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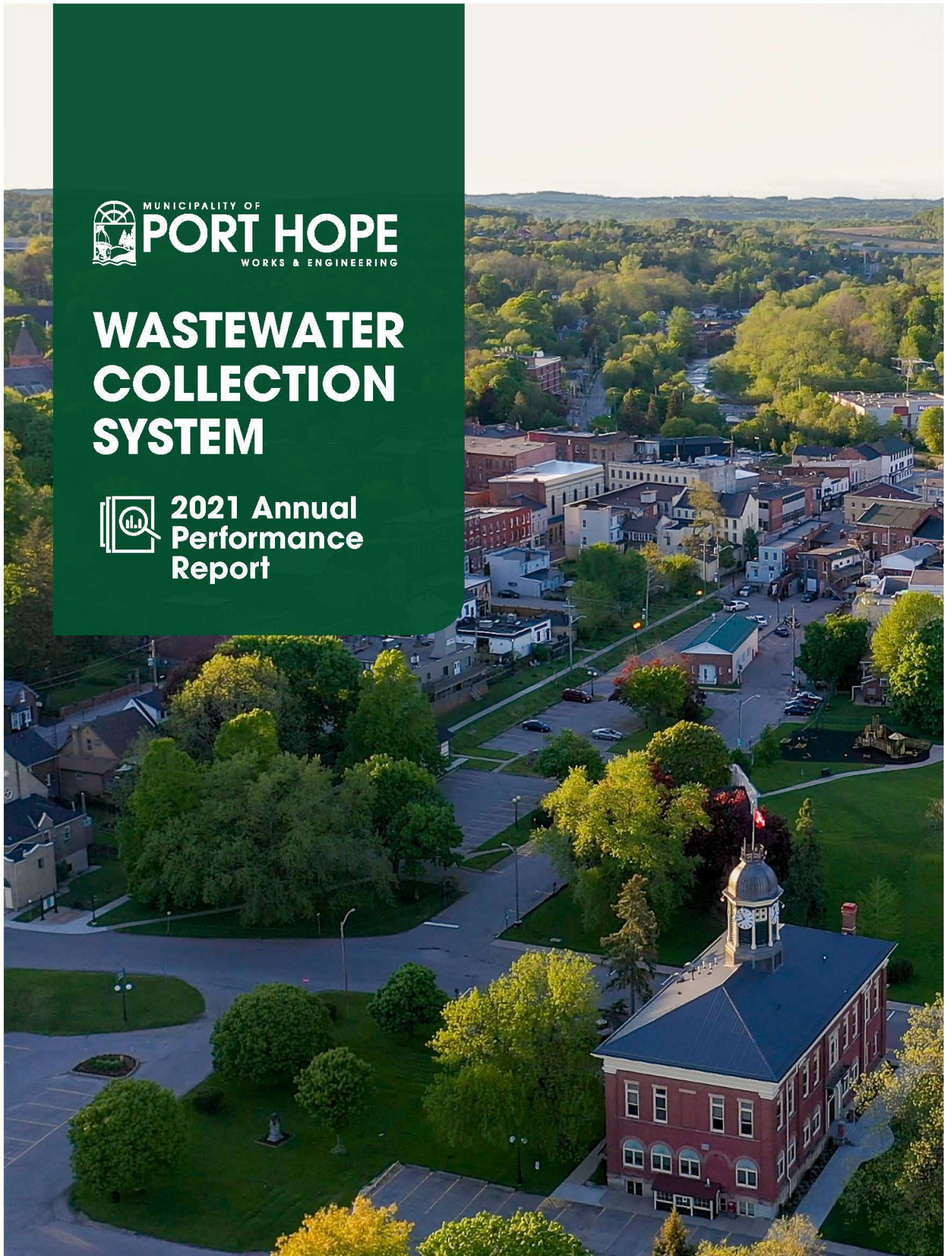
PORT HOPE

WORKS & ENGINEERING

WASTEWATER COLLECTION SYSTEM



**2021 Annual
Performance
Report**





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February 15, 2022

Municipality of Port Hope
56 Queen Street
Port Hope, ON
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Re: 2021 Annual Performance Report - Port Hope Wastewater Collection System

Dear Mr. David Smith:

We are pleased to provide the 2021 Annual Performance Report for the Municipality of Port Hope's **Wastewater Collection System**, located across the Municipality of Port Hope, servicing the Port Hope Wastewater Treatment Plant. This report has been completed in accordance with the Environmental Compliance Approval #5819-AU3QVA, Section 2.6 (3), dated February 26, 2018, and issued to The Corporation of The Municipality of Port Hope.

The report covers the period from January 1, 2021, to December 31, 2021.

Sincerely,

Kevin Yule
Manager, Wastewater
Municipality of Port Hope

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Executive Summary

The Port Hope Wastewater Collection System (WWC) is owned and operated by the Municipality of Port Hope in accordance with Environmental Compliance Approval #5819-AU3QVA, issued February 26, 2018. The wastewater collection system consists of approximately 79 kilometers of sanitary sewers, 3.59 kilometers of sanitary forcemain, and three sewage pumping stations (SPS); Mill Street SPS, AON SPS, Hope Street North SPS. The sanitary collection system also includes all other controls, electrical equipment, instrumentation, piping, pumps, valves, and appurtenances that are essential for the operation of the works. The Collection System is a Class I facility, and the Pumping Stations are a Class II facility.

Throughout the Reporting Period (January 1st – December 31st, 2021), no environmental incidents occurred, and only eight (8) customer complaints were reported. Operations staff worked diligently completing several maintenance, rehabilitation, and renewal projects to ensure the adequacy of the Municipalities wastewater system infrastructure. In 2021, approximately 187 sanitary sewer services were closed-circuit television (CCTV) inspected and 6 kilometers of sanitary sewer main was flushed, and CCTV inspected. Operations staff successfully repaired 3 sections of sanitary sewer main and 10 sanitary sewer services. 10 sanitary sewer service property line clean-out inspection ports were installed, 3 sanitary sewer service cured in place pipe (CIPP) installations, and 2 maintenance hole structure repairs were completed.

As part of our preventative maintenance program to be proactive and mitigate customer complaints, operational staff complete approximately 10 activated carbon odour reduction canister inspections and 24 sanitary sewer maintenance hole inspections.

No MECP inspection occurred during the Reporting Period.

2021 Annual Performance Report - Wastewater Collection System

In accordance with the Environmental Compliance Approval #5819-AU3QVA, Section 2.6 (3) - REPORTING, The Municipality of Port Hope, as the Owner of the Municipal Sanitary Sewage Collection System, shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon.

Section 2.6 (3) - REPORTING requires the Performance Report to contain the following:

- (a) a summary and interpretation of all monitoring data, including an overview of the success and adequacy of the Works,
- (b) a description of any operating problems encountered, and corrective actions taken,
- (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works,

- (d) a summary of the calibration and maintenance carried out on all monitoring equipment; and
- (e) a summary of any complaints received during the reporting period and any steps taken to address the complaints,
- (f) a summary of all Sewage Pumping Station Overflows, spill or abnormal discharge events,
- (g) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule C, Section 1, with a status report on the implementation of each modification,
- (h) a report summarizing all modifications completed as a result of Schedule C, Section 1,
- (i) a copy of all Notice of Assumptions submitted to the Water Supervisor as a result of Condition 2.8, and
- (j) any other information the Water Supervisor requires from time to time.

The following report was generated from the records maintained by The Municipality of Port Hope for the Port Hope Wastewater Collection System (WWC) for the calendar year 2021:

(a) Summary and Interpretation of All Monitoring Data

Licensed operators observe and monitor the sewage pumping stations regularly, during station checks/inspections and while performing scheduled preventative maintenance activities. Operators exercise due diligence in ensuring the Works and the related equipment are properly operated and maintained and any observations are being recorded in the facility logbooks. All major equipment, including pumps, flow meters, gas detectors, etc., are inspected on a regular basis, as per manufacturers recommendations, by qualified contract service providers.

Monitoring and inspection of the sanitary sewage collection system includes annual programs consisting of; sanitary main flushing and camera work, manhole grouting/repair/replacement and inflow and infiltration analysis during storm events. All programs help to sustain an effective Capital Works program that coordinates with the Municipalities Water and Wastewater Rate Study on all assets associated with the sanitary sewage collection system.

(b) Operating Problems and Corrective Actions

Table A - Summary of Operating Problem Encountered and Corrective Actions Taken

Date	Operating Problem	Corrective Action Taken
September 24, 2021	Spill/Pollutant Discharge from Private	Regulatory agencies notified of spill/pollutant discharge. Vacuum truck called in to assist cleanup. Samples collected. CCTV inspection and dye test

Date	Operating Problem	Corrective Action Taken
	Property to Stormwater System	completed. Confirmed blockage in the stormwater service and that private property plumbing of the basement bathroom was connected to the stormwater system instead of wastewater collection system. MPH by-law division confirmed that the private property basement bathroom plumbing connection to the stormwater service was disconnected and a proper connection to the wastewater collection system is complete.

(c) Maintenance Activities

The Municipality maintains an active maintenance management program, for general maintenance and repair, to ensure that the facilities are maintained in a fit state of repair. In addition to this program, major works were upgraded or replaced as follows:

1. July 21, 2021 – Mill Street Pumping Station, replaced all float level switch devices.
2. August 27, 2021 – Mill Street Pumping Station, Stand-by generator, replaced and installed new batteries.
3. Repaired 2 maintenance hole structure; frame, lid, and moduloc to reduce inflow and infiltration.
4. Repaired approximately 3 sanitary sewer mains.
5. Repaired approximately 10 sanitary sewer services.
6. Installed approximately 10 sanitary sewer service, property line clean-out inspection ports.
7. Installed approximately 3 sanitary sewer service cured in place pipe (CIPP) liners.
8. CCTV inspected approximately 187 sanitary sewer services.
9. Flushed and CCTV inspected approximately 6 kilometers of sanitary sewer main during corrective and preventative maintenance activities.

All maintenance was performed on behalf of the Owner, by licenced Operators or qualified contracted services providers who exercise due diligence in ensuring the Works and the related equipment are properly operated and maintained to achieve compliance with the Approval. Daily rounds of the pumping stations are conducted by the Operators and any observations are being recorded.

(d) Calibration and Maintenance on Monitoring Equipment

Calibration of the flow meters and gas detectors were conducted as per regular annual maintenance by a third-party qualified contractor.

Table B - Summary of Calibration and Maintenance of Monitoring Equipment

Analyzer	Location	Date Calibrated	Calibrated by Whom
Flow Meter	Mill St. PS	July 27, 2021	Franklin Empire, Mitch Manley
Gas Detector	Mill St. PS	July 27, 2021	Franklin Empire, Mitch Manley
Flow Meter	AON PS	July 27, 2021	Franklin Empire, Mitch Manley
Gas Detector	AON PS	July 27, 2021	Franklin Empire, Mitch Manley

(e) Complaints

The number of complaints received during the Reporting Period, regarding the Wastewater Collection System, was eight (8). If applicable, complaints are itemized below with corresponding steps taken to address the complaints.

Table C - Summary of Complaints Received

Date of Complaint	Address	Complaint	Steps Taken to Address Complaint
February 9, 2021	45 Wellington Street	Odour	Operator responded to site and checked maintenance holes upstream and downstream. No gases present during inspection. No issues found with Municipal infrastructure. Owner was advised of findings.
May 26, 2021	39 Wellington Street	Odour	Operator responded to site and checked maintenance holes upstream and downstream. No gases detected during inspection. No issues found with Municipal infrastructure. Owner was advised of findings.
August 9, 2021	10 Clovelly Street	Odour	Operator responded to site and performed CCTV camera inspection from property line cleanout to sewer main. No deficiencies were found. Owner was advised of findings.
August 11, 2021	92-94 Pine Street South	Odour	Operator responded to site and checked maintenance holes upstream and downstream. No gases present during inspection. CCTV camera inspection of both laterals performed. No issues found with Municipal infrastructure. Owner was advised of findings.
August 23, 2021	86 John Street	Odour	Operator responded to site and checked maintenance holes upstream and downstream and activated carbon inserts. No gases present during inspection. Activated carbon inserts were replaced. Owner was advised of findings.

The Corporation of the Municipality of Port Hope
Works and Engineering Department
Wastewater Division
2021 Annual Performance Report – WWC

Date of Complaint	Address	Complaint	Steps Taken to Address Complaint
September 13, 2021	86 John Street	Odour	Operator responded to site and checked maintenance holes upstream and downstream and activated carbon inserts. No gases present during inspection. Activated carbon inserts were replaced. Sewer mains flushed in area on September 14, 2021. Owner was advised of findings. On September 22, 2021, deodorant pucks were placed in the maintenance holes adjacent to the address.
September 13, 2021	76 Cavan Street	Odour	Operators responded to site and inspected the storm sewer pipe discharging into the Ganaraska River. No traces of sewage found in pipe or near the discharge pipe. Operators checked maintenance holes upstream and downstream. No gases detected during inspection. No issues found with Municipal infrastructure. A strong fish odour was observed. Owner was advised of findings.
October 4, 2021	31 Bridges Boulevard	Odour	Operator responded to site and checked maintenance holes upstream and downstream. No gases present during inspection. CCTV camera inspection performed from property line cleanout to sewer main. No deficiencies were found. Owner was advised of findings.

(f) Environmental Incidents

There were zero (0) environmental incidents such as by-passes, spills or abnormal discharges to be reported for 2021.

Table D - Summary of Environmental Incidents including Maximum Sampling Results During Event, if applicable

Date	Approx. Duration (hours)	Type of Bypass/Overflow/Spill, Abnormal Discharge Event	Volume (m ³)	CBOD ⁵	TSS	TP	E . coli (cfu/100 mL)	pH (no unit)

Note: CBOD⁵ is Carbonaceous Biochemical Oxygen Demand for a 5-day period; TSS is Total Suspended Solids; TP is Total Phosphorus. All values expressed in mg/L unless otherwise specified.

(g) Notice of Modifications Submitted

The number of Notice(s) of Modifications submitted to the Water Supervisor in 2021 as a result of Schedule C, Section 1, totals one (1). If applicable, copies of the Notice(s)

are attached, in Appendix A, with each Notice itemized below with a corresponding status report on the implementation of each modification.

Table E - Summary of Notice of Modifications Submitted

Notice Issuance Date	Description of Modification as part of the Limited Operational Flexibility	Status	Date Completed/Expected Completed
April 8, 2021	Extension of Municipal sanitary sewer from end manhole located near intersection of Hope Street North and Howard Street. 42 m of 200mm diameter sewer extended south on Hope Street North and 97.5 m to 200 mm diameter sewer extended west on Howard Street. The Sanitary sewer extension Includes 3 sanitary manholes and 2 residential service lines.	In Progress	April 2022

Table F - Summary of Environmental Compliance Approvals (ECAs) Received

The number of Environmental Compliance Approvals (ECAs) received in 2021, totals zero (0).

ECA Number	ECA Issuance Date	Project Description	Status	Date Substantially Completed / Expected Completion

(h) Notice of Modifications Completed

The number of modifications completed as a result of Schedule C, Section 1, totals zero (0). If applicable, completed modifications are itemized below with a corresponding status report on the implementation of each modification.

Table G - Summary of Notice of Modifications Completed

Notice Issuance Date	Description of Modification as part of the Limited Operational Flexibility	Status	Date Completed

(i) Notice of Assumptions Submitted

The number of Notice of Assumptions submitted to the Water Supervisor as a result of Condition 2.8, totals zero (0).

Table H - Summary of Notice of Assumptions Submitted

Notice Issuance Date	Description of Assumption	Previous Owner	Date Assumed

(j) Other Information – Efforts to Achieve Conformance with Procedure F-5-1

During the 2021 reporting period, there were no incidents of an overflow in the Port Hope Wastewater Collection System and therefore no new proposed projects, to eliminate overflows, are forecasted for the 2022 Reporting Period.

**APPENDIX A –
Copy of Notice of Modifications**



Ministry of the
Environment,
Conservation and
Parks

Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA ON-SITE PRIOR TO THE SCHEDULED IMPLEMENTATION DATE.

Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number and issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number 5819-AU3QVA	Issuance Date (mm/dd/yy) February 26, 2018	Notice number (if applicable) 2021-01
ECA Owner The Corporation of the Municipality of Port Hope	Municipality Port Hope	

Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Extension of Municipal sanitary sewer from end manhole located near intersection of Hope Street North and Howard Street. 42m of 200mm diameter sewer will be extended south on Hope Street North and 97.5m of 200mm diameter sewer will be extended west on Howard Street. The sanitary sewer extension will include 3 sanitary manholes and 2 residential service lines.

In accordance with Road & Topographical Plan Drawing No. 20-652-001, Sanitary Sewer Road Plan & Profile Drawing No. 20-652-002 and Sanitary Sewer Design Sheet.

Description shall include:

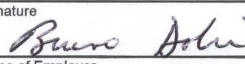
1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Has been designed in accordance with the Limited Operational Flexibility as described in the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name (Print) Bruno Dobri	PEO License Number 11388472
Signature 	Date (mm/dd/yy) April 8, 2021
Name of Employer Dobri Engineering Ltd.	

Part 4 – Declaration by Owner

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. This modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate

Name of Owner Representative (Print) Jeanette Davidson	Owner representative's title (Print) Director of Works and Engineering
Owner Representative's Signature 	Date (mm/dd/yy) 04/09/21

EAPB Form July 26, 2018