monitoring wells and surface water monitoring locations. Groundwater monitoring shall be completed with analyses for the comprehensive list of parameters listed in Column 1 of Schedule 5 for the spring sampling event and Column 2 of Schedule 5 of the fall monitoring event, of the MECP Landfill Standard.

##### 4.2 Groundwater Monitoring Well Locations

The groundwater monitoring well network currently consists of 10 monitoring wells. Some monitoring well locations consist of well nests which provide groundwater quality from the shallow and deeper unconfined aquifer. The following table provides a summary of the current groundwater monitoring well network:

Monitoring Well ID	Location	Rationale
BH1	Northwest of landfill (nested with BH1A).	Background Well
BH1A	Northwest of landfill (nested with BH1).	Background Well
BH2	Central portion of landfill.	Source Well
BH3-10	South of landfill.	Downgradient Well
BH4	Southwest of the landfill (nested with BH4A).	Downgradient Well
BH4A	Southwest of the landfill (nested with BH4).	Downgradient Well
BH5	Southeast of the landfill (nested with BH5A).	Downgradient Well
BH5A	Southeast of the landfill (nested with BH5).	Downgradient Well
BH6	West central portion of landfill.	Source Well
BH7-21	West of the landfill.	Cross-gradient Well

##### 4.3 Groundwater Monitoring Parameters

It is proposed that groundwater samples shall be collected and analyzed for the following parameters:

- Groundwater monitoring shall be completed with analyses for the comprehensive list of parameters listed in Column 1 of Schedule 5 for the spring sampling event and Column 2 of Schedule 5 of the fall monitoring event of the MECP Landfill Standard.





#### **4.4 Groundwater Monitoring Procedures**

To perform the groundwater monitoring activities, the following tasks will be conducted at the Site:

- Pinchin will review the Site-specific monitoring well locations and will notify the Client at least one week prior to field activities. Pinchin will subsequently mobilize staff to the Site for field monitoring activities during the spring and fall 2024, 2025 and 2026 monitoring events;
- A series of samples shall be collected from multiple locations using standard purging and sampling equipment an effort will be made to minimize potential for cross-contamination by initiating sampling at the lesser-contaminated monitoring well installations and progress to locations with higher potential levels of contamination;
- An inspection will be completed of each groundwater monitoring well installation for damage and/or compliance with O.Reg. 903. Confirmatory measurements of the well construction details will be collected to confirm the well installation details. Pinchin will replace dedicated sampling equipment as required;
- The UTM coordinates will be collected at each monitoring well using a hand-held GPS;
- Static groundwater levels shall be collected at all monitoring well locations during the monitoring event using a 100-metre water level tape. Measurements will be collected from the top of riser pipe (which is assumed to have been previously surveyed) and will be compared to previously collected data to determine the water-table trends and anomalies, the hydraulic vectors and gradients and to determine whether rising or falling groundwater elevations significantly affect contaminant migration. At a minimum, two replicate readings shall be collected no less than three minutes apart to ensure level stabilization;
- Each monitoring well shall be purged during the sampling event prior to the collection of sample. Monitoring wells shall be purged using new or existing 3/8" High Density Polyethylene (HDPE) tubing sampling equipment which will be replaced where required (Pinchin is to ensure that existing tubing is reliable in both performance and quality and may need to be replaced). Pinchin shall purge a minimum of three (3) well volumes to a maximum of six (6) well volumes using new Pinchin-supplied sampling equipment until the well volume column is representative of the surrounding formation;



- During purging activities, additional groundwater monitoring parameters shall be collected from each monitoring well using a calibrated YSI-556 water quality meter for real-time in-situ measurement of field parameters including:
  - Dissolved Oxygen (DO);
  - Conductivity;
  - pH;
  - Temperature;
  - Total Dissolved Solids (TDS); and
  - Oxidation-Reduction Potential (ORP).
- Purged water will be disposed to ground surface, on-site and up-gradient within the landfill confines;
- Groundwater samples shall be collected from each groundwater monitoring installation in accordance with the MECP Sampling Document. Dissolved parameters will be field-filtered using an in-line 0.45 micron disposable filter. Upon completion of field sampling and monitoring activities, all samples collected shall be submitted for analyses to a laboratory accredited by the Canadian Association for Laboratory Accreditation (CALA) in accordance with the International Standards ISO/IEC 17025 “*General Requirement for the Competence of Testing and Calibration Laboratories*“, dated December 15, 1999. All parameters will be tested using MECP approved procedures and the analytical methods prescribed in the “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*” dated March 9, 2004, amended July 1, 2011;
- All groundwater samples will be analysed during the monitoring events at the pre-determined monitoring well locations for the comprehensive list of parameters listed in Column 1 of Schedule 5 for the spring sampling event and Column 2 of Schedule 5 of the fall monitoring event of the MECP Landfill Standard; and
- Pinchin shall collect and submit one groundwater field duplicate per ten samples recovered for quality assurance and quality control purposes (QA/QC), per sampling round.

#### **4.5 Surface Water Monitoring Requirements**

The Site has one historically designated surface water monitoring location located along the southwest toe of the waste mound. The surface water has been identified as an expression of the local water table.



As per the most recent annual monitoring report, the following surface water monitoring recommendations were provided:

- Surface water monitoring shall be completed with analyses for the comprehensive list of parameters listed in Column 3 for the spring monitoring events and Column 4 for the fall monitoring event, of Schedule 5 of the MECP Landfill Standard.

#### **4.6 Surface Water Monitoring Location**

One surface water monitoring station is located at the Site:

- SW is located along the southwest toe of the waste mound.

#### **4.7 Surface Water Monitoring Parameters**

It is proposed that surface water samples shall be collected and analyzed for the following parameters:

- The comprehensive list of parameters listed in Column 3 for the spring monitoring events and Column 4 for the fall monitoring events of Schedule 5 of the MECP Landfill Standard.

#### **4.8 Surface Water Monitoring Procedures**

During the monitoring events, the following tasks of the surface water monitoring activities will be conducted at the Site in the spring and fall of 2024, 2025 and 2026:

- Pinchin will review the Site-specific surface water monitoring location and will notify the Client at least one week prior to field activities. Pinchin will subsequently mobilize staff to the Site for field monitoring activities;
- All field activities will be initiated at the down-stream locations working up-stream to avoid sediment disturbance and influencing sample integrity;
- Wherever practical, Pinchin will collect samples and field monitoring at mid-stream rather than nearshore locations. Samples collected from mid-stream reduce the possibilities of contamination (i.e., shore effects - back eddies, seepage from near shore soils, atmospheric components such as pollen concentrating in slow moving water, etc.). Samples will not be taken in back eddies or brackish waters unless required by the monitoring program objectives. If the flow is sufficiently slow that the collector can wade into the stream without risk, then the sample will be collected at a depth that does not pose a threat. If conditions dictate that the sample be taken from the stream bank, any deviations from the standard protocol will be accurately documented;



- During field measurement collection, surface water monitoring parameters shall be collected from each location using a YSI-556 water quality meter real-time in-situ measurement of field parameters including:
  - DO;
  - Conductivity;
  - pH;
  - Temperature;
  - TDS; and
  - ORP.
- Water samples shall be collected from the specified surface water monitoring locations mid-stream and mid-depth to minimize sediment, in accordance with the MECP Sampling Document. Upon completion of field sampling and monitoring activities, all samples collected shall be submitted for analyses to a laboratory accredited by CALA. All parameters will be tested for using MECP approved procedures and the analytical methods prescribed in the “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*”, dated March 9, 2004, amended July 1, 2011;
- All surface water samples shall be analysed during the monitoring events at the pre-determined surface water monitoring locations for the comprehensive list of parameters listed in Column 3 for the spring monitoring events and Column 4 for the fall monitoring event of Schedule 5 of the MECP Landfill Standard;
- Pinchin will only report parameter analyses results as per the supplied parameter lists although some laboratory packages may include additional testing parameters.

#### **4.9 Quality Assurance and Quality Control**

In order to provide confidence in the data obtained, a comprehensive QA/QC component is included in the sampling program. The QA/QC procedures developed for this monitoring program are prepared in accordance with MECP Sampling Documents and in most cases, exceed the minimum requirements. The project laboratory has its own internal QA/QC program, which is not fully described in detail here; however, general laboratory and Pinchin QA/QC procedures are briefly summarized below:

- **Laboratory QA/QC:** Routine QA/QC by the project laboratory will be undertaken and includes the following for every ten samples (a batch): analytical method blank, laboratory duplicate (detailed above), spike blank and matrix blank. Only laboratories accredited by



the CALA in accordance with the “*International Standards ISO/IEC 17025 – General Requirement for the Competence of Testing and Calibration Laboratories*”, dated December 15, 1999, will be used. It contaminants will be tested for using MECP approved procedures and the analytical methods prescribed in the “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*”, dated March 9, 2004;

- **Field Equipment:** The calibration and maintenance of field equipment is also an integral component of QA/QC. All equipment will be kept clean and in good working condition, using the techniques described by the manufacturer. Calibrations, prior to the sampling event, will be performed under the same instrumental and chemical conditions as those that will exist at the sampling site. The frequency of calibration depends on the accuracy requirements of the investigation and the stability of the instrument. To ensure a high standard of QA/QC, monitoring personnel have been adequately trained and supervised;
- Each piece of equipment will be calibrated to a primary standard prior to each monitoring event with a daily functional check against a secondary standard. Each water level meter will be inspected prior to each monitoring event with a daily functional check to ensure proper visual and audible function and be visually inspected for tape damage. Rental equipment is expected to come pre-calibrated to a primary standard; however, functional checks to a secondary standard should also occur daily. When equipment is used at more than one sampling location (e.g., water level meter), the equipment is used first at the location which is assumed to have lesser contamination concentrations, progressing to locations with anticipated higher contamination levels. Common equipment is cleaned, using Alconox, methanol and disposable paper towels and rinsed with distilled water in the field between each sampling location;
- **Sample Collection:** All sample containers are provided by the laboratory (certified clean) and will be appropriate for the parameters being analyzed. All sample containers will be labelled with their respective sampling locations, date and time and sampler name. Sample collection equipment (bailers and samplers) will be dedicated to one sampling location only. Water samples will be collected using clean disposable nitrile gloves. Field-filtering and preservation is done as soon as possible during sampling. Samples are kept cool by storing and transporting them in a cooler with ice;
- **Blind Duplicate Samples:** During each sampling event, a duplicate sample will be collected at a minimum frequency of 10% (i.e., one duplicate sample for every ten samples) to test for reproducibility of the sampling and analytical procedure and representativeness of the sample quality. Samples are collected in sequence and the



duplicate is labelled with a fictitious sampling location so the duplicate is not known to the laboratory, but the location where the duplicate sample is collected is recorded to allow comparison of analytical results. Blind duplicate sample containers are filled immediately after the original sample container for each analysis has been filled;

- Shipment: Samples are packed in a cooler complete with ice packs for shipment to the analytical laboratory. The packing is suitable to ensure bottles are not damaged in transit, and the cooler(s) are sealed at the site. All samples are submitted to the laboratory under a chain of custody procedure. References on the chain of custody to specific samples match sample identifications on the sample bottles. Samples are not shipped on a day preceding a weekend or holiday, to ensure sample shipment and arrival and resulting storage time prior to laboratory analysis does not exceed allowable limits. Samples are stored in a dedicated sample refrigerator prior to shipment; and
- Relative Percent Differences (RPDs): During data analysis, field and laboratory duplicate samples are compared to original samples using RPDs which is the preferred estimator of variability between two uncertain values. This is a commonly accepted method to evaluate variability between a sample and a duplicate. RPDs are defined as the difference in concentration divided by the average concentration of the sample and duplicate. RPDs are typically only applied when the measured concentrations are at least five times the Method Detection Limit (MDL) which is commonly referred to as the Practical Quantification Limit (PQL). Reported concentrations of less than the PQL are considered to be quantitatively unreliable, and RPDs are not applied when the reported concentrations are below this level.

#### **4.10 Reporting**

It is Pinchin's understanding that the reporting requirements will consist of annual monitoring reports completed for the reporting periods 2024, 2025 and 2026.

Pinchin proposes to carry out the reporting requirement in accordance with the following documents:

- Ministry of Environment (MOE), November 2010, *"Monitoring and Reporting for Waste Disposal Sites, Groundwater and Surface Water, Technical Guidance Document"* (MOE Landfill Document);
- MOE, January 2012, *"Landfill Standards: A Guideline on the Regulatory and Approval Requirements for New or Expanding Landfilling Sites"* (MOE Landfill Standards);
- Ontario Regulation (O. Reg.) 232/98, *"Landfilling Sites"*, under the Environmental Protection Act; and



- MOE, December 1996, “Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario” (MOE Sampling Document).

The annual monitoring reports shall be prepared, signed and stamped by a Qualified Person (QP) who shall take professional responsibility for its content and the accuracy of the information contained within.

**NOTE:** To fulfill the reporting requirements of the (i.e., historical comparison of data, trend analysis, etc.), Pinchin will require historical Annual Monitoring Reports for review, as well as any other pertinent information for the Site required to develop the report (i.e., surveys, monitoring well elevations, historical borehole logs, operational data, etc.).

#### 4.11 Limitations

It should be noted that the estimated cost to complete the monitoring program is based on Pinchin’s current knowledge of Site conditions. Should conditions vary during the course of the investigation, such as additional work time from unforeseen ground conditions, Site constraints (wrong keys for locked gate and well access) and additional sampling not included in this proposal. Pinchin reserves the right to modify the work program; however, no budgetary changes will be made without notification and consent from the Client. Pinchin will utilize our Standard Rates and Disbursement Schedule for such additional costs. The estimated cost presented is for the proposed scope of work as outlined herein and does not include clearing/brush cutting access roads and/or bedrock coring and permitting.

#### 5.0 PROJECT ESTIMATED COST

The estimated costs to implement the recommended work program detailed above are presented below:

DELIVERABLE	LUMP SUM COST (HST Extra)	ESTIMATED SCHEDULE
Spring 2024 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$4,750	Spring 2024
Fall 2024 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$3,875	Fall 2024
2024 Annual Monitoring Report	\$3,300	Winter 2025
Spring 2025 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$4,750	Spring 2025
Fall 2025 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$3,875	Fall 2025



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The Township of Jocelyn Landfill Site, Jocelyn Township, Ontario  
The Township of Jocelyn

March 8, 2024  
Pinchin File: 204232.011

DELIVERABLE	LUMP SUM COST (HST Extra)	ESTIMATED SCHEDULE
2025 Annual Monitoring Report	\$3,300	Winter 2026
Spring 2026 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$4,750	Spring 2026
Fall 2026 Field Monitoring Program (includes laboratory fees, project management, travel and disbursements)	\$3,875	Fall 2026
2026 Annual Monitoring Report	\$3,300	Winter 2027

In addition, it should be noted that the estimated cost is based on Pinchin's current knowledge of Site conditions. Should conditions vary during the course of the investigation, such as additional work time from unforeseen constraints, Pinchin reserves the right to modify the work program; however, no budgetary changes will be made without notification and consent from the Client. Pinchin will utilize our Standard Rates and Disbursement Schedule for such additional costs. The estimated cost presented is for the proposed scope of work as outlined herein and does not include Client meetings, obtaining municipal or other required permits, preparation of proposals/cost estimates for follow-up work or remediation activities, or additional work beyond the scope of work.

Pinchin will provide Client with an invoice for all work performed to date, including any necessary reasonable de-mobilization costs, and Client agrees to pay such invoice according to the payment terms of the contract or sooner as mutually agreed.

**Payment Methods Accepted by Pinchin**

Pay by Cheque	Pay by EFT or Wire Payments	Pay by Interac E-Transfer
Remit payment to: Pinchin Ltd.  2360 Meadowpine Blvd, Unit 2, Mississauga, ON L5N 6S2	Remitters in Canada: Pinchin Ltd.  Canadian Imperial Bank of Commerce, Meadowvale Banking Centre  6975 Meadowvale Town Centre Circle, Unit N1, Mississauga, ON L5N 2W7  Account # 6627919  Institution # 010  Transit # 08222  SWIFT/BIC: CIBCCATT  Deposit confirmations and/or remittance advice to be sent to <a href="mailto:accountsreceivable@pinchin.com">accountsreceivable@pinchin.com</a>	Contact Pinchin's Accounts Receivable Coordinator (info below).  <b>The Accounts Receivable            Coordinator will send a            Request Money link in order            to execute this transaction.</b>





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**Payment Methods Accepted by Pinchin**

Pay by Cheque	Pay by EFT or Wire Payments	Pay by Interac E-Transfer
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All payment methods must include reference to the **Pinchin Invoice Number** or the **Pinchin File Number**.

For assistance, contact an Accounts Receivable Coordinator [accountsreceivable@pinchin.com](mailto:accountsreceivable@pinchin.com) or 905.363.0678 and option 5.

The proposed work program is offered subject to the Terms and Conditions given in the “Authorization to Proceed” contract form (attached as Appendix I).

**6.0 CLOSING**

We trust that the information provided herein is sufficient for the Client to evaluate Pinchin’s proposal. To authorize Pinchin to initiate the work outlined herein, please sign and date the attached Authorization to Proceed (Appendix I) and e-mail an electronic (pdf) copy of the executed Authorization to Proceed to Cody Wheten at [cwheten@pinchin.com](mailto:cwheten@pinchin.com) If you have any questions, or require additional information, please do not hesitate to contact the undersigned.

We look forward to working with you on this assignment.

Sincerely,

**Pinchin Ltd.**

Prepared by:

Reviewed by:

Stuart Chisholm  
Project Technologist  
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Encl.: Appendix I – Authorization to Proceed, Limitation of Liability and Terms of Engagement

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Template: Phase II ESA Stage II PSI Proposal Template, EDR, January 25, 2024

**APPENDIX I**

**Authorization to Proceed, Limitation of Liability and Terms of Engagement**