Date: **February 2, 2023**
Time: **1 pm**
Location: **Online by Zoom and in person**
Rideau Valley Conservation Authority
3889 Rideau Valley Drive, Manotick

Source Protection Committee Meeting

Item Number	Item Title	Page	Person Responsible
1.0	**Welcome and Introductions** a. Agenda Review b. Notice of Proxies c. Adoption of the Agenda (D) d. Declarations of Interest e. Approval of Minutes –November 2, 2022 (D) ► draft minutes attached as a separate document	1	*Acting Chair*
	Staff Reports, Updates and Presentation		
2.0	Directors Technical Rules Update— Waste and Sewage (D)	2-40	*Marika and Brian*
3.0	Directors Technical Rules Update— Pesticides, Fertilizer, Chemical……(D)	41-50	*Marika and Brian*
4.0	RMO Annual Reports……(I)	51	*Brian Stratton*
	Other		
6.0	Other Business		*Acting Chair*
7.0	Member Inquiries		*Acting Chair*
8.0	Next Meeting -April 6, 2023, in person		*Acting Chair*
9.0	Adjournment		

(I) = Information (D) = Decision

Delegations: If you wish to speak to an item on the Agenda please contact Marika Livingston before the meeting (marika.livingston@mrsourcewater.ca) or 613-692-3571 x 1148)

If you are a member of the public and would like to join the Zoom meeting please contact the above for more meeting details.

**2.0 Director's Technical Rule Changes—
Sewage and Waste Threat Updates**

Date: **February 2, 2023**
To: **Mississippi-Rideau Source Protection Committee**
From: **Marika Livingston, Project Manager**
Brian Stratton, Co-Project Manager
Mississippi-Rideau Source Protection Region

Recommendation:

That the Source Protection Committee receive this report for information;

Further that the preamble to the Mississippi-Rideau Source Protection Plan NASM policies be amended;

Further that policy SEWG-13-LB-PI-MC should be revised to include sanitary sewer overflow;

Further that policy SEWG-15-LB-PI-MC be revised to permit existing pumping stations retrofits for overflow purposes to protect the public and community;

Further that stormwater policy SEW-10-LB-PI-MC be revised to suggest that stormwater threats directly adjacent to the IPZ-1 be reviewed by Ministry staff;

Further that the Source Protection Committee direct staff to pre-consult on the proposed draft policy updates with implementing bodies and the Ministry of Environment, Conservation and Parks; and,

Further that staff be directed to incorporate the proposed policy updates and updated maps as part of the forthcoming amendment under Section 36 of the *Clean Water Act*.

Background

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules (DTRs) on December 3, 2021. The changes include numerous updates to the Circumstances of several of the 22 drinking water threats and technical rules. The changes to be reviewed, assessed, and evaluated in this staff report are Waste or Sewage related threats.

All changes will be reviewed and discussed; however minor threat changes will not have a lot of discussion.

Waste Threat Changes:

- Disposal of Hauled Sewage to Land
- Application of Processed Organic Waste
- Landfilling (Hazardous Waste or Liquid Industrial Waste
- Storage of Hauled Sewage
- Storage of Processed Organic Waste
- Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste
- Transfer/Processing Site approved to receive only Municipal Waste under Part V of the Environmental Protection Act
- Storage of Subject Waste at a Waste Generation Facility: site requires generator registration under Section 3 of O. Reg. 347
- Storage of Waste at a Waste Generation Facility: site that is exempt or excluded from generator registration requirements

Sewage Threat Changes:

- Industrial Effluent Discharges
- Storm Water Management Facilities and Drainage Systems: Outfall from a Storm Water Management Facility or Storm Water Drainage System
- Storm Water Management Facilities and Drainage Systems: Storm Water Infiltration
- Wastewater Collection Facilities and Associated Parts: Sanitary Sewers
- Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well
- Wastewater Collection Facilities and Associated Parts: Sewage Pumping Station or Lift Station Wet Well, a Holding Tank or a Tunnel
- Wastewater Treatment Facilities and Associated Parts

Effective Date of Changes

Despite the DTR changes being effective December 3, 2021, the changes will not be applied in our Region until our Section 36 Workplan has been submitted and approved. Our target for completion and submission of our Section 36 Workplan is December 2024. The Ministry encourages DTR changes be consolidated in S. 36 Workplans if possible, otherwise a S.34 Amendment would be required if policy changes are suggested.

Summary of Tools Available to Manage Threats

Risk Management Plans—S. 58
Prohibition—S.57
Prescribed Instrument—i.e., ECAs, NASM plans, Nutrient Management Plans
Non-regulatory policy tools: i.e., Education and Outreach, Incentives

Waste Threats

Waste Threat—Disposal of Hauled Sewage to Land

Minor threat revision. “By any method” was added to the original threat circumstances. No new threats will be enumerated. No policy changes suggested.

Application of Processed Organic Waste (POW)

Original DTRs

New threat.

New DTRs

POW material is the organic waste residue remaining after sewage treatment plant processing and is similar to a category 3 non-agricultural source material (NASM). Under the provincial management frameworks, the land application and storage of POW are subject to an Environmental Compliance Approval (ECA) under the Environmental Protection Act (EPA) when applied on non-agricultural land. When POW is applied on agricultural land as NASM, land application and storage are subject to the Nutrient Management Act (NMA).

Directors Technical Rules	**Circumstance and Vulnerability Score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the applicable area that is less than 40% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate thatis more than 1.0 nutrient units per acre.	10	10
	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the applicable area that is at least 40%, but not more than 80% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is at least 0.5 nutrient units per acre but not more than 1.0 nutrient unit per acre.		10
	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the	10	9-10

	applicable area that is at least 40%, but not more than 80% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is more than 1.0 nutrient units per acre.		
	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the applicable area that is more than 80% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is less than 0.5 nutrient units per acre.	10	10
	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the applicable area that is more than 80% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is at least 0.5 nutrient units per acre but not more than 1.0 nutrient unit per acre.	10	9-10
	The processed organic waste or waste biomass is applied to a land located in a vulnerable area, where the managed land map shows a managed land percentage for the applicable area that is more than 80% and the livestock density map shows a livestock density for the applicable area that is sufficient to annually apply agricultural source material at a rate that is more than 1.0 nutrient units per acre.	10	9-10
	Pathogen Circumstances		
	Land application of any quantity of processed organic waste or waste biomass. 2. The application may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10

Threats Enumeration

None anticipated. Land application of POW in a WHPA-10 and IPZ 8-10 is unlikely.

Policy Review

There are two current policies that would appropriately address this new threat. When the application of POW occurs on agricultural land, it would be subject to our NASM policy for instruments under the *Nutrient Management Act*—NASM-1-LB-PI-MC. When the application occurs on non-agricultural land, it is subject to our NASM policy for instruments under the *Environmental Protection Act*—NASM-2-LB-PI-MC.

Staff are of the opinion that current policies in our Source Protection Plan address this new threat. Staff suggest revising the preamble for NASM policies to reflect the new threat addition. Otherwise, no policy revisions are proposed.

Policy: NASM-1-LB-PI-MC

Non-agricultural Source Material — Prescribed Instrument (under the *Nutrient Management Act*)

Where the application, handling or storage of non-agricultural source material (existing and/or future) that is or would be a significant drinking water threat as described in Appendix B is governed by a Prescribed Instrument (NASM Plan developed under General Regulation 267/03 of the *Nutrient Management Act*), this activity shall continue to be managed through these existing requirements. The existing regulatory requirements administered by the Ontario Ministry of Agriculture, Food and Rural Affairs and the corresponding compliance program enforced by the MOECC already manage this activity so that it is not a significant threat to drinking water.

Policy: NASM-2-LB-PI-MC

Non-agricultural Source Material — Prescribed Instrument (under the *Environmental Protection Act*)

Where the application, handling or storage of non-agricultural source material (existing and/or future) is or would be a significant drinking water threat as described in Appendix B and is governed by a Prescribed Instrument (Certificate of Approval or Environmental Compliance Approval under the *Environmental Protection Act*) the MOECC shall ensure the instrument includes appropriate terms and conditions so that:

a) The application, handling and storage of non-agricultural source material (existing) ceases to be a significant drinking water threat; or
b) The application, handling and storage of non-agricultural source material (future) never becomes a significant drinking water threat.

The MOECC shall comply with part (a) of this policy within three years from the date the Source Protection Plan takes effect.

Note that if the material is untreated septage, the future application is prohibited through policies WASTE-3-LB-PI-MC and *WASTE-4-LB-S57.*

<u>Landfilling of Hazardous Waste or Liquid Industrial Waste</u>

Original DTRs

This threat includes sites approved to receive subject waste (i.e. hazardous waste and liquid industrial waste (LIW) defined under Part V of the EPA).

New DTRs

The only revision to this threat is that the land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste is a threat now for areas greater than 10 hectares in WHPA scores 8-10, instead of just 10.

Directors Technical Rules	Circumstance and Vulnerability score needed for a significant threat		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	The land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General - Waste Management) made under the Environmental Protection Act, is undertaken at the site.The fill area is less than 1 hectare.	10	
	The land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General - Waste Management) made under the Environmental Protection Act, is undertaken at the site. 2. The fill area is at least 1 but not more than 10 hectares.	10	10
	1. The land disposal of hazardous waste, liquid industrial waste, or processed liquid industrial waste, within the meaning of clauses (a) and (b) of the definition of "land disposal" in section 1 of Regulation 347, R.R.O. 1990 (General - Waste Management) made under the Environmental Protection Act, is undertaken at the site. 2. The fill area is more than 10 hectares.	10	9-10
2021	Same as above	10	
	Same as above	10	10
	Same above	8-10	9-10

Threats Enumeration

Despite the increase in area where a landfill for hazardous waste would be a threat, none are anticipated. A desktop exercise was completed, and no active waste disposal sites were found within WHPAs 8-10.

Policy Review

No existing threats are anticipated to be enumerated. Current policies would prohibit a new landfill for hazardous waste in WHPA 8-10 or IPZ 9-10 if it meets the threat circumstances above. Staff are of the opinion that this policy is appropriate, and no policy revisions are suggested.

Policy: WASTE-3-LB-PI-MC

Future Waste Disposal Site — Prescribed Instrument

Future waste disposal sites are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals under the *Environmental Protection Act* or the *Ontario Water Resources Act*) must conform with this policy.

Storage of Hauled Sewage

Original DTRs

New threat

New DTRs

This new threat sub-category is mainly associated with stationary storage and does not include septic tanks or septic systems where the sewage is produced before hauling. The risks related to the application of hauled sewage are defined in the threat tables; however, the tables did not capture the risk associated with the stationary storage where the hauled sewage is stored temporarily by haulers where it is not generated or disposed.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	The hauled sewage is stored in a tank at a site in a stationary means of containment for hauled sewage, not including a site where it is produced before its collection by a hauled sewage system.	10	
	The hauled sewage is stored in a lagoon at a site in a stationary means of containment for hauled sewage, not including a site where it is produced before its collection by a hauled sewage system.	10	9-10
	Pathogen Circumstances		
	The hauled sewage is stored in a tank or in a lagoon on site in a stationary means of containment for hauled sewage. 2. The storage may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10

Threats Enumeration

A desktop threats assessment was completed, and one sewage hauler was found in IPZ-3, score of 8 in Perth. However, our Risk Management staff were made aware that the temporary storage of hauled sewage does not occur—the trucks immediately dump at the wastewater treatment plant and do not store on site or in trucks.

Policy Review

Staff are of the opinion that current policies in our Source Protection Plan address this new threat. The current policy that would appropriately address this new threat would prohibit the temporary storage of hauled sewage in WHPA 10 and IPZ 8-10. Staff are of the opinion that this policy is appropriate, and no policy revisions are suggested.

Policy: WASTE-3-LB-PI-MC

Future Waste Disposal Site — Prescribed Instrument

Future waste disposal sites are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals under the *Environmental Protection Act* or the *Ontario Water Resources Act*) must conform with this policy.

Policy: WASTE-4-LB-S57

Future Waste Disposal Site — Section 57 Prohibition

Future waste disposal sites that are not governed by a Prescribed Instrument (Environmental Compliance Approval) are designated as prohibited under Section 57 of the *Clean Water Act* in areas where they would be a significant drinking water threat as described in Appendix B. This policy does not apply to waste that is registered with the MOECC waste generation reporting system or waste that is approved to be transported off-site using the MOECC manifest process or waste that is subject to Director's Instructions.

<u>Storage of Processed Organic Waste and Waste Biomass</u>

Original DTRs

New threat.

New DTRs

This is a new threat category. When processed organic waste is stored on an agricultural property for disposal and does not meet the category 3 land application requirements under the NMA, the POW storage and disposal would be subject to the EPA. POW can either be disposed of in municipal landfills or applied to sites that are not municipal landfills.

Waste biomass is the organic matter derived from a plant or animal available on a renewable basis, as defined under O. Reg. 347 under the EPA. It is similar to several

NASM materials. The generation and storage of waste biomass off-farm are subject to the EPA unless sent to an anaerobic digestion facility defined in Section 3(1) 14 of O. Reg 347. If the waste biomass is not sent to anaerobic digestion facilities but rather disposed of, this material is considered municipal waste and disposed of in municipal landfills.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	1. The processed organic waste or waste biomass is stored at or above grade. 2. The mass of nitrogen in the processed organic waste stored is at least 0.5 tonne but not more than 5 tonnes.		10
	1. The processed organic waste or waste biomass is stored partially below grade. 2. The mass of nitrogen in the processed organic waste stored is at least 0.5 tonne but not more than 5 tonnes.	10	10
	1. The processed organic waste or waste biomass is stored below grade. 2. The mass of nitrogen in the processed organic waste stored is at least 0.5 tonne but not more than 5 tonnes.	10	
	1. The processed organic waste or waste biomass is stored at or above grade. 2. The mass of nitrogen in the processed organic waste stored is more than 5 tonnes.	10	9-10
	1. The processed organic waste or waste biomass is stored partially below grade. 2. The mass of nitrogen in the processed organic waste stored is more than 5 tonnes.	10	9-10
	1. The processed organic waste or waste biomass is stored below grade. 2. The mass of nitrogen in the processed organic waste stored is more than 5 tonnes.	10	
	Pathogen Circumstances		
	1. The processed organic waste or waste biomass is stored on a site, and any portion of the material is stored at or above grade. 2. The storage may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10

Threats Enumeration

It is very unlikely that POW or Waste Biomass is stored in a WHPA 10 or in IPZ 8-10. However, where they may be a threat, the Ministry is responsible for issuing the ECA or NASM approvals for the storage of POW or Waste Biomass and will be required to review the instrument. Future new applications will also be reviewed by the appropriate Ministry. Our current policies for NASM will allow the future storage of POW or Waste Biomass with prescribed instrument

Policy Review

There are two current policies that would appropriately address this new threat. When the storage of POW and Waste Biomass occurs on agricultural land, it would be subject to our NASM policy for instruments under the *Nutrient Management Act*—NASM-1-LB-PI-MC. When the storage occurs on non-agricultural land, it is subject to our NASM policy for instruments under the *Environmental Protection Act*—NASM-2-LB-PI-MC.

Staff are of the opinion that current policies in our Source Protection Plan address this new threat. Staff suggest revising the preamble for NASM policies to reflect the new threat addition. Otherwise, no policy revisions are proposed.

Policy: NASM-1-LB-PI-MC

Non-agricultural Source Material — Prescribed Instrument (under the *Nutrient Management Act*)

Where the application, handling or storage of non-agricultural source material (existing and/or future) that is or would be a significant drinking water threat as described in Appendix B is governed by a Prescribed Instrument (NASM Plan developed under General Regulation 267/03 of the *Nutrient Management Act*), this activity shall continue to be managed through these existing requirements. The existing regulatory requirements administered by the Ontario Ministry of Agriculture, Food and Rural Affairs and the corresponding compliance program enforced by the MOECC already manage this activity so that it is not a significant threat to drinking water.

Policy: NASM-2-LB-PI-MC

Non-agricultural Source Material — Prescribed Instrument (under the *Environmental Protection Act*)

Where the application, handling or storage of non-agricultural source material (existing and/or future) is or would be a significant drinking water threat as described in Appendix B and is governed by a Prescribed Instrument (Certificate of Approval or Environmental Compliance Approval under the *Environmental Protection Act*) the MOECC shall ensure the instrument includes appropriate terms and conditions so that:

a) The application, handling and storage of non-agricultural source material (existing) ceases to be a significant drinking water threat; or
b) The application, handling and storage of non-agricultural source material (future) never becomes a significant drinking water threat.

The MOECC shall comply with part (a) of this policy within three years from the date the Source Protection Plan takes effect.

Note that if the material is untreated septage, the future application is prohibited through policies WASTE-3-LB-PI-MC and *WASTE-4-LB-S57.*

<u>Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste</u>

Old DTRs

When hazardous waste or liquid industrial waste (LIW) is stored at a transfer processing site it is considered a threat in WHPA score of 10 and IPZ 9-10.

New DTRs

When hazardous waste or LIW is stored at a transfer processing site it is now considered a threat in WHPA score of 8-10 and IPZ 8-10.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	Hazardous waste or liquid industrial waste stored at or above grade	10	9-10
	Hazardous waste or liquid industrial waste stored and a portion but not all is stored below grade	10	9-10
	Hazardous waste or liquid industrial waste stored below grade	10	
2021	The hazardous waste or liquid industrial waste is stored above grade at a transfer/processing site approved to receive waste under Part V of the Environmental Protection Act, that includes hazardous waste or liquid industrial waste.	8-10	8-10
	The hazardous waste or liquid industrial waste is stored partially below grade at a transfer/processing site approved to receive waste under Part V of the Environmental Protection Act, that includes hazardous waste or liquid industrial waste.	8-10	8-10
	The hazardous waste or liquid industrial waste is stored below grade at a transfer/processing site approved to receive waste under Part V of the Environmental Protection Act, that includes hazardous waste or liquid industrial waste.	8-10	

Threats Enumeration

Despite the increase in area where a transfer processing site for hazardous waste would be a threat, none are anticipated. A desktop exercise was completed, and no active waste disposal sites were found within WHPAs 8-10 or IPZ 9-10.

Policy Review

Current policies would prohibit a new transfer processing site for hazardous waste in WHPA 8-10 or IPZ 8-10 if it meets the threat circumstances above. Staff are of the opinion that this policy is appropriate, and no policy revisions are suggested.

Policy: WASTE-3-LB-PI-MC

Future Waste Disposal Site — Prescribed Instrument

Future waste disposal sites are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals under the *Environmental Protection Act* or the *Ontario Water Resources Act*) must conform with this policy.

<u>Storage of Subject Waste at a Waste Generation Facility: site requires generator registration</u>

Old DTRs

New threat.

New DTRs

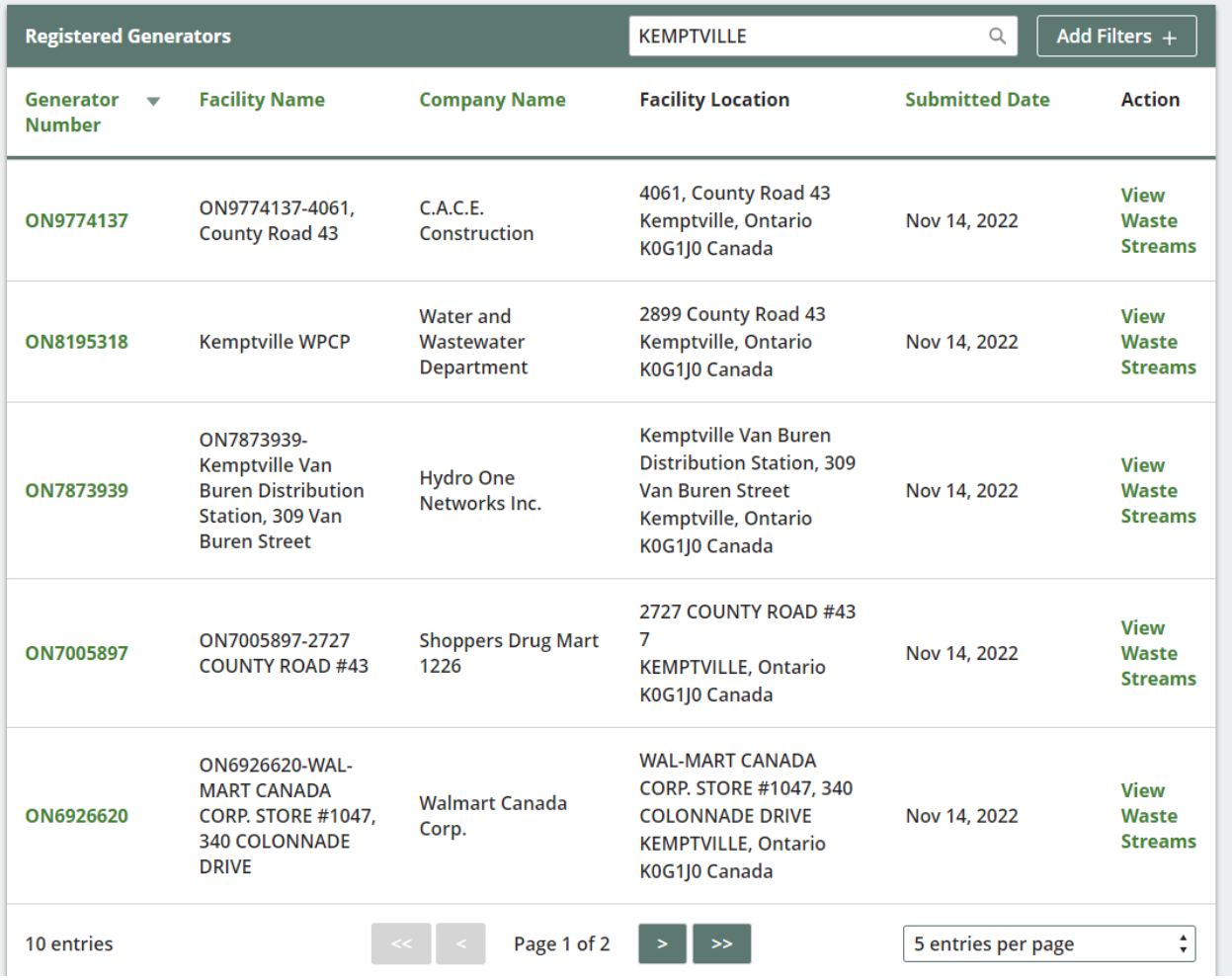
This new threat subcategory includes storage of commercial, institutional, and industrial facilities at the original generators of subject waste until these wastes have been treated to meet the land disposal treatment requirements. Some facilities generating and storing hazardous waste or LIW (i.e., subject waste) do not require an ECA. Instead, they only require registration under the Hazardous Waste Information Network (HWIN). "Subject waste" is a term that refers to hazardous waste (including hazardous waste treated to remove characteristic hazards such as reactivity and ignitability) and LIW that is to be registered with the MECP through the HWIN.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	The subject waste is stored at or above grade, or partially below grade, at a waste generation facility requiring generator registration as prescribed in Ontario Regulation 347 (General - Waste Management) R.R.O. 1990 made under the Environmental Protection Act, excluding a waste disposal site that requires an ECA under Part V of the EPA.	10	10

	The subject waste is stored below grade at a waste generation facility requiring generator registration as prescribed in Ontario Regulation 347 (General - Waste Management) R.R.O. 1990 made under the Environmental Protection Act, excluding a waste disposal site that requires an ECA under Part V of the EPA.	10	

Threats Enumeration

Since most of those who generate subject waste are required to register with HWIN, we were able to look at the HWIN database to see the typical land use associated with this threat activity. HWIN is accessed here. Example of businesses in North Grenville that generate waste that are required to register is provided below.



Registered Generators — KEMPTVILLE — Add Filters +

Generator Number	Facility Name	Company Name	Facility Location	Submitted Date	Action
ON9774137	ON9774137-4061, County Road 43	C.A.C.E. Construction	4061, County Road 43 Kemptville, Ontario K0G1J0 Canada	Nov 14, 2022	View Waste Streams
ON8195318	Kemptville WPCP	Water and Wastewater Department	2899 County Road 43 Kemptville, Ontario K0G1J0 Canada	Nov 14, 2022	View Waste Streams
ON7873939	ON7873939-Kemptville Van Buren Distribution Station, 309 Van Buren Street	Hydro One Networks Inc.	Kemptville Van Buren Distribution Station, 309 Van Buren Street Kemptville, Ontario K0G1J0 Canada	Nov 14, 2022	View Waste Streams
ON7005897	ON7005897-2727 COUNTY ROAD #43	Shoppers Drug Mart 1226	2727 COUNTY ROAD #43 7 KEMPTVILLE, Ontario K0G1J0 Canada	Nov 14, 2022	View Waste Streams
ON6926620	ON6926620-WAL-MART CANADA CORP. STORE #1047, 340 COLONNADE DRIVE	Walmart Canada Corp.	WAL-MART CANADA CORP. STORE #1047, 340 COLONNADE DRIVE KEMPTVILLE, Ontario K0G1J0 Canada	Nov 14, 2022	View Waste Streams

10 entries — << < Page 1 of 2 > >> — 5 entries per page

However, it is very unlikely that these type of land uses will be occuring in a IPZ-10 since most of our IPZ 10 areas are in water, and WHPA 10 is generally a 100 meter radius around the well and are predominantly in built up or residential areas.

Policy Review

Current policies would prohibit the storage of subject waste in WHPA 10 and IPZ 10. Staff are of the opinion that this policy is appropriate, and no policy revisions are suggested.

Policy: WASTE-4-LB-S57

Future Waste Disposal Site — Section 57 Prohibition

Future waste disposal sites that are not governed by a Prescribed Instrument (Environmental Compliance Approval) are designated as prohibited under Section 57 of the *Clean Water Act* in areas where they would be a significant drinking water threat as described in Appendix B. This policy does not apply to waste that is registered with the MOECC waste generation reporting system or waste that is approved to be transported off-site using the MOECC manifest process or waste that is subject to Director's Instructions.

<u>Storage of Waste at a Waste Generation Facility: site that is exempt or excluded from generator registration requirements</u>

Old DTRs

New threat.

New DTRs

Storage of Waste at a Waste Generation Facility: site that is exempt or excluded from generator registration requirements includes facilities that are the original generators of hazardous wastes or LIW. However, unlike the threat above (storage of subject waste that is required to register), these facilities <u>do not</u> require ECAs or registration under HWIN. The management framework of these wastes is found in other EPA regulations.

Some examples of land uses or activities that fall under this threat are listed below:

- Waste from a motor servicing facility
- Waste batteries
- Electrical waste
- Nursing home waste
- Dental surgeon office
- Medical physician or surgeons office

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	Any of the following wastes described in the specified provisions of Ontario Regulation 347 and are stored partially below grade at a waste generation facility: a) A waste excluded from the definition of subject waste as	10	

	described in subsection 1 (3). B) A subject waste that is exempt from Part V because it meets the requirements set out in paragraph 1 of subsection 3 (2). C) A subject waste that is exempt from Part V and is described in paragraphs 3, 6, 7, 8, 10, 13, and 17, 18 and 19 of subsection 3 (2).		
	Any of the following wastes described in the specified provisions of Ontario Regulation 347 and are stored below grade at a waste generation facility: a) A waste excluded from the definition of subject waste as described in subsection 1 (3). B) A subject waste that is exempt from Part V because it meets the requirements set out in paragraph 1 of subsection 3 (2). C) A subject waste that is exempt from Part V and is described in paragraphs 3, 6, 7, 8, 10, 13, and 17, 18 and 19 of subsection 3 (2).	10	

Threats Enumeration

The storage of waste at a waste generation facility that is exempt from registration is only a threat in WHPA 10 below grade or partially below grade. As discussed previoulsy, WHPA 10 is generally a 100 meter radius around the well and are predominantly in built up or residential areas. We completed a desktop review of land uses in these areas and we did not identify any possible threats with the possibility of below grade storage in WHPA 10.

Policy Review

Current policies would prohibit the below grade storage of waste that is exempt from registration in WHPA 10. Staff are of the opinion that this policy is appropriate and that if new land uses associated with this threat are proposed in these areas, they can be relocated elsewhere. No policy revisions are suggested.

Policy: WASTE-4-LB-S57

Future Waste Disposal Site — Section 57 Prohibition

Future waste disposal sites that are not governed by a Prescribed Instrument (Environmental Compliance Approval) are designated as prohibited under Section 57 of the *Clean Water Act* in areas where they would be a significant drinking water threat as described in Appendix B. This policy does not apply to waste that is registered with the MOECC waste generation reporting system or waste that is approved to be transported off-site using the MOECC manifest process or waste that is subject to Director's Instructions.

<u>Waste Threat Summary</u>

- One policy revision proposed to update preamble of NASM policies
- Two threat circumstances updated and areas where they are a threat was expanded:
    - Landfilling of Hazardous Waste or Liquid Industrial Waste –minor revision, expanded where it is a threat

    - Transfer/Processing Sites approved to receive Hazardous Waste or Liquid Industrial Waste—expanded where it is a threat
- The following threats are new:
    - Disposal of Hauled Sewage to Land
    - Application of Processed Organic Waste (POW)
    - Storage of Hauled Sewage
    - Storage of Processed Organic Waste and Waste Biomass
    - Storage of Subject Waste at a Waste Generation Facility: site requires generator registration
    - Storage of Waste at a Waste Generation Facility: site that is exempt or excluded from generator registration requirements

Sewage Threats

Industrial Effluent Discharges

Original DTRs

A wastewater system that discharges to surface water and has as its primary function the collection, transmission or treatment of industrial sewage

New DTRs

Added “or land” to the threat circumstances and industrial effluent discharges are now a threat in WHPA-10, instead of just IPZs.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. A wastewater system that discharges to surface water and has as its primary function the collection, transmission or treatment of industrial sewage. 2. The system is part of a facility for which the NPRI Notice requires a person to report and the report must include information in relation to a substance listed in Group 1, 2, 3 or 4 of Part 1 of Schedule 1 or Part 2 of Schedule 1 of the notice.		8-10
	1. A wastewater system that discharges to surface water or land and has as its primary function the collection, transmission or treatment of industrial sewage. The system is not part of a facility for which the NPRI Notice requires a person to report.		10
	Pathogen Circumstances		

	1. The system discharges to surface water or land and its primary functions include conveying sewage from a meat plant. 2. The discharge may result in the presence of one or more pathogens in groundwater or surface water.		8-10
2021	1. A wastewater system that discharges to surface water or land and has as its primary function the collection, transmission or treatment of industrial sewage. 2. The system is part of a facility for which the NPRI Notice requires a person to report and the report must include information in relation to a substance listed in Group 1, 2, 3 or 4 of Part 1 of Schedule 1 or Part 2 of Schedule 1 of the notice.	10	8-10
	1. A wastewater system that discharges to surface water or land and has as its primary function the collection, transmission or treatment of industrial sewage. 2. The system is not part of a facility for which the NPRI Notice requires a person to report.	10	
	Pathogen Circumstances		
	1. The system discharges to surface water or land and its primary functions include conveying sewage from a meat plant. 2. The discharge may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10

Threats Enumeration

No threats anticipated. WHPA 10 is generally a 100-meter radius around the well and are predominantly in built up or residential areas.

Policy Review

Current policies would prohibit future industrial effluent discharges. No policy revisions are suggested.

Policy: SEW-15-LB-PI/PA-MC

Future "Other" Sewage Works — Prescribed Instrument/*Planning Act* Decisions

Future sewage works of the types listed in policy SEW-13-LB-PI-MC are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act)* must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

Storm Water Management Facilities and Drainage Systems: Outfall from a Storm Water Management Facility or Storm Water Drainage System.

Old DTRs

Significant drinking water threats for stormwater management facility outfalls or a stormwater drainage system outfalls were determined by the land use type and the drainage area of the associated property.

New DTRs

Significant drinking water threats for stormwater management facility outfalls or a stormwater drainage system outfalls are determined by considering the predominant land use that the system serves and the percentage of impervious area of the drainage area.

Drainage Area
<20% of Drainage Area is Impervious (Excluding Roofs)
20% to 50% of Drainage Area is Impervious (Excluding Roofs)
>50% of the Drainage Area is Impervious (Excluding Roofs)

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land uses in the area are rural, agricultural, or low density residential; or 2. The drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land uses in the area are rural, agricultural, or low density residential.		10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the	10	9-10

	predominant land uses in the area are rural, agricultural, or low density residential.		
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is not more than 1 hectare and the predominant land use in the area is high density residential land use.	10	
	The system is a storm water management facility designed to discharge storm water to land or surface water. The drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land use in the area is high density residential land use; or The drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land use in the area is high density residential land use.		9-10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the predominant land use in the area is high density residential land use.	10	9-10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is not more than 1 hectare and the predominant land uses in the area are industrial or commercial.		10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land uses in the area are industrial or commercial; or 2. The drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land uses in the area are industrial or commercial.	10	9-10

	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the predominant land uses in the area are industrial or commercial.	10	10
2021	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouses. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is more than 20 but not more than 50% of the drainage area.		10
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouses. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is more than 50% of the drainage area.	10	9-10
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is residential or institutional or community use. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is not more than 20% of the drainage area.		10
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is residential or institutional or community use. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is more than 20 but not more than 50% of the drainage area.	10	9-10
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is commercial or industrial . 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces -	10	

	aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is not more than 20% of the drainage area.		
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is commercial or industrial land uses including greenhouses. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is more than 20 but not more than 50% of the drainage area.	10	9-10
	1. A storm water management facility outfall or a storm water drainage system outfall that serves land where the predominant land use is commercial or industrial. 2. The percentage of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water management facility or to the storm water drainage system is more than 50% of the drainage area.	10	8-10

Threats Enumeration

Historically, stormwater approvals are managed by the Province on an application basis, but routine low risk municipal based stormwater approvals will move to a new approval process called Consolidated Linear Infrastructure (CLI). Industrial, commercial, and higher risk sewage works will still require a separate sewage ECA.

The Consolidated Linear Infrastructure Permissions Approach will change current permissions framework for low-risk sewage works by consolidating approvals for linear infrastructure (e.g. sanitary collection, stormwater works). One ECA will include approval for all municipal stormwater works in one area, and one ECA will provide approval for all municipal sanitary sewage works in one area, i.e. municipality.

It is our understanding that when the Province reviews applications for new environmental compliance approvals (ECA) or amendments to existing ECAs, the Ministry applies the Rules in effect at the time the application is received whether or not the source protection plan has been updated to reflect the 2021 Rules. However, it is unclear how Source Water considerations will be included in the new CLI process. Staff believe that the CLI process will eliminate the opportunity for a Ministry reviewer to consider Source Water implications. We have seen a draft CLI for the Municipality of North Grenville and it appears as though they CLI defers back to the Source Protection Plan for Source Water conformity.

Policy Review

New stormwater threats would be managed by ECA as a standalone approval or through the CLI process introduced above.

Staff are of the opinion that due to the widespread application of CLIs, there will be limited review of ECAs within vulnerable areas. As such staff suggest revising our Stormwater policy to suggest that stormwater threats directly adjacent to the IPZ-1 be reviewed by Ministry staff.

Policy: SEW-9-LB-PI/PA-MC

Future Stormwater Management Facility In Wellhead Protection Area "A" or Intake Protection Zone Scored 10 — Prescribed Instrument/*Planning Act* Decisions

Future stormwater management facilities that would be a significant drinking water threat as described in Appendix B are prohibited in the:

- Wellhead Protection Area "A"; and
- Intake Protection Zone with a vulnerability score of 10.

continued ...

Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act)* must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

A stormwater management facility is exempt from this policy and instead subject to policy SEW-10-LB-PI-MC if:

- It is located within a Wellhead Protection Area "A" that is under municipal ownership and maintained in a natural state that protects source water;
- It is located at the outer perimeter of the Wellhead Protection Area "A" and a minimum of 30 metres from the municipal well; and
- It is located in an area where it can be demonstrated that there is no discernible hydrogeological connection between the surface and the aquifer supplying the municipal well.

Policy: SEW-10-LB-PI-MC

Future Stormwater Management Facility in Wellhead Protection area "B" Scored 10 or Intake Protection Zone Scored 8 to 9 — Prescribed Instrument

A future stormwater management facility that would be a significant drinking water threat as described in Appendix B is permitted in the:

- Intake Protection Zone with a vulnerability score of 8, 8.1 or 9
- Wellhead Protection Area "A" (under the exemption described in policy SEW-9-LB-PI/PA-MC)
- Wellhead Protection Area "B" with a vulnerability score of 10

The MOECC shall ensure that the Prescribed Instrument (Environmental Compliance Approval required under the *Ontario Water Resources Act*) that governs a stormwater management facility permitted to be established in these areas includes appropriate terms and conditions to manage the threat so that it does not become significant. Where the Director considers it appropriate, terms and conditions will include a requirement that a new stormwater management facility be built to Enhanced Level Protection Standards as described in the Stormwater Management Planning and Design Manual, MOECC 2003.

Storm Water Management Facilities and Drainage Systems: Storm Water Infiltration

Old DTRs

Historically, there was no distinction between stormwater outlets and stormwater infiltration systems.

New DTRs

A stormwater infiltration facility is a system that temporarily impounds rainfall and stormwater runoff and allows it to flow into and through soil rather than to surface water. It is designed to exfiltrate or infiltrate part or all of the “storm water” into the ground to reduce runoff, including a greenway terrace, a soak way, an infiltration trench, an infiltration chamber, a bioretention structure, a vegetated filter strip, a permeable pavement, a grass swale, a dry swale, a perforated pipe system or pervious pipe, a pervious catch basin, an infiltration basin, an infiltration gallery Facilities identified as threats in this sub-category require Environmental Compliance Approvals.

Drainage Area
<200 m² of Drainage Area is Impervious (Excluding Roofs)
200 to 2000 m² of Drainage Area is Impervious (Excluding Roofs)
>2000 m² of the Drainage Area is Impervious (Excluding Roofs)

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the predominant land uses in the area are rural, agricultural, or low density residential.		9 – 10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land use in the area is high density residential land use; or	10	

	2. The drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land use in the area is high density residential land use.		
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the predominant land use in the area is high density residential land use.		9-10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 1 but not more than 10 hectares and the predominant land uses in the area are industrial or commercial; or 2. The drainage area associated with the storm water management facility is more than 10 but not more than 100 hectares and the predominant land uses in the area are industrial or commercial.	10	10
	1. The system is a storm water management facility designed to discharge storm water to land or surface water. 2. The drainage area associated with the storm water management facility is more than 100 hectares and the predominant land uses in the area are industrial or commercial.	10	8-10
2021	1. A storm water infiltration facility that serves land where the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouses. 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is more than 200 but not more than 2000 m2.	10	
	1. A storm water infiltration facility that serves land where the predominant land use is rural, agricultural, outdoor recreational, parkland or greenhouses 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is more than 2000 m_2.	10	9-10

	1. A storm water infiltration facility that serves land where the predominant land use is residential or institutional or community use. 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is more than 200 but not more than 2000 m2.	10	
	1. A storm water infiltration facility that serves land where the predominant land use is residential or institutional or community use. 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is more than 2000 m2.	10	10
	1. A storm water infiltration facility that serves land where the predominant land use is commercial or industrial land uses. 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is not more 200 m2.	10	
	1. A storm water infiltration facility that serves land where the predominant land use is commercial or industrial land uses. 2. The sum of impervious areas of the lands served by the facility (including roads, sidewalks and parking surfaces - aisles and driveways but excluding roofs) draining to the storm water infiltration facilities in the site is more than 2000 m2.	10	9-10

Threats Enumeration

The threats enumeration discussion is the same as the above threat for stormwater outfalls.

Policy Review

The policy review discussion is the same as the above threat for stormwater outfalls.

<u>Wastewater Collection Facilities and Associated Parts: Sanitary Sewers</u>

Old DTRs

The threats addressed in this section remain the same as in the existing 2017/2018 tables of threats; however, the circumstances have been amended to clearly identify the parts, facilities, and structures associated with the activities that pose a risk to sources of drinking water.

New DTRs

This revised threat explicitly identifies the force main or rising main as the facilities that pose a higher risk. The circumstances that are considered to determine if sanitary sewers and related pipes are a significant drinking water threat are the volume of sewage that the system is designed to convey per day and for pathogens, the potential for the discharge from the system to result in the presence of pathogens in groundwater or surface water.

"*force main or rising main" means a "sanitary sewer", which conveys sewage under pressure from a pump or pneumatic ejector to a point where the system is either combined with other parts of the "wastewater collection facility" or discharged to a "wastewater treatment facility";*

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The system is part of a wastewater collection facility that collects or transmits sewage containing human waste, but does not include a sewage storage tank or a designed bypass. 2. The system is designed to convey more than 10,000, but not more than 100,000 cubic metres of sewage per day.	10	
	1. The system is part of a wastewater collection facility that collects or transmits sewage containing human waste, but does not include a sewage storage tank or a designed bypass. 2. The system is designed to convey more than 100,000 cubic metres of sewage per day.	10	
	Pathogen Circumstances		
	1. The system is a wastewater collection facility that collects or transmits sewage containing human waste, but does not include any part of the facility that is a sewage storage tank or works used to carry out a designed bypass.	10	10
2021	1. A force main or rising main that forms part of a wastewater collection facility, not including its appurtenances. 2. The wastewater collection facility is designed to convey more than 10,000, but not more than 100,000 cubic metres of sewage per day.	10	

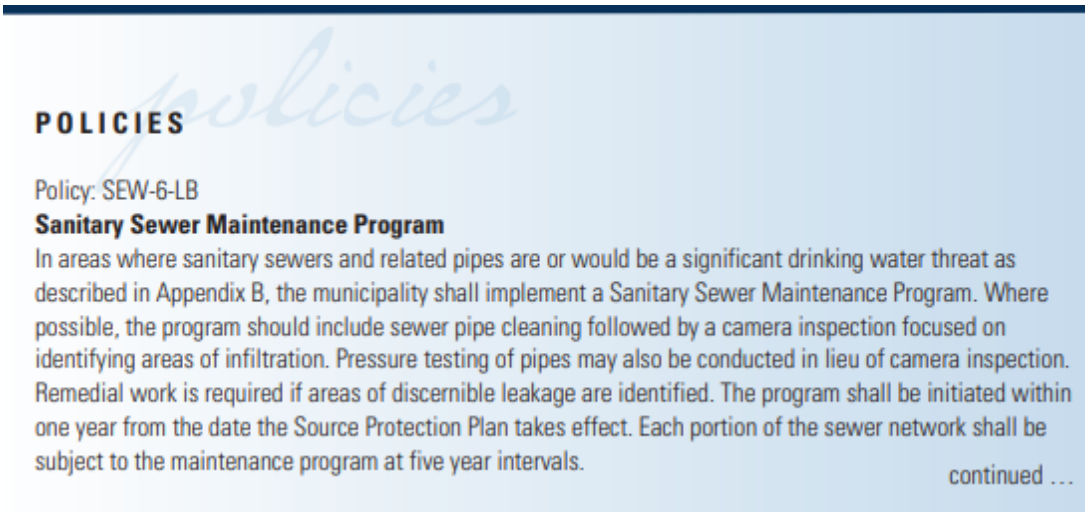
	1. A force main or rising main that forms part of a wastewater collection facility, not including its appurtenances. 2. The wastewater collection facility is designed to convey more than 100,000 cubic metres of sewage per day.	10	
	Pathogen Circumstances		
	1. A force main, a combined sewer or partially separated sanitary sewer, a rising main or a gravity sanitary sewer that forms part of a wastewater collection facility, not including its appurtenances. 2. The discharge from the system may result in the presence of one or more pathogens in groundwater or surface water.	10	10

Threats Enumeration

New sanitary sewer threats would be managed by ECA as a standalone approval or through the CLI process introduced above. However, the area is small since it Is only a threat in WHPA 10 or IPZ 10.

Policy Overview

No policy changes suggested.



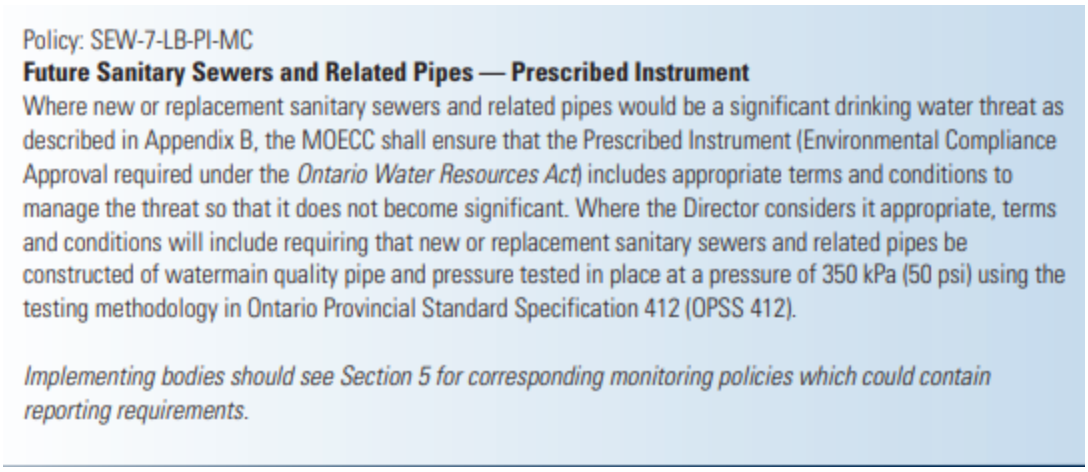
POLICIES

Policy: SEW-6-LB

Sanitary Sewer Maintenance Program

In areas where sanitary sewers and related pipes are or would be a significant drinking water threat as described in Appendix B, the municipality shall implement a Sanitary Sewer Maintenance Program. Where possible, the program should include sewer pipe cleaning followed by a camera inspection focused on identifying areas of infiltration. Pressure testing of pipes may also be conducted in lieu of camera inspection. Remedial work is required if areas of discernible leakage are identified. The program shall be initiated within one year from the date the Source Protection Plan takes effect. Each portion of the sewer network shall be subject to the maintenance program at five year intervals.

continued …



Policy: SEW-7-LB-PI-MC

Future Sanitary Sewers and Related Pipes — Prescribed Instrument

Where new or replacement sanitary sewers and related pipes would be a significant drinking water threat as described in Appendix B, the MOECC shall ensure that the Prescribed Instrument (Environmental Compliance Approval required under the *Ontario Water Resources Act*) includes appropriate terms and conditions to manage the threat so that it does not become significant. Where the Director considers it appropriate, terms and conditions will include requiring that new or replacement sanitary sewers and related pipes be constructed of watermain quality pipe and pressure tested in place at a pressure of 350 kPa (50 psi) using the testing methodology in Ontario Provincial Standard Specification 412 (OPSS 412).

Implementing bodies should see Section 5 for corresponding monitoring policies which could contain reporting requirements.

<u>Wastewater Collection Facilities and Associated Parts: Outfall of a Combined Sewer Overflow (CSO), or a Sanitary Sewer Overflow (SSO) from a Manhole or Wet Well</u>

Old DTRs

The threats addressed in this section remain the same as in the existing 2017/2018 tables of threats; however, the circumstances have been amended to clearly identify the parts, facilities, and structures associated with the activities that pose a risk to sources of drinking water.

Combined sewers collect sanitary sewage and stormwater in the same pipe. Under normal conditions all flow goes through the sewage treatment plant and gets treated before being discharged. However, during extreme wet weather events the system can become overwhelmed with too much water causing overflows. This is the discharge of untreated sewage that has bypassed the sewage treatment plant.

New DTRS

Added Sanitary Sewer Overflow to clarify.
"sanitary sewer overflow (SSO)" means a discharge of untreated sanitary sewage to the land or surface water from a sanitary sewer at designed locations, other than the final discharge to a wastewater treatment plant or at a combined sewer outfall.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water other than by way of a designed bypass.		10

	2. The combined sewer is part of a system that includes a wastewater treatment facility designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis.		
	1. The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water other than by way of a designed bypass. 2. The combined sewer is part of a system that includes a wastewater treatment facility designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.		9-10
	1. The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water other than by way of a designed bypass. 2. The combined sewer is part of a system that includes a wastewater treatment facility designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis.		8-10
	Pathogen Circumstances		
	1. The system is a combined sewer that may discharge sanitary sewage containing human waste to surface water. 2. The discharge may result in the presence of one or more pathogens in surface water.	10	8-10
2021	1. A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges the sanitary sewer overflow (SSO) or outfall that discharges sanitary sewage pumping station overflow (PSO), and that forms part of a wastewater collection facility and that may discharge to land or surface water. 2. The wastewater collection facility is designed to convey more than 1,000, but not more than 10,000 cubic metres of sewage per day.		10
	1. A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges the sanitary sewer overflow (SSO) or a wet well outfall that discharges sanitary sewage pumping station overflow (PSO), and that forms part of a wastewater collection facility and that may discharge to land or surface water. 2. The wastewater collection facility is designed to convey more than 10,000, but not more than 100,000 cubic metres of sewage per day.		9-10
	1. A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges the sanitary sewer overflow (SSO) or a from a wet well outfall that discharges sanitary sewage pumping station overflow (PSO), and that forms part of a wastewater collection facility and that may discharge to land or surface water. 2. The wastewater		8-10

	collection facility is designed to convey more than 100,000 cubic metres of sewage per day.		
	Pathogen Circumstances		
	1. A combined sewer or partially separated sanitary sewer outfall that discharges combined sewer overflow (CSO), or a manhole that discharges the sanitary sewer overflow (SSO) or a from a manhole wet well outfall that discharges sanitary sewage pumping station overflow (PSO), and that forms part of a wastewater collection facility. 2. The discharge may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10

Threats Enumeration

This threat applies in WHPA-10 and IPZ 8-10. New Combined Sewer Overflows (CSOs) are no longer permitted by the Ministry, but they are also prohibited per Source Protection Plan policies.

Policy Overview

Our policies currently only speak to CSOs. Staff are of the opinion that we should amend Policy SEWG-13-LB-PI-MC to include sanitary sewer overflow. Staff are also of the opinion that we should include a new provision in policy SEWG-15-LB-PI-MC that would permit existing pumping stations retrofits for overflow purposes to protect the public and community. Should the policy not be updated, existing pumping stations would not be permitted to upgrade to include a bypass and this may result in raw sewage backing up into people’s basements.

POLICIES

Policy: SEW-13-LB-PI-MC

Existing "Other" Sewage Works — Prescribed Instrument

Where an existing sewage works is a significant drinking water threat as described in Appendix B, the MOECC shall ensure that the Prescribed Instrument (Certificate of Approval or Environmental Compliance Approval required under the *Ontario Water Resources Act)* that governs the sewage works includes appropriate terms and conditions to ensure that it ceases to be a significant drinking water threat. This policy applies where the types of sewage works include:

- Sewage treatment plant effluent discharges
- Industrial effluent discharges
- Storage of sewage (excluding storage associated with the sewer network)
- Combined sewer discharge from a stormwater outlet to surface water
- Sewage treatment plant bypass discharge to surface water

The MOECC shall review and amend the Prescribed Instrument within three years from the date the Source Protection Plan takes effect.

Policy: SEW-15-LB-PI/PA-MC

Future "Other" Sewage Works — Prescribed Instrument/*Planning Act* Decisions

Future sewage works of the types listed in policy SEW-13-LB-PI-MC are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act)* must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

<u>Wastewater Collection Facilities and Associated Parts: Sewage Pumping Station or Lift Station Wet Well, a Holding Tank or a Tunnel.</u>

Old DTRs

The threats addressed in this section remain the same as in the existing 2017/2018 tables of threats; however, the circumstances have been amended to clearly identify the parts, facilities, and structures associated with the activities that pose a risk to sources of drinking water.

New DTRs

Significant drinking water threats for this subcategory include a holding tank or a tunnel that forms part of a wastewater collection facility not including a wet well, and stores sanitary sewage containing human waste and that may discharge sewage to groundwater or from which a spill may result in the presence of one or more pathogens in groundwater or surface water.

Sanitary sewers (2017 DTRs) captured wet wells but this wasn't explicitly stated in the circumstances. The circumstances for the holding tank or tunnel are a new addition to the 2021 DTRs.

"wet well" means an underground pit as part of a sewage pumping station or lift station, where sanitary sewage is stored in until it is pumped out of the station;

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
2021	1. A holding tank or a tunnel that forms part of a wastewater collection facility not including a wet well, and stores sanitary sewage containing human waste and that may discharge sewage to groundwater. 2. The wastewater collection facility is designed to convey more than 100,000 cubic metres of sewage per day.	10	
	Pathogen Circumstances		
	1. A wet well, a holding tank or a tunnel that forms part of a wastewater collection facility as part of a sanitary sewage pumping station or lift station and stores sanitary sewage containing human waste. 2. A spill may result in the presence of one or more pathogens in groundwater or surface water.	10	9-10

A new sewage pumping station or lift station wet well, a holding tank or a tunnel would be prohibited. However, the area is small since it is only a threat in WHPA 10 or IPZ 9-10.

Policy Overview

No policy changes suggested. Staff are of the opinion that new sewage pumping station or lift station wet well, a holding tank or a tunnel could be relocated outside of WHPA-10 and IPZ 9-10.

POLICIES

Policy: SEW-13-LB-PI-MC

Existing "Other" Sewage Works — Prescribed Instrument

Where an existing sewage works is a significant drinking water threat as described in Appendix B, the MOECC shall ensure that the Prescribed Instrument (Certificate of Approval or Environmental Compliance Approval required under the *Ontario Water Resources Act)* that governs the sewage works includes appropriate terms and conditions to ensure that it ceases to be a significant drinking water threat. This policy applies where the types of sewage works include:

- Sewage treatment plant effluent discharges
- Industrial effluent discharges
- Storage of sewage (excluding storage associated with the sewer network)
- Combined sewer discharge from a stormwater outlet to surface water
- Sewage treatment plant bypass discharge to surface water

The MOECC shall review and amend the Prescribed Instrument within three years from the date the Source Protection Plan takes effect.

Policy: SEW-15-LB-PI/PA-MC

Future "Other" Sewage Works — Prescribed Instrument/*Planning Act* Decisions

Future sewage works of the types listed in policy SEW-13-LB-PI-MC are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act)* must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

<u>Wastewater Treatment Facilities and Associated Parts</u>

Old DTRs

Focused on wastewater treatment facility, instead of separate parts such as effluent overflow, lagoon or holding tanks that may discharge. The threats addressed in this section remain the same as in the existing 2017/2018 tables of threats; however, the circumstances have been amended to clearly identify the parts, facilities, and structures associated with the activities that pose a risk to sources of drinking water.

New DTRs

Significant drinking water threats for this subcategory include a final effluent outfall or a sewage lagoon that forms part of a wastewater treatment facility and that may discharge sewage to groundwater or a sewage treatment plant process tank or a sewage treatment plant holding tank that is part of a wastewater treatment facility and that may discharge sewage to groundwater. The circumstances that are considered to determine if these are a significant drinking water threat are the volume that the wastewater treatment facility is designed to discharge on an annual basis, if a discharge may result

in the presence of one or more pathogens in groundwater or surface water or if a spill may result in the presence of one or more pathogens in groundwater or surface water.

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis. & 1. The system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass. 2. The system is designed to discharge treated sanitary sewage at average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis.		10
	1. The system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis. & 1. The system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass. 2. The system is designed to discharge treated sanitary sewage at average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.	10	9-10
	1. The system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis. & 1. The system is a wastewater treatment facility that discharges directly to land or surface water through a means other than a designed bypass. 2. The system is designed to discharge treated sanitary sewage at average daily rate that is more than 50,000 cubic metres on an annual basis.	10	8-10

	1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is at or above grade; 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is below grade; or 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste, and a part of the tank, but not all, is below grade. 2. The system is associated with a wastewater treatment facility that is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis.	10	
	1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is at or above grade; 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is below grade; or 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste, and a part of the tank, but not all, is below grade. 2. The system is associated with a wastewater treatment facility that is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.	10	
	1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is at or above grade; 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste and is below grade; or 1. The system is a treatment tank or storage tank that is part of a sewage works within the meaning of the Ontario Water Resources Act, the tank treats or stores sanitary sewage containing human waste, and a part of the tank, but not all, is below grade. 2. The system is associated with a wastewater treatment facility that is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis.	10	10

	1. The system is a wastewater treatment facility that may discharge sanitary sewage containing human waste to surface water by way of a designed bypass. 2. The discharge may result in the presence of one or more pathogens in surface water. & 1. The system is a wastewater treatment facility that discharges to surface water through a means other than a designed bypass.	10	8-10
	1. The system is a sewage treatment tank or sewage storage tank in either a wastewater collection facility or wastewater treatment facility, and any part of the tank is at or above grade; or 1. The system is a sewage treatment tank or sewage storage tank in a wastewater collection facility or a wastewater treatment facility and the tank is below grade. 2. A spill from the tank may result in the presence of one or more pathogens in groundwater or surface water.	10	10
2021	1. A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis.		10
	1. A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.		9-10
	1. A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis.	10	8-10
	1. A sewage lagoon that forms part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 2,500 but not more than 17,500 cubic metres on an annual basis.	10	
	1. A sewage lagoon that forms part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.	10	

	1. A sewage lagoon that forms part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis.	10	10
	1. A sewage treatment plant process tank or a sewage treatment plant holding tank that is part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 17,500 but not more than 50,000 cubic metres on an annual basis.	10	
	1. A sewage treatment plant process tank or a sewage treatment plant holding tank that is part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. The wastewater treatment facility is designed to discharge treated sanitary sewage at an average daily rate that is more than 50,000 cubic metres on an annual basis.	10	10
	1. A final effluent outfall or a sewage treatment plant overflow outfall that is part of a wastewater treatment facility. 2. A discharge may result in the presence of one or more pathogens in groundwater or surface water.	10	8-10
	1. A sewage lagoon that forms part of a wastewater treatment facility and that may discharge sewage to groundwater. 2. A discharge may result in the presence of one or more pathogens in groundwater.	10	
	1. A sewage treatment plant process tank or a sewage treatment plant holding tank, or a sewage lagoon that does not discharges to surface water, and that forms part of a wastewater treatment facility. 2. A spill may result in the presence of one or more pathogens in groundwater or surface water.	10	9-10

Threats Enumeration

New Wastewater Treatment Facilities and Associated Parts threats would be managed by ECA as a standalone approval or through the CLI process introduced above.

Policy Review

These threats would be prohibited where they are a significant drinking water threat. No policy updates are suggested.

POLICIES

Policy: SEW-13-LB-PI-MC

Existing "Other" Sewage Works — Prescribed Instrument

Where an existing sewage works is a significant drinking water threat as described in Appendix B, the MOECC shall ensure that the Prescribed Instrument (Certificate of Approval or Environmental Compliance Approval required under the *Ontario Water Resources Act)* that governs the sewage works includes appropriate terms and conditions to ensure that it ceases to be a significant drinking water threat. This policy applies where the types of sewage works include:

- Sewage treatment plant effluent discharges
- Industrial effluent discharges
- Storage of sewage (excluding storage associated with the sewer network)
- Combined sewer discharge from a stormwater outlet to surface water
- Sewage treatment plant bypass discharge to surface water

The MOECC shall review and amend the Prescribed Instrument within three years from the date the Source Protection Plan takes effect.

Policy: SEW-15-LB-PI/PA-MC

Future "Other" Sewage Works — Prescribed Instrument/*Planning Act* Decisions

Future sewage works of the types listed in policy SEW-13-LB-PI-MC are prohibited where they would be a significant drinking water threat as described in Appendix B. Accordingly, decisions to issue, otherwise create or amend Prescribed Instruments (Environmental Compliance Approvals required under the *Ontario Water Resources Act)* must conform with this policy. In addition, decisions made by planning authorities under the *Planning Act* must conform with this policy.

<u>Sewage Threat Summary</u>

- Policy SEWG-13-LB-PI-MC should be revised to include sanitary sewer overflow.
- A new provision in policy SEWG-15-LB-PI-MC that would permit existing pumping stations retrofits for overflow purposes to protect the public and community.
- Revise Stormwater policy to suggest that stormwater threats directly adjacent to the IPZ-1 be reviewed by Ministry staff.
- The circumstances to separate the following sub-categories have been amended:
    - Effluent (including bypass) overflow from the sewage treatment plant.
    - Sewage lagoon as a wastewater treatment facility where a discharge to groundwater may occur.
    - Process and holding tanks associated with the wastewater treatment facility that may discharge or spill to groundwater or surface water
    - Sanitary Sewers: explicitly identify the forcemain or rising main as the facilities that pose a higher risk.
    - Outfalls: identify the facilities posing risks, e.g. discharge of a combined sewer overflow or sanitary sewer overflow from a manhole or sanitary sewage pumping station overflow from a wet well.

- Sewage pumping station/lift station from a wet well and holding tank or a tunnel risks associated with the leakages to groundwater and surface water.

Technical Municipal Working Group

Staff had the opportunity to engage with a handful of Municipal Working Group (MWG) members on December 13, 2022, to present an overview of the changes to the Waste and Sewage threats and get feedback.

Municipal working group members were in favor of the proposed approaches and the proposed policy updates.

Next Steps

Pre-consult during the required consultation process as outlined in the Section 36 Workplan and as described in the Minister's Order.

3.0 Director's Technical Rule Changes—
Fertilizer, Pesticides, DNAPL Threat Updates
Date: February 2, 2023
To: Mississippi-Rideau Source Protection Committee
From: Marika Livingston, Project Manager
Brian Stratton, Co-Project Manager
Mississippi-Rideau Source Protection Region

Recommendation:

That the Source Protection Committee receive this report for information;

Further that the preamble to the Mississippi-Rideau Source Protection Plan Pesticide policies be amended;

Further that the policy titles for DNAPL-3-LB-S57 and DNAPL-4-LB-S58 be revised;

Further that the Source Protection Committee to direct staff to pre-consult on the proposed draft policy updates with implementing bodies and the Ministry of Environment, Conservation and Parks; and,

Further that staff be directed to incorporate the proposed policy updates and updated maps as part of the forthcoming amendment under Section 36 of the *Clean Water Act*.

Background

The Ministry of Environment, Conservation and Parks announced changes to the Director's Technical Rules (DTRs) on December 3, 2021. The changes include numerous updates to the Circumstances of several of the 22 drinking water threats and technical rules. The changes to be reviewed, assessed, and evaluated in this staff report are Fertilizer, Pesticides and DNAPL related threats.

All changes will be reviewed and discussed; however minor threat changes will not have a lot of discussion.

Effective Date of Changes

Despite the DTR changes being effective December 3, 2021, the changes will not be applied in our Region until our Section 36 Workplan has been submitted and approved. Our target for completion and submission of our Section 36 Workplan is December 2024. The Ministry encourages DTR changes be consolidated in S. 36 Workplans if

possible, otherwise a S.34 Amendment would be required if policy changes are suggested.

Summary of Tools Available to Manage Threats

Risk Management Plans—S. 58
Prohibition—S.57
Prescribed Instrument—i.e., ECAs, NASM plans, Nutrient Management Plans
Non-regulatory policy tools: i.e., Education and Outreach, Incentives

Handling and storage of commercial fertilizer

Original DTRs

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The commercial fertilizer is stored at a facility where it is manufactured or processed, or from which it is wholesaled, excluding storage related solely to retail sale or in relation to the application of the fertilizer; or 1. The commercial fertilizer is stored for retail sale or in relation to its application. 2. The total mass of all materials stored that contain the commercial fertilizer, in any form including liquid or solid, is not more than 2500 kilograms.	10	10
2021	1. Storage of commercial fertilizer on a site. 2. The commercial fertilizer stored in any form, including liquid or solid, is more than 2,500 kg.	10	10

New DTRs

The circumstances for this threat have been simplified to focus on the sites where handling and storage of fertilizer may occur. These sites include but are not limited to retail, wholesale, manufacturing facilities, and storage associated with the application of commercial fertilizer. Also, the circumstances include liquid, solid, powder, or any other forms of commercial fertilizer. Mixing and mobilizing of commercial fertilizer within a property are identified as threats under the handling sub-category while transporting fertilizer off the property on roads or highways is not included under this threat sub-category.

Threats Enumeration

None anticipated.

Policy Review

Current policies would prohibit a new retail fertilizer storage business if it meets the threat circumstances above but otherwise the storage is managed by Risk Management Plan or Prescribed Instrument. Staff are of the opinion that this policy is appropriate, and no policy revisions are suggested.

Policy: FERT-1-LB-PI-MC

Commercial Fertilizer — Prescribed Instrument

Where the application of commercial fertilizer (existing and/or future) that is or would be a significant drinking water threat as described in Appendix B is governed by a Prescribed Instrument (Nutrient Management Plan developed under General Regulation 267/03 of the *Nutrient Management Act*), this activity shall continue to be managed through these existing requirements. The existing regulatory requirements administered by the Ontario Ministry of Agriculture, Food and Rural Affairs and the corresponding compliance program enforced by the MOECC already manage this activity so that it is not a significant threat to drinking water.

Policy: FERT-2-LB-S58

Commercial Fertilizer — Risk Management Plan

The following activities related to commercial fertilizer are designated for the purpose of Section 58 of the *Clean Water Act,* requiring a Risk Management Plan in areas where the threat is or would be significant as described in Appendix B:

- Existing handling and storage for retail sale
- Existing and future non-residential handling and storage in relation to application
- Existing and future non-residential application

The Risk Management Plan should demonstrate and ensure compliance with Canadian Fertilizer Institute guidelines and codes of practice where appropriate. The Risk Management Plans for existing activities shall be established within three years from the date the Source Protection Plan takes effect. This policy does not apply to:

- Activities governed by Nutrient Management Plans developed under the *Nutrient Management Act*

Policy: FERT-3-LB-S57

Future Retail Storage of Commercial Fertilizer — Section 57 Prohibition

The future handling and storage of commercial fertilizer for retail sale is designated as prohibited under Section 57 of the *Clean Water Act* in areas where the threat would be significant as described in Appendix B.

Implementing bodies should see Section 5 for corresponding monitoring policies which could contain reporting requirements.

Handling and storage of pesticides

Original DTRs

Directors Technical Rules	Circumstance and Vulnerability score needed for a significant threat		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. A pesticide is stored at a facility where it is manufactured or processed, or from which it is wholesaled, excluding storage related solely to retail sale or for use in extermination within the meaning of the Pesticides Act; or 1. A pesticide is stored for retail sale or for use in extermination within the meaning of the Pesticides Act. 2. The total mass of all materials stored that contain the pesticide, in any form including liquid or solid, is more than 250 but no more than 2,500 kilograms.	10	10
	1. A pesticide is stored at a facility where it is manufactured or processed, or from which it is wholesaled, excluding storage related solely to retail sale or for use in extermination within the meaning of the Pesticides Act; or 1. A pesticide is stored for retail sale or for use in extermination within the meaning of the Pesticides Act. 2. The total mass of all materials stored that contain the pesticide, in any form including liquid or solid, is more than 2,500 kilograms.	10	9-10
2021	1. The storage of pesticide on a site. 2. The pesticide stored in any form, including liquid or solid, is more than 250 but not more than 2,500 kg.	10	10
	1. The storage of pesticide on a site. 2. The pesticide stored in any form, including liquid or solid, is more than 2,500 kg.	10	9-10

New DTRs

The circumstances related to the type of storage and material form used to describe the handling and storage of pesticides have been clarified to be consistent with those of the handling and storage of commercial fertilizer. The quantity thresholds or the vulnerability scores have not changed.

They have also removed the list of 11 chemicals that were considered a pesticide threat.

Threats Enumeration

None anticipated.

Policy Review

Current policies would prohibit a new commercial pesticide business that stores pesticides if it meets the threat circumstances above.

Staff suggest amending the preamble to remove the list of chemicals to be considered a pesticide threat.

Policy: PEST-1-NLB

Pesticide Inspections

The MOECC is strongly encouraged to integrate source water protection information, such as the location of vulnerable drinking water areas, into the criteria used by program managers and inspectors to determine inspection priorities related to pesticide use in areas where the application, handling and storage of pesticide is or would be a significant drinking water threat as described in Appendix B. Action to implement this policy should be initiated within one year from the date the Source Protection Plan takes effect.

Policy: PEST-2-NLB

Pesticide Education Programs

The MOECC is strongly encouraged to undertake a program analysis of the Ontario Pesticide Education Program and the Ontario Pesticide Training and Certification Program. The analysis should consider the need for training/certification to be required for all pesticide application, handling and storage that is or would be a significant drinking water threat as described in Appendix B. Action to implement this policy should be initiated within one year from the date the Source Protection Plan takes effect.

Policy: PEST-3-LB-PI-MC

Pesticide Use — Prescribed Instrument

Where the application of pesticide (existing and/or future) is or would be a significant drinking water threat as described in Appendix B, the MOECC shall ensure that the Prescribed Instrument that governs the activity (approvals issued under the *Pesticides Act*) includes appropriate terms and conditions so that:

a) The application of pesticide (existing) ceases to be a significant drinking water threat; or
b) The application of pesticide (future) never becomes a significant drinking water threat.

The MOECC shall comply with part (a) of this policy within three years from the date the Source Protection Plan takes effect.

Policy: PEST-4-LB-S58

Existing Commercial Storage of Pesticide — Risk Management Plan

The existing handling and storage of pesticide at a manufacturing, processing or wholesaling facility, retail outlet or custom applicator's storage yard is designated for the purpose of Section 58 of the *Clean Water Act*, requiring a Risk Management Plan in areas where the threat is significant as described in Appendix B. The Risk Management Plans shall be established within three years from the date the Source Protection Plan takes effect.

Policy: PEST-5-LB-S57

Future Commercial Storage of Pesticide — Section 57 Prohibition

The future handling and storage of pesticide at a manufacturing, processing or wholesaling facility, retail outlet or custom applicator's storage yard is designated as prohibited under Section 57 of the *Clean Water Act* in areas where the threat would be significant as described in Appendix B.

Implementing bodies should see Section 5 for corresponding monitoring policies which could contain reporting requirements.

Handling and storage of DNAPLs

DNAPLs are chemicals that are denser than water.

Original DTRs

Directors Technical Rules	**Circumstance and Vulnerability score needed for a significant threat**		
	Circumstance	**WHPA**	**IPZ / WHPA E**
		Vulnerability Score	
Original	1. The above grade handling of a DNAPL in relation to its storage 1. The storage of a DNAPL at or above grade.	2-10 (A-C)	10
	1. The storage of a DNAPL if a portion, but not all, of the storage is below grade.	2-10 (A-C)	10
	1. The below grade handling of a DNAPL in relation to its storage 1. The storage of a DNAPL below grade.	2-10 (A-C)	
2021	1. The engagement of an activity that may include, but not limited to, those provided in List 1 of Section 9 of the Glossary of Terms in the Table of Drinking Water Threats. 2. Storage of a DNAPL at or above grade.	2-10 (A-C)	9-10
	1. The engagement of an activity that may include, but not limited to, those provided in List 1 of Section 9 of the Glossary of Terms in the Table of Drinking Water Threats. 2. Storage of a DNAPL partially below grade.	2-10 (A-C)	9-10
	1. The engagement of an activity that may include, but not limited to, those provided in List 1 of Section 9 of the Glossary of Terms in the Table of Drinking Water Threats. 2. Storage of a DNAPL entirely below grade.	2-10 (A-C)	

New DTRs

The circumstances have been amended to identify DNAPL activities as significant drinking water threats in IPZs scored 9 and 10 instead of only those scored 10. The tables now recognize that DNAPL chemicals with a high toxicity rating may impact surface water bodies where new areas where significant threats could occur may be identified.

Additionally, a list of activities (List 1), adapted from O. Reg. 153/04 (Records of Site Conditions, also known as the brownfields regulation) where DNAPLs may be stored or handled as part of their operations, have been added. The list of activities is intended to be used to identify activities that likely use DNAPLs instead of attempting to identify specific liquids that exhibit DNAPL characteristics and behaviour in the environment.

List 1 is meant to be used as a guide for the local authority, and its use is optional. The list can be used, in addition to the methods and the local knowledge that were originally used by the local authority to identify significant drinking water threats related to DNAPLs. The list does not limit the local authority from adding other activities to their local list of DNAPL activities. The list is not intended to change the policy approaches implemented in the first round of planning.

Threats Enumeration

A desktop threats assessment was completed for Perth and Carleton Place. Please note, there are no IPZ-9's for Smiths Falls and Ottawa intakes. In terms of new threats related to the updated technical rules for DNAPLs, there is a potential for at least two automotive repair shops in IPZ-2, score of 9 in Perth. This would result in two new RMPs for these businesses.

Policy Review

Historically, future[1] businesses storing and handling DNAPLs (in any quantity) were to be prohibited in areas where they are considered a significant drinking water threat, specifically in Intake Protection Zone-1 and Wellhead Protection Areas A, B & C. For some municipalities, the affected area is quite large.

When developing policies to manage this threat, the Mississippi-Rideau Source Protection Committee expected to find these chemicals only in large quantities (i.e. industrial drums) at dry cleaning or manufacturing facilities. However, after completing detailed background research and site visits, it was determined that DNAPL chemicals can be found in small quantities, specifically products commonly used in the automotive service industry (i.e. chlorinated brake cleaner in aerosol cans).

Source Protection staff brought this to the attention of the SPC and an Amendment was proposed to include a quantity limit of 25L or more to trigger prohibition. The Amendment was approved in Spring 2020.

However, due to the updated threat circumstances, policy revisions are necessary to capture the change in circumstances for IPZ-9. As such, staff suggest amending policy titles DNAPL-3-LB-S57 and DNAPL-4-LB-S58 to read:

Future DNAPLs—Section 57 Prohibition Where the Vulnerability Score is 4 to 8 in Wellhead Protection Areas "B" and "C" and IPZ-2, score of 9 in quantities greater than 25 liters.

Future DNAPLs— Risk Management Plan Where the Vulnerability Score is 4 to 8 in Wellhead Protection Areas "B" and "C" and IPZ-2, score of 9 in quantities less than 25 liters.

[1] A future activity is one that is established or commenced after January 1, 2015 and does not meet the criteria of the Transition Policy or the Interruptions/Expansions Policy of the Source Protection Plan.

Policy: DNAPL-1-LB-S58

Existing DNAPLs and Organic Solvents — Risk Management Plan

The existing handling and storage of DNAPL and organic solvent substances is designated for the purpose of Section 58 of the *Clean Water Act,* requiring a Risk Management Plan in areas where the threat is significant as described in Appendix B. Risk Management Plans shall be established within three years from the date the Source Protection Plan takes effect. Retail sales establishments are excluded from the Risk Management Plan requirement. This policy applies to these DNAPL and organic solvent substances in the quantities and at the locations listed in Appendix B:

DNAPLs	**Organic Solvents**
Dioxane-1,4	Carbon tetrachloride
Polycyclic Aromatic Hydrocarbons (PAHs)	Chloroform
Tetrachloroethylene (PCE) (or PERC)	Methylene chloride (dichloromethane)
Trichloroethylene (TCE)	Pentachlorophenol
Vinyl Chloride	

continued …

Policy: DNAPL-2-LB-S57

Future DNAPLs and Organic Solvents — Section 57 Prohibition Where the Vulnerability Score is 10

The future handling and storage of the DNAPL and organic solvent substances listed in policy DNAPL-1-LB-S58 is designated as prohibited under Section 57 of the *Clean Water Act* in areas where the threat would be significant as described in Appendix B.

Implementing bodies should see Section 5 for corresponding monitoring policies which could contain reporting requirements.

Policy: DNAPL-3-LB-S57

Future DNAPLs— Section 57 Prohibition Where the Vulnerability Score is is 4 to 8 in Wellhead Protection Areas "B" and "C" in quantities greater than 25 liters.

The future handling and storage of the DNAPL listed in policy DNAPL-1-LB-S58 is designated as prohibited in quantities greater than 25 liters under Section 57 of the *Clean Water Act i*n areas where the threat would be significant as described in Appendix B. Retail sales establishments are excluded from this prohibition.

Implementing bodies should see Section 5 for corresponding monitoring policies which could contain reporting requirements.

Policy: DNAPL-4-LB-S58

Future DNAPLs— Risk Management Plan Where the Vulnerability Score is 4 to 8 in Wellhead Protection Areas "B" and "C" for quantities less than 25 liters

The future handling and storage of DNAPL under 25 liters is designated for the purpose of Section 58 of the *Clean Water Act,* requiring a Risk Management Plan in areas where the threat is significant as described in Appendix B. Risk Management Plans shall be established within three years from the date the Source Protection Plan takes effect. Retail sales establishments are excluded from the Risk Management Plan requirement.

Editorial changes to threat sub-categories

Conveyance of a liquid hydrocarbon by a pipeline

The name of the National Energy Board Act has been replaced with Canadian Energy Regulator Act to align with the name change in that Act in 2019. This change does not affect the risk scores nor the circumstances describing the risk. Also, a definition of liquid hydrocarbon is provided in the glossary of Part XII.1 of the Rules to align with the definitions of pipeline in other provincial regulations and ensure consistency with the previous Director's letters approving local threats for pipelines.

Summary of threat and policy changes

- Revised threat circumstances to clarify the handling and storage of commercial fertilizer
- Revised policy for handling and storage of pesticides and removing list of 11 pesticides
- Revised policy for handling and storage of DNAPLs due to revised threat circumstances (now a threat in IPZ-2, score of 9)
- Remove any reference to National Energy Board and replace with Canadian Energy Regulator Act

Next Steps

Pre-consult during the required consultation process as outlined in the Section 36 Workplan and as described in the Minister’s Order.

4.0 Risk Management Official Annual Report (2022)

Date: February 2, 2023
To: Mississippi-Rideau Source Protection Committee
From: Brian Stratton, Risk Management Official
Mississippi-Rideau Source Protection Region

Recommendation:

That the Mississippi-Rideau Source Protection Committee receive for information the Risk Management Official Annual Reports for the 2022 calendar year.

Background

The Mississippi-Rideau Source Protection Plan contains some policies that regulate significant drinking water threats using Part IV of the *Clean Water Act.* Municipalities are responsible for these Part IV policies however they have the option of transferring their enforcement authority to another body. In the Mississippi-Rideau Source Protection Region, all municipalities except the City of Ottawa have chosen to transfer their Part IV enforcement authority to the Source Protection Authorities (SPA) which is the Conservation Authorities. Qualified staff with specialized training have been appointed by the Source Protection Authority or Municipality to implement Part IV Policies in our region.

Risk Management Official Annual Reports

Section 81 of the *Clean Water Act* requires each Risk Management Official to submit an annual report that summarizes the actions taken by risk management staff. Each report applies to a calendar year and must be submitted to the SPA by February 1 in the year following the year to which the report applies. The report will be submitted to MECP if requested by the Director. Section 65 of the *Clean Water Act* Regulation 287/07 sets out the required content of the report.

The focus of 2022 was to complete any outstanding Risk Management Plans. As of December 31, 2022, there are 6 outstanding Risk Management Plans to address 7 threats. More specifically, 5 of the 7 of the remaining threats are within the City of Ottawa and are home heating fuel oil threats. The City of Ottawa is currently developing an incentive program to eliminate any outstanding fuel oil threats. Mississippi-Rideau Source Protection staff will be assisting with program coordination and delivery.

The remaining 2 threats are on the same parcel and are agricultural threats, specifically the storage of manure and the runoff related to an outdoor confinement area for livestock. Risk Management staff are working with the landowner's lawyer to come to an agreement on the best way to mitigate the significant drinking water threats.

Attachments: Risk Management Official Annual Reports for 2022

1. Rideau Valley Source Protection Area
2. Mississippi Valley Source Protection Area