

Henvey Inlet Wind LP Henvey Inlet Wind Henvey Inlet Wind Energy Centre Decommissioning Plan Report

**Final Draft** 



Henvey Inlet Wind LP

## **Henvey Inlet Wind**

## Henvey Inlet Wind Energy Centre (HIWEC) -Decommissioning Plan Report – Final Draft

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## List of Acronyms and Glossary

BMPs	Best Management Practices
EA	Environmental Assessment
EEMP	Environmental Effects Monitoring Plan
FIT	. Feed-in-Tariff
HIFN	Henvey Inlet First Nation
HIFN I.R. #2	Henvey Inlet First Nation Reserve No. 2
HIW	Henvey Inlet Wind
HIWEC	Henvey Inlet Wind Energy Centre
Km	Kilometre
m	Metre
Met tower	Meteorological tower
MW	Megawatt
Nigig	Nigig Power Corporation
O&M	Operations and Maintenance
OPA	Ontario Power Authority
TS	Transformer Station
UNESCO	United Nations Educational, Scientific, and Cultural Organization
WTG	Wind Turbine Generator

## 1. Introduction and Overview

Nigig Power Corporation (Nigig) received a Feed-in-Tariff (FIT) Contract from the Ontario Power Authority (OPA) in 2011 for a 300 megawatt (MW) wind energy generation centre. Henvey Inlet Wind LP (HIW), a limited partnership between Pattern Renewable Holdings Canada ULC and Nigig Power Corporation, is proposing to develop the Henvey Inlet Wind Energy Centre (HIWEC), a 300 MW facility on Henvey Inlet First Nation Reserve No. 2 (HIFN I.R. #2). AECOM Canada Ltd. (AECOM) was retained by HIW to prepare an Environmental Assessment (EA) for the proposed HIWEC. The EA was conducted in accordance with the Henvey Inlet First Nation Environmental Assessment Guidance Instrument (HIFN EA Guidance) requirements.

### 1.1 Summary of Decommissioning Plan Report Requirements

The requirements for the Decommissioning Plan Report defined in the HIFN EA Guidance document are outlined in **Table 1-1** along with where information about those requirements can be found in this report.

#### Table 1-1: Adherence to Decommissioning Plan Report Requirements under HIFN EA Guidance Document

Requirement	Completed	Corresponding Section
Procedures for dismantling or demolishing the HIWEC	Yes	Sections 2.1 and 2.2
Activities related to the restoration of any land and water negatively affected by the HIWEC	Yes	Section 2.3
Procedures for managing excess materials and waste	Yes	Section 2.4

The Interim Draft Decommissioning Plan Report was posted to the HIW website on June 24, 2015 to provide information about HIWEC to HIFN, the public, local municipalities, government agencies and other stakeholder / interest groups, as early as possible in the EA process. In addition, this Final Draft Decommissioning Plan report has been posted to the HIW website to provide all stakeholders with a copy of what is being reviewed by HIFN's Band Council and further information that was collected since the Interim Draft.

## 1.2 Location and Study Area

The HIWEC study area includes the entirety of HIFN I.R. #2 plus a 550 m buffer extending beyond the HIFN I.R. #2 boundary. HIFN I.R. #2 is bounded on the north by the Key River, Georgian Bay to the west, Highway 69 to the east with some HIFN I.R. #2 property located on the east side of Highway 69. The southern boundary runs from Sandy Bay on the southwest corner in a north easterly direction to Highway 69 south of Bekanon Road. The geographic location is along the eastern shore of Georgian Bay, south of French River Provincial Park and directly north of North Georgian Bay Shoreline and Islands Conservation Reserve (**Figure 1-1**). HIFN I.R. #2 is part of the Georgian Bay Biosphere Reserve which encompasses 347,000 ha of land stretching 300 km from Port Severn to the French River and is designated as a United Nations Educational, Scientific, and Cultural Organization (UNESCO) Biosphere Reserve (Georgian Bay Biosphere, 2015). Highway 69 is a major north-south highway connecting Highway 400 north of Parry Sound with the City of Greater Sudbury at Highway 17.

Generally, the HIWEC study area has shallow soils, with many rocky outcrops forming longitudinal ridges running on a northwest to southeast axis, and is divided roughly in half by the Henvey Inlet waterbody. Numerous wetland pockets are located between the ridges and across the study area, with upland regions supporting forested areas of poplar and jack pine. **Section 4** of the Description Report (**Appendix A** of **Volume A**) provides a more detailed description of the existing environmental conditions within the study area. The study area for the HIWEC also includes lands off-Reserve that are within the area that may experience increased noise levels from the HIWEC. All HIWEC components will be located within the HIWEC study area as shown in the preliminary site plan provided as **Figure 1-1**.







## **1.3** Proponent Contact and Key Information

The following table provides key HIWEC information.

#### Table 1-2: Key Information

Proponent:	The HIWEC is being developed by HIW. HIW is a limited partnership between Nigig Power Corporation, a company wholly owned by HIFN, and Pattern Renewable Holdings Canada ULC.		
HIWEC Location:	HIFN I.R. #2		
Energy Source:	Wind energy. No supplementary fuel sources will be	e used to generate electricity.	
Contracted Nameplate Capacity:	300 MW		
Website:	www.henveyinletwind.com		
Email:	info@henveyinletwind.com		
Telephone:	(705) 857-5265		
Proponent Contact Information:	Ken Noble President Nigig Power Corporation (Nigig) a company wholly owned by HIFN 295 Pickerel River Road Pickerel, ON POG 1J0	Kim Sachtleben Project Director Pattern Renewable Holdings Canada ULC 355 Adelaide Street West Suite 100 Toronto, Ontario M5V 1S2	
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# 2. Decommissioning Plan Overview

Following the anticipated 30 year operational phase of the HIWEC, all components are expected to be decommissioned as described in the following sections. In the unlikely event that HIWEC development is halted during construction, the HIWEC would be decommissioned as described in **Section 2.1**.

In determining the probable future use for the HIWEC, there are two (2) primary factors to consider, namely: economics and technological improvements. If an economic evaluation determines that repowering the HIWEC by replacing and / or upgrading HIWEC components is possible, extending the lifespan of the HIWEC may be considered. Any evaluation of repowering the HIWEC will also consider any technological improvements that have been developed during the proposed 30 year operational phase of the HIWEC. If HIW makes the decision to decommission the HIWEC in lieu of replacing and / or upgrading HIWEC components, then the most probable future land use is traditional and recreational uses. As previously noted the proposed HIWEC is located solely on HIFN lands; therefore, following the decommissioning of the HIWEC, lands will be restored so that the pre-existing traditional land use can continue, in accordance with HIFN guidance requirements.

The decommissioning process will involve removing infrastructure based on HIFN requirements. This could involve removing the wind turbine generators (WTGs), including the tower, generator, auxiliary equipment, aboveground cables / poles, fixtures and otherwise restoring the premises to a condition similar to what existed prior to the HIWEC. If it is agreed upon with HIFN, access roads and underground cables may be left in place. Foundations shall be removed to approximately 1 metre (m) below grade and replaced with topsoil unless the foundations are aboveground and on rock. It is anticipated that within 12 months of initiating the decommissioning process, HIW will have removed the relevant components from the land.

The decommissioning of the HIWEC will be undertaken in compliance with this Decommissioning Plan along with any other applicable regulatory requirements and standards of the day, including those from HIFN. As with construction, a manager responsible for safety will be present on site for the duration of the work.

## 2.1 Decommissioning During Construction

Although it is unlikely that the HIWEC would be decommissioned before the operations phase, should this occur, the procedures for dismantling the HIWEC would depend upon the state of construction. Dismantling would follow the steps outlined in **Section 2.2.1** of this report and any exposed soils would be re-seeded, at the discretion of HIFN. Proposed mitigation measures as described in the Environmental Effects Monitoring Plan (EEMP), part of the Design and Operations Report (**Section 6**) and **Appendix G** of **Volume A**, would also be implemented.

Following construction best management practices (BMPs), stockpiles of soil will be covered as required with tarps, plastic sheeting or other BMPs deemed necessary during work stoppages to prevent erosion, run-off and fugitive dust emissions. Vegetation removal adjacent to waterbodies will be minimized and will be avoided wherever possible to reduce potential sedimentation of watercourses. Silt fencing will be installed on the closest edge of the construction area from watercourses and wetlands where works are performed. Land will be re-graded to the original or otherwise effective grade to allow for natural surface drainage.

Once decommissioning activities cease, excavated soil will be replaced with stockpiled soil to restore the original soil horizons and land uses. If subsoil has become compacted, it will be ripped using equipment appropriate for the terrain. Areas with disturbed soils or areas that are re-graded with topsoil will be re-seeded with an annual seed mix to help temporarily stabilize the soil and prevent erosion.

The proposed mitigation strategies and monitoring plans will not differ from those used during construction and installation activities. Restoration of the HIWEC area would follow the procedures outlined in the Construction Plan Report for post-construction activities of the HIWEC (see **Appendix B** – Construction Plan Report of **Volume A**).

## 2.2 Decommissioning After Ceasing Operations

Many of the activities completed during decommissioning are similar to those completed during construction and installation activities, but would likely occur in the reverse sequence. Preliminary decommissioning activities will include equipment delivery, topsoil removal, and the creation of temporary staging and laydown areas (including field offices). For a detailed description of these activities, refer to the Construction Plan Report (**Appendix B** of **Volume A**).

A summary of the general timing of HIWEC decommissioning is provided in **Table 2-1**. Decommissioning is expected to span approximately 12 months. The decommissioning duration accounts for minor delays that could result from delayed equipment arrival and potentially adverse weather conditions.

	HIWEC Phase and Activity	Duration*
Decommissioning Planning and Permitting	Planning and permitting	12 months
Aboveground Structure	WTG including dismantling and removal	5 months
Decommissioning	Overhead collector system and on-Reserve transmission lines including dismantling and removal	2 months
	Transformer Stations (TSs) including dismantling and removal	2 months
	Operations and maintenance (O&M) building, including dismantling and removal, if required	2 months
	Access roads including road bed removal and land reclamation, if required	3 months
	Meteorological (Met) towers including dismantling and removal	1 month
	Watercourse crossings including removal and aquatic and riparian habitat reclamation, if required	1 month
	Pad-mounted transformer including dismantling and removal	2 months
Belowground Structure Decommissioning	WTG foundation removal, as appropriate, transport and disposal of materials to suitable facility	4 months
	Underground collector lines, which will be terminated at connection points and removed to 1 m below surface	2 months

#### Table 2-1: Timing of HIWEC Decommissioning Activities

\*Note: Some decommissioning activities will be completed concurrently and the outlined durations are approximate

### 2.2.1 Henvey Inlet Wind Energy Centre Component Dismantling and Removal

At the end of the HIWEC's operational life, all components will be shut down and disconnected. Temporary staging and laydown areas will then be constructed and all decommissioning activities will be carried out within these designated areas. During decommissioning activities, erosion and sedimentation control measures will be implemented, as required.

Delivery of decommissioning equipment and transportation of dismantled HIWEC components from the HWIEC study area will use existing provincial and local roads. HIW will prepare a traffic management plan, if required. The decommissioning contractor will oversee the implementation of the traffic management plan, as required, during the HIWEC decommissioning phase, which may include measures such as signage, speed restrictions, truck lighting, dust control, load restrictions and equipment inspections. The decommissioning contractor will ensure that road damage and traffic congestion are avoided, where possible, and suitable repair and mitigation measures are in place.

#### 2.2.1.1 Aboveground and Underground Structure Decommissioning

**Table 2-2** summarizes the activities that will be completed during decommissioning of aboveground and underground structures. A more detailed description of these activities is included in the following sections.

# Table 2-2:HIWEC Decommissioning Activities for Aboveground and Underground<br/>Structures

Structure	Description
Wind Turbine Generators	<ul> <li>A crane pad and WTG laydown area will be constructed at each WTG location to accommodate the dismantling of the WTGs.</li> <li>WTGs will be dismantled into their component parts, including the hub, nacelle, blades, tower and pad-mounted transformers.</li> <li>Before directing components to disposal or recycling facilities, efforts will be made to re-use equipment and salvage parts for existing wind energy centres with similar WTG technology.</li> <li>WTG components will be delivered to the appropriate landfill, scrap metal yard or industrial recycling areas by large truck and trailer combinations, requiring approximately ten (10) loads per WTG. The total number of loads may decrease substantially if the materials are considered to be scrap and can be reduced to a smaller than original size (e.g., cutting WTG blades into pieces).</li> </ul>
Wind Turbine Generator Foundations	<ul> <li>Foundations, including any rebar or steel anchor bolts, will be removed to a depth of approximately 1 m below grade, if possible and as required by HIFN, so that pre-existing land uses can continue following site restoration.</li> <li>Excavated foundation areas will be backfilled with subsoil and topsoil to match the original soil horizons and elevation, and the area will be graded and contoured.</li> <li>Rock anchor foundation areas will cleared to rock depth and backfilled with native rock to match the original elevations.</li> </ul>
Pad-mounted Transformers	<ul> <li>Pad-mounted transformers will be detached from the base of each WTG and foundation by a small crane.</li> <li>If possible, the pad-mounted transformers from the HIWEC will be recycled for future use.</li> </ul>
Access Roads	<ul> <li>Following decommissioning of select HIWEC components, the granular base material and crushed gravel used to construct access roads will be removed from the site by dump truck and delivered to a final destination, unless otherwise agreed upon with HIFN.</li> <li>Culverts installed during construction and installation activities will also be removed unless otherwise requested by HIFN.</li> </ul>
Overhead and Underground Collector Lines	<ul> <li>Overhead cables and on-Reserve transmission poles will be removed, unless HIFN identifies other uses for them.</li> <li>At the connection points, where the underground collector lines come to the surface, the collector lines will be cut and buried in place to a depth of approximately 1 m below grade.</li> </ul>
Transformer Stations	• The TSs will be dismantled and removed at the time of decommissioning and components will be re- used, recycled or disposed of at approved facilities.
Operations and Maintenance Building	Appropriate use or disposal of the building will be determined at time of decommissioning through consultation with HIFN.
Meteorological Towers	• The towers will be removed and dismantled and components will be re-used, recycled or disposed of at appropriate facilities. The concrete foundations will be removed completely or to a depth of approximately 1 m to allow for the reinstatement of previous land use.

#### 2.2.1.2 Wind Turbine Generators

Consistent with the approach detailed in the Construction Plan Report, a crane pad and laydown area will be constructed at each WTG location to accommodate the dismantling of the WTGs. Crane pads will be removed following the dismantling of each WTG and the area will be restored so that existing land uses can continue.

WTGs will be dismantled into their component parts, including the hub, nacelle, blades, tower and pad-mounted transformers. Dismantling procedures for the WTGs will be carried out in reverse order of those described during the construction and installation process (see **Appendix B** – Construction Plan Report of **Volume A**). Equipment required for decommissioning of WTGs will include cranes, machinery required to construct roads and crane pads, light-duty trucks, flatbed trucks and trailers.

WTG components will be stored in the temporary staging area prior to removal unless a recycling company can transport these materials directly from the site, or if there are delays attributed to bad weather or other unforeseen circumstances. Prior to disposal or recycling, efforts will be made to re-use equipment and salvage parts. WTG components will be transported to the appropriate landfill, scrap metal yard or recycling facilities by large truck and trailer combinations.

#### 2.2.1.3 Wind Turbine Generator Foundations

WTG foundations, including any rebar or steel anchor bolts, will be removed to a depth of approximately 1 m below grade, where possible, and as required by HIFN. Excavators mounted with hydraulic hammers and / or hydraulic shears will be used to break up and remove sections of the foundation, and removed concrete may be crushed using a mobile crushing unit before being loaded in dump trucks for removal from the HIWEC study area.

#### 2.2.1.4 Pad-Mounted Transformers

Pad-mounted transformers will be detached from the base of each WTG and foundation. A small crane will be used to lift the transformer onto a flatbed truck for removal from the HIWEC study area. If possible, the pad-mounted transformers from the HIWEC will be recycled for future use.

#### 2.2.1.5 Access Roads

Following the decommissioning of select HIWEC components (including WTGs, TSs, O&M building and collector lines), access roads will be removed and lands will be restored so that pre-existing land uses can continue, as required by HIFN. As required, additional clean topsoil will be imported to facilitate reclamation.

Granular base material and crushed gravel used to construct access roads will be removed from the site by dump truck. At the request of HIFN, all or portions of access roads may be left in place for future use.

Culverts installed during construction and installation activities will also be removed unless otherwise requested by HIFN.

#### 2.2.1.6 Collector Lines

Following current BMPs, underground collector lines will be left in place. It is anticipated that the underground cables will have no adverse effects on the soil or environment since the remaining cables will be inert and contain no materials known to be harmful to the environment. This will avoid disturbing large natural areas, in comparison to the areas that would be disturbed and the associated potential environmental effects from removing the cables.

At the connection points where the underground collector lines come to the surface, the collector lines will be cut and buried in place to a depth of approximately 1 m below grade. Any removal of underground collector lines will be carried out in accordance with HIFN requirements. Any collector lines located at directionally drilled watercourse crossings will remain in place. Where applicable, overhead collector lines will be removed, unless HIFN identifies other uses for them. Holes remaining following the removal of any poles will be filled with clean fill and disturbed areas will be restored, as required. Overhead collector lines will be removed from the HIWEC study area and recycled, re-used or disposed of in accordance with HIFN requirements at the time of decommissioning.

#### 2.2.1.7 Transformer Stations

The TSs, control building, electrical components and associated infrastructure will be dismantled and decommissioned.

The entire area will have the subsoil ripped to alleviate compaction, and topsoil will be replaced with clean fill. Soil management will include soil testing for contaminants in accordance with applicable regulatory requirements at the time of decommissioning. If a concrete foundation is used for the TSs, it will be removed to approximately 1 m below grade by excavators mounted with hydraulic hammers and / or hydraulic shears. The concrete may be broken up and crushed using a mobile crushing unit before being loaded in dump trucks and removed from the site. Concrete material will be recycled, where possible, or disposed off-site at an approved and appropriate facility.

#### 2.2.1.8 Operations and Maintenance Building

An appropriate re-use or dismantling of the O&M building will be determined at the time of decommissioning through consultation with HIFN. If dismantling is required, all materials will be removed from the HIWEC study area for re-use, recycling or disposal at approved and appropriate facilities. Gravel will be removed from the site. The entire area will have the subsoil ripped to alleviate compaction, and topsoil will be replaced with clean fill. Soil testing for contaminants will be conducted in accordance with applicable regulatory requirements at the time of decommissioning, as required. The area will be re-graded and restored to pre-facility conditions.

#### 2.2.1.9 Meteorological Towers

The existing and proposed Met towers may be left in place, if agreed upon by HIFN and HIW. If it is determined that the Met towers need to be removed, they will be dismantled using a crane, and the metal components will be recycled at an approved and appropriate facility. All components that cannot be recycled will be delivered to an approved and appropriate waste facility. The concrete foundations will be removed to approximately 1 m below grade, if appropriate.

### 2.3 Site Restoration Activities

#### 2.3.1 Land Restoration

Once all of the WTGs and ancillary facilities are removed, the remaining decommissioning work will consist of shaping and grading the areas where soil previously existed. All areas, including the access roads, transformer pads and crane pads will be restored to a state similar to the original condition with native soils and seeding where feasible. If there is insufficient material on-site, soil will be imported from an acceptable source.

Although spill prevention procedures will be in place, there is the potential throughout the decommissioning phase for small spills of solvents or fuels to occur. The soil surrounding WTG areas will be visually surveyed to determine if any spills have occurred. As a proposed mitigation measure, contaminated soils will be excavated and removed in accordance with applicable standards. As required, additional clean topsoil will be imported to facilitate reclamation.

Decommissioning may temporarily affect existing land uses around the access roads, TSs and WTG locations, but only during their removal. Similar to the construction phase, proper steps will be followed to mitigate erosion and silt/sediment runoff during decommissioning.

As with the HIWEC's construction, noise levels around the decommissioning work may be higher than average. Proper steps will be followed to minimize this disturbance, such as avoiding work outside of daylight hours. All decommissioning activities will conform to applicable HIFN requirements.

Road traffic in the area will increase temporarily due to crews and heavy equipment movements, similar to the HIWEC's construction phase. If required, a traffic management plan will be prepared to mitigate the effects of increased road traffic.

#### 2.3.2 Water Resources

Decommissioning activities will occur in the vicinity of watercourses or aquatic habitat. Mitigation and environmental monitoring procedures in these areas are anticipated to be similar to those proposed in the Construction Plan Report.

Following the removal of any culverts, the banks and channel bed will be contoured to match the upstream and downstream grade. Native riparian vegetation will be planted to replace any such vegetation disturbed during decommissioning activities to prevent erosion and promote proper riparian function. Any underground watercourse crossings required for collector lines will remain in place after decommissioning activities in order to avoid disturbance to watercourses that would likely occur if collector lines were removed. An erosion and sediment control plan will be implemented to minimize the potential effects of erosion and sedimentation on water resources.

#### 2.3.3 Cultural Heritage Resources

Prior to decommissioning, previous archaeological assessment reports produced for the HWIEC will be reviewed to confirm whether any archaeological or heritage assessment recommendations apply to decommissioning activities. By following the appropriate mitigation measures, no adverse effects on protected properties or archaeological and heritage resources are anticipated.

#### 2.3.4 Accidental Spills

Accidental spills or releases of contaminants (i.e., fuel, lubricating oils and other fluids) may occur during the refuelling, operation or maintenance of decommissioning equipment. In the event that any soils are contaminated, the impacted soils will be removed and disposed of at an approved facility. Removed soils will be replaced with appropriate fill. A Spill Prevention and Response Plan will be prepared by the decommissioning contractor.

## 2.4 Management of Waste and Excess Materials

#### 2.4.1 Hazardous Materials

Machinery used to dismantle and remove HIWEC components will require the use of oils, fuels and lubricants. In addition, waste lubricants will be recovered during the dismantling of HIWEC components, including the TSs, WTGs and O&M building. These materials will be disposed of through conventional waste-oil and hazardous waste disposal streams as per regulatory requirements, if required at the time of decommissioning.



Any overhead collector lines that are required for the HIWEC will be constructed on a wood, steel or concrete monopole structure. Typically, wooden monopole structures utilize a chemical-treated exterior. If required, HIW will discuss the recycling of wooden monopoles with a licensed facility, which would likely involve stripping the chemically-treated exterior, disposing of this chemically-infused wood in a landfill, and re-milling the remaining wood core for alternative end uses.

#### 2.4.2 Non-hazardous Materials

The major components of the WTGs (tower, nacelle and blades) are modular items that allow for ease of construction and disassembly of the WTGs during replacement or decommissioning. Dismantled WTGs have a high salvage value due to the steel and copper components. These components are easily recyclable and there is a ready market for scrap metals. Transformers and transmission line components are typically designed for a 50 year lifespan so these items could be refurbished and sold for re-use.

Based on typical WTGs and associated tower and components, it is assumed that both the tower and nacelle will yield approximately 80% salvageable materials. Since the hub assembly and bedplate is typically manufactured steel, it is anticipated that the hub will yield 100% salvageable metallic materials. Copper salvage estimates were derived by assuming 5% of the total tower and nacelle weight for typical WTGs consists of salvageable copper bearing materials. Since the rotor / blades are often constructed of predominantly non-metallic materials (fiberglass reinforced epoxy and carbon fibres), no salvage for the rotor or blades is currently assumed.

It is assumed that 75% of the aggregate material from the decommissioning of the crane pads can be salvaged for future use as aggregate base course. The remaining materials would be viable for general fill on non-structural fill areas. The geotextile fabric cannot be salvaged.

### 2.5 Emergency Response and Communications

The decommissioning contractor will prepare protocols for emergency response and communication for the decommissioning activities. These will be similar to what is described in **Section 5** of the Design and Operations Report (**Appendix C** of **Volume A**).

**Section 5** of the Design and Operations Report includes details on providing notifications to local residents, HIFN and regulatory agencies. In addition, the protocols for emergency response and communication should include details on receiving communications, including a complaint response protocol. During the decommissioning of the HIWEC the protocols for emergency response and communication will be used to inform HIFN, the public, local municipalities, government agencies and other stakeholder / interest groups on activities being undertaken in the HWIEC study area. In addition, the protocols will outline how HIFN, the public, local municipalities, government agencies are able to contact the HIW and any firm(s) contracted to complete decommissioning activities, as well as the means by which communications will be logged, tracked, and addressed.

### 2.6 Decommissioning Notification

The process for notifying HIFN, the public, local municipalities, government agencies and other stakeholder / interest groups of decommissioning activities occurring in the HIWEC study area will follow procedures outlined in **Section 5.2** of the Design and Operations Report (**Appendix C** of **Volume A**). Decommissioning notifications may be distributed in the form of published notices, letters, direct communication, updates on the HIW website, or equivalent.

## 2.7 Decommissioning Related Approvals

For decommissioning activities, additional permits may also be required from regulatory agencies. **Table 2-3** indicates some of the authorizations and approvals that may be required at the time of decommissioning based on current regulatory expectation for disposal or recycling of HIWEC components and associated waste materials. The summary provided in **Table 2-3** may not include all possible regulatory requirements for HIWEC decommissioning; however, all authorizations and permitting will be obtained in accordance with applicable regulatory requirements at the time of decommissioning.

Table 2-0. Outliniary of Fotential Decommissioning Fernits and Approva	Table 2-3:	Summary of Potentia	I Decommissioning	Permits and	Approvals
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Permit / Authorization	Administering Agency	Rationale
Land-Use Permit	Ministry of Transportation	Works undertaken within 180 m of an Ministry of Transportation controlled intersection
Change of Access & Heavy / Oversize Load Transportation Permit	Ministry of Transportation	Compliance with provincial highway traffic and road safety regulations
Special Vehicle Configuration Permit	Ministry of Transportation	Use of non-standard vehicles to transport large components
<i>Fisheries Act</i> Letter of Advice or Authorization	Fisheries and Oceans Canada	Potential direct or indirect effects to fish habitat as defined under the <i>Fisheries Act</i> .

## 3. References

Georgian Bay Biosphere Reserve, 2015:

Our Biosphere. Available: http://www.gbbr.ca/about-us/gbbr/. Accessed February 19, 2015.