

APPENDIX B

ENVIRONMENTAL DISCHARGE & RELEASE REPORT

April 25, 2022

All information in this report is in compliance with *The Local Authority Freedom of Information and Protection of Privacy Act*.

1.0 Introduction

To increase transparency and education regarding environmental protection, the City of Regina (City) has developed the Environmental Discharge & Release Report. The City protects the environment by employing a team of professionals that oversee, direct, and educate City employees and at times, residents and businesses on the proper cleanup and reporting of spills. The team also helps implement measures to mitigate and prevent spills within the organization.

This proactive approach to share environmental spill/release information publicly is also intended to build trust within the community. The information included in this report is based on regulatory requirements and/or industry best practice standards and includes a summary of regulatory and non-regulatory releases to the environment that occurred over the previous year. By providing this information to the public, the City intends to demonstrate continued improvement and protecting the environment, community, and employees is paramount to the City's vision.

To help residents better understand the City's approach to the cleanup of spills and releases, definitions and a severity index are included below:

Regulatory Release is a spill or discharge that meets federal or provincial regulatory limits and is required to be reported as per the Saskatchewan Ministry of Environment Discharge and Discovery Reporting Standard.

Non-Regulatory Release is a spill or discharge that does not meet the Saskatchewan Ministry of Environment Discharge and Discovery Reporting Standard and has the potential to cause minor harm to the environment but is not serious enough to be reportable to regulatory agencies.

Sewer Release is a spill or discharge into either the wastewater or stormwater system that could cause an adverse impact to the sewer system but does not have a negative impact on the environment and is not reportable as per the Discharge and Discovery Reporting Standard. For more information on Sewer Releases, please see the Semi-annual Sewer Source Control Report.

Table 1. Spill Severity Index

Severity Level	Description	Action
1	<ul style="list-style-type: none"> ▪ Potential for immediate hazard to human health 	<ul style="list-style-type: none"> ▪ Fire Protective Services takes control of the site ▪ Primary objective: minimize risk to human health ▪ Secondary objective: manage impacts to the environment ▪ Ensure regulatory engagement ▪ Contact downstream users if applicable ▪ Advise City Council
2	<ul style="list-style-type: none"> ▪ Reportable Discharge enters the stormwater system AND reaches a natural (fish bearing) waterbody or an above ground storm channel (if fish as defined by the Fisheries Act) are present). ▪ Domestic sewage bypass to a natural waterbody ▪ No immediate risk to human health <p>These factors increase the severity</p> <ul style="list-style-type: none"> ○ Short duration large volume discharge ○ Highly hazardous substance ○ Minimal stormwater piping before substance reaches the natural waterbody ○ No stormwater ponds or other intervening structures along the run ○ Enters an environmentally sensitive area 	<ul style="list-style-type: none"> ▪ Primary objective: manage impacts to the waterbody (may trigger specialized response) and stop the flow at the source ▪ Secondary objective: identify the source ▪ Ensure regulatory engagement ▪ Spill to Wascana that may affect downstream → contact downstream users ▪ Advise City Council
3	<ul style="list-style-type: none"> ▪ Reportable Discharge enters: <ul style="list-style-type: none"> ○ the stormwater system ○ a natural (fish bearing) waterbody ○ an above ground storm channel if fish (as defined by the Fisheries Act) are present. ▪ Discharge aboveground, adjacent to the natural waterbody ▪ No hazard to human health <p>These factors decrease the severity</p> <ul style="list-style-type: none"> ○ Medium volume discharge ○ Low to medium hazard substance 	<ul style="list-style-type: none"> ▪ Primary objective is confining the substance ▪ Secondary objective is to manage impacts (may trigger specialized response) ▪ Tertiary objective: identify the source ▪ Ensure regulatory engagement
4	<ul style="list-style-type: none"> ▪ Reportable Discharge to a permeable surface, but area is low risk (low environmental sensitivity) and easily contained; OR ▪ Short-term release enters the stormwater system, but one or more factors keep the severity to a Level 4. <ul style="list-style-type: none"> ○ Small volume released that would be retained by storm drain or lead ○ Known, non-hazardous substance (most substances are hazardous) ○ Long run of underground stormwater piping before substance reaches the waterbody ○ One or more stormwater ponds along the run, with sufficient capacity ▪ No hazard to human health 	<ul style="list-style-type: none"> ▪ Primary objective is confining the substance and ensuring it doesn't enter a more sensitive area. ▪ Secondary objective is to manage impacts to the stormwater system ▪ Tertiary objective: identify the source ▪ Ensure regulatory engagement
5	<ul style="list-style-type: none"> ▪ Minor short-term discharge to a paved surface below reportable limit. ▪ No entry to stormwater system, or directly to a fish-bearing waterbody. ▪ No hazard to human health 	<ul style="list-style-type: none"> ▪ Work area can generally clean up without assistance



2.0 Environmental Regulations

The Government of Saskatchewan and the Government of Canada have jurisdiction over environmental legislation and regulation in Regina, including the reporting and cleanup of spills. Both levels of government have a robust regulatory framework and reporting structure that use a risk-based framework to set limits for compounds in the environment to protect animal, plant and human life. Until compounds enter the environment at a level above regulatory criteria, such compounds are not considered spills or releases by the regulators. Rigorous science-based regulations are in place federally and across all provinces that define what constitutes acceptable public risk based on best practice scientific principles.

When a Regulatory Release occurs, a “single window approach” is used so that individuals or businesses report the spill one time, but the information is made available to all applicable regulatory bodies. This approach improves transparency of reporting and simplifies the process so that reporting requirements are easier to understand and follow and individuals can focus on cleaning up the spill and mitigating impacts to the environment.

After a spill is reported to the regulatory agencies, they become involved to ensure that the actions of the offending party meet all regulatory requirements and risk to both humans and the environment is minimized. In the event the spill takes place on public property and the offending party cannot be identified, the City is responsible for the cleanup.

When the City identifies a Regulatory Release, no matter the responsible party, the City calls the Provincial Spill Line (1-800-667-7525) as soon as reasonably practicable to advise the regulatory bodies of the situation and submits a Written Spill Report within 30 days to the Saskatchewan Ministry of Environment. If the release is on private property, it is the owner’s responsibility to determine if the incident needs to be reported to

regulators. Unless there is potential for harm to human health or public property the City and its residents are not informed of releases or spills on private property.

The City responds to various Reportable and Non-Reportable Releases within Regina to mitigate impacts to the environment and City owned property. When a release occurs on or enters public property, the City will:

- Determine severity
- Notify the Provincial Spill Line if warranted
- Notify downstream users if warranted
- Try to identify the responsible party if they have not already come forward
- Oversee or conduct the cleanup of the spill depending if the offending party has been identified and/or if it was caused by the City
- Ensure public safety and protection of the environment is maintained
- Charge back costs associated with the event to the offending party (if applicable).

3.0 Notification

Notification will occur when either a regulatory body directs the City to notify downstream users, or the City has assessed the situation and deemed the spill may affect downstream users. In the event the City and its regulators have determined an emergency notification is not required, the information on the spill can be found in this report following its annual update. This process considers the risk to the public and the environment and notifies potentially affected parties, when required, without desensitizing the public with numerous notifications. It is important that the effects of any spill are understood and the tangible risks are appropriately communicated to avoid generating unnecessary fear or confusion for the public.

4.0 Summary Tables

One of the ways the City becomes aware of a spill is through residents phoning in. In 2021, the City received 103 service requests that were related to hazardous materials or spills. Of those service requests, 68 were for active spills and 8 were Reportable Releases. Although most of the incidents were Level 5 spills such as oil pans leaking onto roadways, without community engagement and reporting many Reportable Releases would go unreported for longer and could result in a higher severity spill as a result.

Table 1. Summary table of Non-Reportable Releases to the Storm System in 2021

Date	Description	Severity Index	Action Taken
12-May-21	Resident called in as they were concerned a contracted painter dumping paint down storm drain	Level 5	The City investigated the area, did not find any signs of paint.
25-Jun-21	Resident called in and stated "something chemical smelling" dumped into a storm drain	Level 5	Investigated the area, could not find evidence of chemicals or the odour that was mentioned.
09-Aug-21	Resident called in and stated another resident was dumping lawn chemicals into storm drain.	Level 5	Investigated the area, did not find evidence of dumping.
01-Dec-21	A resident claimed heating oil was spilled and entering storm drain	Level 5	Investigated the area, noted a chemical smell, placed absorbent in the storm drain.

*There were minimal to no additional costs incurred apart from employee time

Absorbent: The City employs the use of specialized absorbent that encapsulates contaminants and does not allow them to leach into the environment. This allows the City to use the absorbent in stormwater drains, on plants or trees, or on water to collect and

effectively remove the contaminate from the environment where cleanup and recovery is difficult.

Costs associated with motor vehicle accidents and their spills were not accounted for in this report unless the spill entered a waterbody or the storm sewer system.

5.0 Conclusion

The City is committed to open and honest dialog and transparency with its residents and stakeholders regarding hazardous material spills within Regina. Work will continue both externally and internally to improve our processes and ensure that when both Reportable and Non-Reportable Releases happen risk to the public and environment is mitigated, and the offending party pays for the clean-up when appropriate. This process, in addition to the current environmental programs within the City, will make the environment a priority and help prevent, as well as mitigate, future releases to the environment.

Table 2. Summary of Reportable Releases for 2021

Date	Location	Description of Events	Summary of Action Taken	Severity Index	Cost Incurred	Cost Recouped
11-Jun-21	Wascana Creek	Domestic sewage overflow into Wascana Creek within Regina due to heavy rain. 5.1 ML of sewage and rainwater were released.	The City conducted additional downstream sampling. Communicated with downstream users regarding the overflow.	Level 2	\$6,287	N/A
29-Jul-21	South Storm Channel	A small amount of discoloured, odorous water was identified in the storm sewer. Based on observations steps to determine if the liquid was sewage began.	The City investigated to determine if a cross connection (sewage incorrectly entering the storm sewer) was entering the storm channel. Water samples were taken, and the storm system was investigated to determine where/if the sewage may be coming from. Any cross connections found as part of the investigation were fixed accordingly.	Level 3	\$303	N/A
Aug 29-30-21	WWTP	The treated water leaving the WWTP had levels of benzo[a]pyrene above the reportable limit of 0.00001 mg/L. The level in the water entering the creek was 0.00002 mg/L. No exceedances were identified in downstream sampling.	The City, EPCOR, and the Coop Refinery Complex (CRC) worked with regulators to determine cause of the Reportable Release. Additional sampling was conducted downstream of the WWTP to determine the impacted area and associated levels. Detectable levels of benzo(a)pyrene were not detected within Wascana Creek. Work is ongoing to prevent similar events. Associated costs with the event were invoiced to the CRC.	Level 3	Still under investigation.	
07-Sep-21	N/A	Potable water line break of a large volume. This was reported based on the size of the leak and the potential to enter a nearby waterbody.	The City of Regina conducted testing in the stormwater system to determine risk to the environment. The break was found and repaired.	Level 3	\$570	N/A
15-Sep-21	WWTP	The treated water leaving the WWTP had levels of benzo(a)pyrene above the reportable limit of 0.00001 mg/L. The level in the water entering the creek was 0.000013 mg/L. No exceedances were identified in downstream sampling.	The City, EPCOR, and the CRC worked with regulators to determine cause of the Reportable Release. Additional sampling was conducted downstream of the WWTP to determine the impacted area and associated levels. Detectable levels of benzo(a)pyrene were not detected within Wascana Creek. Work is ongoing to prevent similar events. Associated costs with the event were invoiced to the CRC.	Level 3	Still under investigation.	
17-Oct-21	WWTP	The treated water leaving the WWTP had levels of benzo(a)pyrene above the reportable limit of 0.00001 mg/L. The level in the water entering the creek was 0.00001 mg/L. No exceedances that were correlated to the release were identified in downstream sampling.	The City, EPCOR, and the CRC worked with regulators to determine cause of the Reportable Release. Additional sampling was conducted downstream to determine reach and associated levels. Work is ongoing to prevent similar events. Associated costs with the event were invoiced to CRC.	Level 3	Still under investigation.	
15-Nov-21	WWTP	The treated water leaving the WWTP had levels of benzo(a)pyrene above the reportable limit of 0.00001 mg/L. The level in the water entering the creek was 0.00006 mg/L. No exceedances that were correlated to the release were identified in downstream sampling.	The City, EPCOR, and the CRC worked with regulators to determine cause of the Reportable Release. Additional sampling was conducted downstream to determine impacted area and associated levels. Detectable levels of benzo(a)pyrene were not detected within Wascana Creek. Additional treatment processes have been implemented by the CRC to remove benzo(a)pyrene from their wastewater. Associated costs were invoiced to the CRC.	Level 3	Still under investigation.	
27-Nov-21	N/A	A parked vehicle leaked diesel fuel from a slip tank. Approximately 100 L.	A parked vehicle was found to be leaking diesel fuel from a slip tank. Regina Fire and Protective Services was called to the scene. A license plate number was noted but the registered owner could not be located. The City of Regina cannot access registered owners via license plate numbers due to privacy laws.	Level 4	<\$500	\$0
10-Dec-21	N/A	An unknown liquid was reported to the City of Regina. Unknown volume.	The City collected samples of water found in the area. The incident was reported to regulators. The offending party was suspected but could not be confirmed. The information was forwarded to the Regulator and was dealt with by the Regulator as the spill was determined to be on private property.	Level 3	\$278	\$0
23-Dec-21	Harbour Landing Storm Channel	Yellow water was reported to the City of Regina.	The City was alerted to the water on top of the ice. Samples were collected and it was identified as a potential potable water leak. The leak was identified and repaired.	Level 3	\$96	N/A