



15 November 2023

Manitoba Environment, Climate and Parks
 Environmental Compliance and Enforcement Branch
 1007 Century St
 Winnipeg, MB
 R3H 0W4

Attention: **Edwin Yazon, Peng., Environmental Engineer, Environmental Approvals**

Re: Supplemental Information for the **Notice of Alteration for GFL Facility at 1090 Kenaston Blvd, Winnipeg, *Dangerous Goods Handling and Transportation Act* Licence No. 334 HW Client #**

This letter is in response to the request for additional information, submitted to GFL on September 18, 2023, in relation to the Notice of Alteration for the GFL Facility located at 1090 Kenaston Blvd, for its *Dangerous Goods Handling and Transportation Act* Licence No. 334 HW (the permit).

Responses to the request for clarification and/or additional information are outlined below.

Request #1	
Request	Provide an updated site plan to show the final placement of aeration box, shredder, and 50000-litre aboveground used oil tank. Provide also a one-page facility layout.
Response	Included as Attachment A to this response.

Request #2	
Request	Clarify/describe how the treatment process in the aeration box eliminates the hazardous waste characteristics of materials.
Response	After reviewing the needs of the facility, GFL has decided to withdraw the request for the aeration box process from the application. The aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #3

Request	<p>Relating to aeration box, provide a detailed description of the aeration process including the following:</p> <ul style="list-style-type: none">• volume of waste• type of waste• location• loading process• unloading process• testing protocol of VOC (before and after treatment)• volume or rate of treatment• details about receiving of materials before treatment• details about storing of materials before treatment• post treatment procedure including storage before offsite treatment
Response	As noted above aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #4

Request	<p>Relating to air emission, provide a detailed description of the aeration process that includes the following:</p> <ul style="list-style-type: none">• exhaust gas ventilation system including design and specification• emission control measures• targeted emission standards• discharge rate• air pollution control system
Response	As noted above the aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #5	
Request	Describe the sampling and analysis of potential air pollutants released as stationary point. The description should include the following: <ul style="list-style-type: none"> • list of compounds for analysis • rational for sampling • methods used for sampling • analysis for each method • an explanation note to describe the state and types of samples for analysis • results of lab analysis • standards to compare analysis
Response	As noted above the aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #6	
Request	Describe how odour from the aeration process is mitigated to ensure an odour problem is not created from the process.
Response	As noted above the aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #7	
Request	Describe the measures if/when the air pollution control system fails or malfunctions
Response	As noted above the aeration box no longer forms part of this NoA and will be removed from the Facility.

Request #8	
Request	Please include the following in the shredding operation description: volume capacity shredding rate
Response	The shredder specifications are contained in Attachment B to this response. From an operational perspective, the shredder is capable of shredding materials at a rate of fifty (50) ton/hour.

Request #9	
Request	The proposal indicates shredding of mix of solids. The process will drain excess liquids. What are the liquids? Is there any hazardous component in the liquid?

Request #9	
Response	<p>The liquids will primarily be non-regulated consumer goods such as beer and other alcohol containing beverages. The containers will typically be in aluminum cans in and bulk packaging such as twenty-four (24) cans in a combination of plastic and cardboard overpacking.</p> <p>Other items that are proposed to be shredded are used oil filters. Typically, these will be large train type filter that not able to be processed in the current used oil processing equipment. These will produce used oil as product, which are disposed of in the waste oil containers at the Facility.</p>

Request #10	
Request	What stage of the process is the liquid drained from materials?
Response	The liquid is drained during the shredding process with the solids and liquid exiting to the bottom of the shredder together, and then eventually disposed of in appropriate containers

Request #11	
Request	Submit a design or specification of the floor sump and holding tank for containing the drained liquid.
Response	There is no drawing for the containment. The debris from shredding is collected in bins with a screen that will capture the solids and allow the liquids to accumulate at the bottom. The liquids are pumped out of the bin into a tank via a valve at the bottom of the bin.

Request #12	
Request	What are bulky industrial waste? Provide examples.
Response	Bulky industrial waste may include large bundles of cardboard, metals, glass, aluminum – larger items that cannot be placed into either a recycling program or in designated waste containers for disposal. This does not include any hazardous materials such as asbestos ceiling tiles, or construction waste such as drywall.

Request #13	
Request	Describe how noise and dust from the shredding process will be mitigated to ensure noise or dust problem is not created from the process.
Response	Shredding operations are completed inside building “B.” Noise generated from the operation of the shredder is contained within the building, which mitigates the opportunity for noise generation to the outside. Dust from the shredding operation is minimal and contained within the building. Any dust that is generated is swept up and disposed of at the conclusion of the shredding operation.

Request #14	
Request	Describe the potential explosion from shredding containers of incompatible products, and the mitigation measures to prevent explosion.

Request #14

Response	Only non-flammable liquid or other non-hazardous containers are processed through the shredder. The materials are sorted prior to operation to ensure compatibility of materials being shredded.
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Request #15

Request	The addition of a 50,000-litre storage tank will increase GFL's current operation. This will also increase the vehicular traffic within the facility and nearby intersections. Please clarify how this addition will not change the environmental effects to the current operation.
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Response	While the additional tank does provide for an increase on the volume of product that can be accepted at the facility, it is not anticipated that the volumes of product currently being accepted at the Facility will change. This does not increase vehicular traffic within the Facility and the nearby intersections. The additional tank is being brought in as a proactive measure to allow for GFL to accept product from one off events like emergency situations or seasonal surges in product disposals.
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Request #16

Request	Describe the following: <ul style="list-style-type: none">• loading procedures• unloading procedures• spill containment measures• emergency response plan that includes the following hazards:<ul style="list-style-type: none">○ accidental spill○ fire
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Response	Attached to the response are the GFL SOPs: <ul style="list-style-type: none">• GFL-PRF-LIQ-0032-1ALW-SOP - Bulk Waste Receiving• GFL-PRF-LIQ-0039-1ALW-SOP - Tank Farm Transfers• GFL-OLS-LIQ-3010-1ALW-SOP - Oil Truck Transfer (Loading from Tank Farm)• GFL-OLS-LIQ-3012-1ALW-SOP - Oil Truck Transfer (Loading)• GFL-OPS-LIQ-9018-1ALW-SOP - Bulk Waste Shipping - Waste Fuels• GFL-PRF-LIQ-0010-1ALW-SOP - Tank Farm Ops Spill containment procedures are detailed in each SOP for transfers. The the ERP for the facility is attached to this response. There are no changes to the fundamentals of the response plan as this does not add any new hazards to the site and the tank is of a similar design to tank already on site. Once the tank has been authorized and put in place it will be added to the site plan and listing in the ERP.
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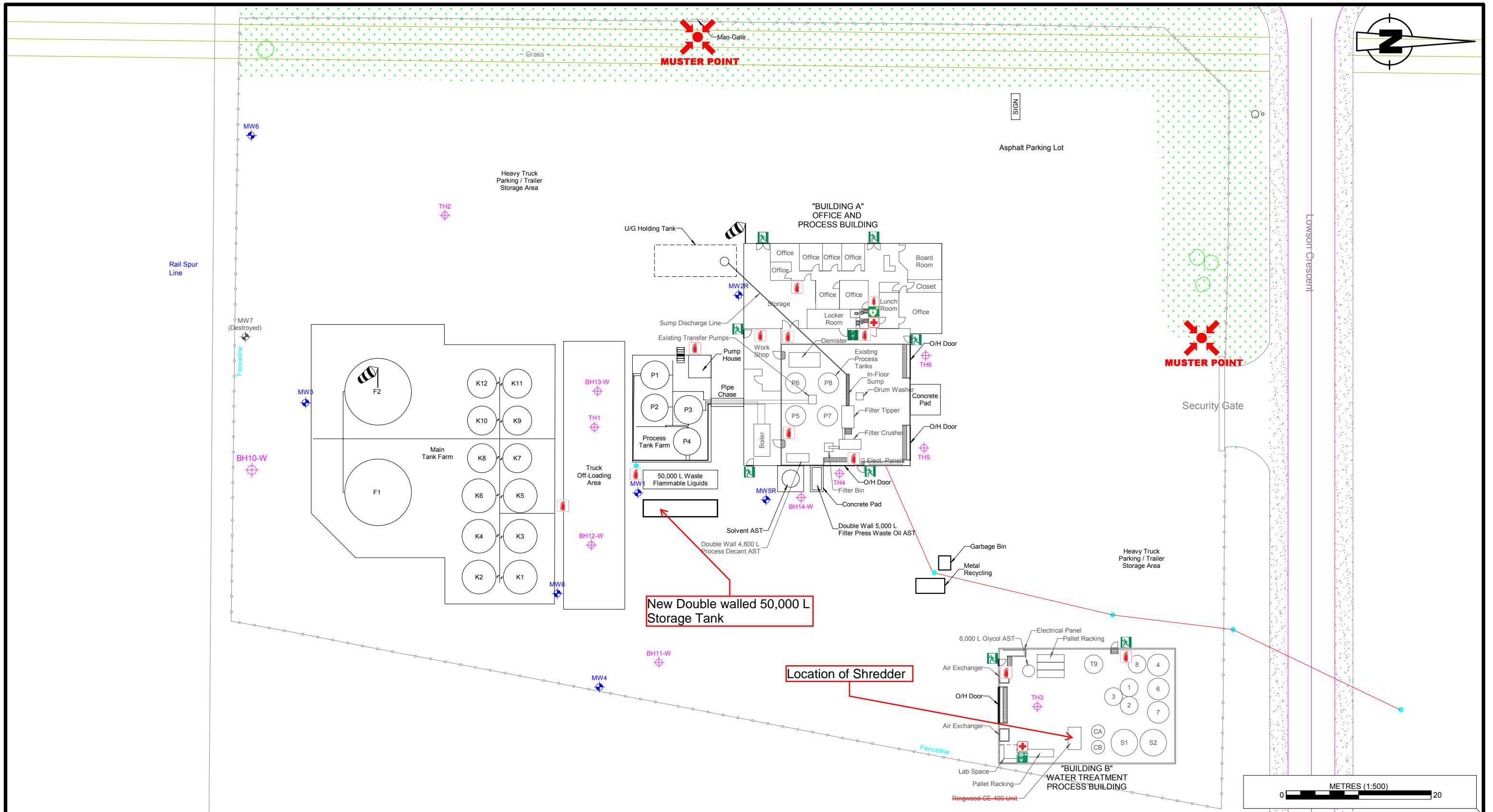
Please direct any questions or concerns to the undersigned at (780) 805 – 6107, cprichard@gflenv.com or to Christa Deblaere at WSP E&I at (204) 488-2997, christa.deblaere@wsp.com

Yours Sincerely,

GFL Environmental Services Inc.

Cameron Prichard
EHS Manager - Compliance
(cell): 780 805 6107
cprichard@gflenv.com

cc: Colin Dutton
Christa Deblaere, WSP E&I



NOTES:
 1. THIS DRAWING IS PREPARED FOR ILLUSTRATIVE PURPOSES ONLY. THIS IS NOT A LEGAL SURVEY. ALL MEASUREMENTS ARE IN METRES.
 2. SITE COORDINATES: 49.838888° N, -97.208127° W.

LEGEND:	
FENCE	
MONITORING WELL	
BOREHOLE	
O/H POWER	
MUSTER POINT	
FIRE EXTINGUISHER	
EMERGENCY EXIT	
FIRST AID KIT	
EMERGENCY EYEWASH STATION	
EMERGENCY SHOWER AND EYEWASH	
AED	
WINDSOCK	

REVISIONS	
REVISED BY / DATE	
REVISED BY / DATE	
REVISED BY / DATE	
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REVISED BY / DATE	

FIGURE 2
 SITE LAYOUT AND EMERGENCY EQUIPMENT LOCATIONS
 03 MAY 2018
 GFL KENASTON FACILITY
 1090 KENASTON BLVD, WINNIPEG, MB
 DRAWN BY: SAM
 CHECKED BY: GJW



GSR LINE - GL LINE

MONOROTORI POTENZIATI PRESTAZIONI SUPERIORI

I macinatori potenziati della linea GS e GL soddisfano standard qualitativi e livelli di performance elevati specialmente nel trattamento di RSU, plastiche, legno, gomma, carta e cartone e rifiuti industriali ingombranti. Potenti nella struttura e nel risultato, i macinatori potenziati sono caratterizzati da un'alta produttività e da una massima affidabilità. Grazie alla presenza di una griglia, questi macinatori permettono una produzione di materiale in uscita in pezzatura omogenea, preparando il materiale per eventuali lavorazioni e impieghi successivi. Inoltre, l'utilizzo di placchette intercambiabili permette veloci manutenzioni con fermi macchina ridotti. Le lame configurabili in base a spessore e numero rappresentano la grande flessibilità di queste macchine, mentre l'impiego di placchette intercambiabili con riporto anti usura proteggono la macchina da possibili danneggiamenti.

HIGH-POWERED SINGLE-SHAFT SHREDDERS SUPERIOR PERFORMANCE

The high-powered shredders of the GS and GL line meet high standards of quality and performance especially for the processing of MSW, plastics, wood, rubber, paper and cardboard, and bulky industrial waste. With a powerful structure and performance, the high-powered shredders guarantee high productivity and reliability. Thanks to their screen, these shredders produce homogeneous output size, preparing the material for subsequent processing and uses. The use of interchangeable cutters also permits quick maintenance, minimizing downtime. The blades can be configured in various thicknesses and numbers for great flexibility, while the use of interchangeable cutters with a wear-resistant coating protects the machine from damage.

GSR480

GSR480 con rotore potenziato a 480 mm è un monorotore con spinatore radiale e dotato di motorizzazione elettrica. La maggiore superficie macinante permette una maggiore produzione. La possibilità di avere il motoriduttore ad assi paralleli e l'inversione di marcia automatica fanno di queste macchine un monorotore dalle elevate prestazioni.

GSR480 with its enhanced 480-mm rotor is a single-shaft shredder with a radial ram and an electric motor. It has an increased shredding surface for greater production. The possibility of having a gearmotor with parallel shafts and automatic reverse improves the performance of these single-shaft machines.

GSR480 LINE

	GSR480/13	GSR480/15	GSR480/18
Ingombro \ Overall dimension \ mm	3.609 x 2.513 x 3.242	3.809 x 2.513 x 3.242	4.109 x 2.513 x 3.242
Camera di taglio \ Cutting chamber \ mm	1.130 x 1.350	1.130 x 1.550	1.130 x 1.850
Diametro rotore \ Rotor diameter \ mm	480	480	480
Peso \ Weight \ kg	10.000	12.000	15.000
Motore \ Motor \ kW	55	75	90
Lame \ Blades	Placchette \ Cutters	Placchette \ Cutters	Placchette \ Cutters
Dimensione placchette \ Cutter dimensions \ mm	60 x 60 x 20	60 x 60 x 20	60 x 60 x 20





Title	Bulk Waste Receiving		
Document No.	GFL-PRF-LIQ-0032-1ALW-SOP	Page No.	1 of 4
Document Owner	Regional Manager - Processing Facilities	Version Number	1.0
Approved by	Chad Wood	Document Revision Date	01-Feb-2021
Document Location:	Workhub		

1. JOB INFORMATION

Purpose and Scope of Job	Materials and Equipment Required	Repetitiveness
This document describes the correct methods to receive bulk waste materials at a GFL Processing Facility	<ul style="list-style-type: none"> Tank Farm Inventory Report Inbound paperwork (B.O.L., manifest, movement documents) Clipboard Pen Scanning device (where applicable) Scale Sampling tools and container Wheel chocks Waste Surcharge Ticket Tank Treatment pad Roll off bin Desired implement Fall Protection Harness (as required) Ice Cleats (as required) Headlamp (as required) Safety Pylons (as required) 	<input checked="" type="checkbox"/> 1 – Hourly <input type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW

Waste receiving includes the proper tools, steps and information to receive bulk waste at a GFL Processing Facility.

3. HAZARDS AND RISKS (Under normal operating conditions)

Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Chemical Exposure (Ingestion, Inhalation, Splash)	Chemical Exposure	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Spill	Environmental	4 - Major	2 - Minor	2 - May occur in exceptional circumstances	1 - Doubtful occurrence	3
Fall from heights	Fall Potential	5 - Catastrophic	2 - Minor	3 - Possible occurrence	1 - Doubtful occurrence	3
Vehicle and equipment movements	Motorized Equipment	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Icy and/or muddy and uneven terrain	Slips Trips	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Climate	Climate (Heat / Cold)	2 - Minor	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2






4. TRAINING & COURSES REQUIRED


FREQUENCY OF RETRAINING

Internal training and SOP review.
Fall Arrest training.

Annual.

5. JOB PLANNING REQUIRED		
Risk Mitigations	Additional Forms & Related Documents	Permits Required
<input checked="" type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input checked="" type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign Off <input checked="" type="checkbox"/> Pre-task Inspection <input type="checkbox"/> Post-task Inspection <input type="checkbox"/> Other: _____	<input type="checkbox"/> Purchase Order <input checked="" type="checkbox"/> Service Order <input checked="" type="checkbox"/> Bill of Lading <input type="checkbox"/> Customer / Client Signature Required <input type="checkbox"/> Managers Approval <input checked="" type="checkbox"/> Other: manifest _____	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input type="checkbox"/> Traffic <input type="checkbox"/> Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Head	Standard hard hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.
 Eyes / Face	Sidewall safety glasses	CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields. For Saskatchewan and Manitoba (or site specific requirement) please follow: CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields.
 Hearing	N/A	Earplugs as required (CSA Z94.2-02).
 Respiratory	N/A	Half-Mask APR w/ Honeywell 75SCL Defender cartridges (or equivalent). Operator must be fit tested to use APR or SCBA equipment.
 Hands	Leather Gloves	Standard issue leather-palmed gloves must be on the worksite for all hands on. Where needed, cut resistant, chemical resistant or hazard specific gloves, may be selected and used to address certain risks.

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
 Body / Clothing	High Vis, FR coveralls	Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).
 Feet	Safety Boots Met-guard boots	Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate. For Saskatchewan and Manitoba (or site specific requirement) Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate.
 Chemical / Decontamination	Eyewash kit available within 100m First aid kit available within 100m	DAP Decontamination Procedures – Remove soiled clothing, wash affected area with mild soap and water. SDS information reviewed prior to job task for chemicals or products (SDS attached to SOP).
 Fire / Explosion	Fire extinguisher available within 100m	Emergency plan reviewed and current. Fire Extinguishers nearby and checked.
 Environmental Conditions	Building airflow controlled, no additional measures necessary	
 Environmental Damage	Spill kit available within 100m	Spill Kit in place and fully stocked with supplies. Review protocols for any spill and thresholds for escalation.

7. EMERGENCY PROCEDURES		
Category	Procedure	Additional Details
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	See lockout procedure
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 15 minutes, seek medical attention 	See SDS attached
Skin	<ul style="list-style-type: none"> Wipe affected area down, wash with soap and water, monitor for any irritation, seek medical attention if symptoms worsen 	See SDS attached
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS attached
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Under 5 L	<ul style="list-style-type: none"> Control Spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report
Over 200 L	<ul style="list-style-type: none"> Control spill as much as possible Report to supervisor immediately Activate internal spill response procedures 	Contact Supervisor Complete internal spill report
7.4 EQUIPMENT FAILURES		
Overheat / Seize	<ul style="list-style-type: none"> Turn off equipment Disconnect power 	Report to supervisor
Pump/Hose Failure	<ul style="list-style-type: none"> Close valves Lock-out pump power supply (electric or pneumatic) Remove any debris, assess failure mode 	Report to supervisor

8. JOB SEQUENCE		
Step No.	Task Steps	Possible Hazards / Concerns and Controls
1	Obtain copy of shipping paperwork (B.O.L, manifest and/or movement documents)	
2	Obtain a full weight/scale ticket of the delivery unit and contents where required. Utilized onsite scale where applicable and third party scale where onsite is not available.	
3	Ensure that the transport vehicle is in place and secured for unloading.	<i>Use wheel chocks to keep vehicle in position.</i>
4	Review the inbound waste paperwork to determine if further data is required on the waste streams about to be received. Ex. SDS	
5	Obtain a sample to check compatibility with contents of proposed receiving location or determine other characteristics of waste, such as water content, where required. Log sample in records and mark container with sample number corresponding to sample log. Store sample in required location.	

6	Cross reference the physical waste to be received against inbound paperwork and sample obtained so all are matching. If all do not match, stop immediately and contact your supervisor.	
7	Check proposed receiving location volume to ensure full volume of waste can be received into receiving location, or to determine how much of the shipment volume can safely be received in the receiving location without overfilling.	
8	Connect all required components to perform the offload. Refer to any SOP's for specific waste types.	
9	Carefully begin to offload waste.	<i>Chemical exposure, use proper PPE Release from container, have spill kit near</i>
10	Disconnect unload component and remove wheel chocks.	<i>Use spill tray to prevent any released liquid</i>
11	Obtain and empty weight/scale ticket of the delivery unit where required. Utilized onsite scale where applicable and third party scale where onsite is not available.	
12	Validate the volume of waste received against the inbound paperwork utilizing the tools at your disposal. This can include weights, tank calibration charts and/or gauging systems. Any discrepancies must be notified to the transport operator, your supervisor, inbound paperwork and waste surcharge ticket.	
13	Print name, sign, and date shipping paperwork as receiver.	
14	Submit all completed documents to your supervisor.	

9. DIAGRAMS / PHOTOS



Title	Tank Farm Transfers		
Document No.	GFL-PRF-LIQ-0039-1ALW-SOP	Page No.	1 of 4
Document Owner	Line of Business Manager - PRF	Revision Number	1.0
Approved by	Chad Wood	Document Revision Date	01-Feb-2021
Document Location:	WorkHub		

1. JOB INFORMATION

Purpose and Scope of Job	Materials and Equipment Required	Repetitiveness
The following SOP outline how to preform transfers within the tank farm and minimize the potential for injury, exposure, leaks/spills and operational issues.	<ul style="list-style-type: none"> Site Standard PPE Truck Transfer Pump 	<input type="checkbox"/> 1 – Hourly <input checked="" type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW

This safe operating procedure entails determining which tanks needs to be transferred, opening and closing valves, applying and removing lockout locks to tanks, recording changes in tank levels and the amount of transfers. It also describes what paperwork needs to be recorded and explains what to do if a spill occurs.

3. HAZARDS AND RISKS (Under normal operating conditions)

Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Large spill causing contamination	Environmental	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Spill from not following procedure	Other: Spills	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2


4. TRAINING & COURSES REQUIRED








TRAINING & COURSES REQUIRED	FREQUENCY OF RETRAINING
Internal Training	Annually




5. JOB PLANNING REQUIRED

Risk Mitigations	Additional Forms & Related Documents	Permits Required
<input type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign Off <input type="checkbox"/> Pre-task Inspection <input type="checkbox"/> Post-task Inspection <input type="checkbox"/> Other: _____	<input type="checkbox"/> Purchase Order <input type="checkbox"/> Service Order <input type="checkbox"/> Bill of Lading <input type="checkbox"/> Customer / Client Signature Required <input type="checkbox"/> Managers Approval <input type="checkbox"/> Other: _____	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input type="checkbox"/> Traffic <input type="checkbox"/> Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK

Category	Common Name	Additional Details
 Head	Standard hard hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
 <p>Eyes / Face</p>	<p>Sidewall safety glasses</p>	<p>CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields.</p> <p>For Saskatchewan and Manitoba (or site specific requirement) please follow: CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields.</p>
 <p>Hearing</p>	<p>N/A</p>	<p>Earplugs as required (CSA Z94.2-02).</p>
 <p>Respiratory</p>	<p>N/A</p>	<p>Half-Mask APR w/ Honeywell 75SCL Defender cartridges (or equivalent).</p> <p>Operator must be fit tested to use APR or SCBA equipment.</p>
 <p>Hands</p>	<p>Leather Gloves</p>	<p>Standard issue leather-palmed gloves must be on the worksite for all hands on. Where needed, cut resistant, chemical resistant or hazard specific gloves, may be selected and used to address certain risks.</p>
 <p>Body / Clothing</p>	<p>High Vis, FR coveralls</p>	<p>Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).</p>
 <p>Feet</p>	<p>Steel Toes Boots</p>	<p>Boots must extend above the ankle and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05 and be CSA approved Class 1 Steel Toe and Plate.</p> <p>For Saskatchewan and Manitoba (or site specific requirement) please follow: Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate.</p>
 <p>Chemical / Decontamination</p>	<p>Eyewash kit available within 100m First aid kit available within 100m</p>	<p>DAP Decontamination Procedures – Remove soiled clothing, wash affected area with mild soap and water.</p> <p>SDS information reviewed prior to job task for chemicals or products (SDS attached to SOP).</p>

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
 Fire / Explosion	Fire extinguisher available within 100m	Emergency plan reviewed and current. Fire Extinguishers nearby and checked.
 Environmental Conditions	Building airflow controlled, no additional measures necessary	Check for adequate airflow through absorbent media. Oil De-Misting and Air Scrubber Unit Functional.
 Environmental Damage	Spill kit available within 100m	Spill Kit in place and fully stocked with supplies. Review protocols for any spill and thresholds for escalation.

7. EMERGENCY PROCEDURES		
Category	Procedure	Additional Details
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	See lockout procedure
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 15 minutes, seek medical attention 	See SDS attached
Skin	<ul style="list-style-type: none"> Wipe affected area down, wash with soap and water, monitor for any irritation, seek medical attention if symptoms worsen 	See SDS attached
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS attached
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Under 5 L	<ul style="list-style-type: none"> Control Spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report
Over 200 L	<ul style="list-style-type: none"> Control spill as much as possible Report to supervisor immediately Activate internal spill response procedures 	Contact Supervisor Complete internal spill report
7.4 EQUIPMENT FAILURES		
Overheat / Seize	<ul style="list-style-type: none"> Turn off equipment Disconnect power 	Report to supervisor
Medium Jam	<ul style="list-style-type: none"> Lock out equipment 	Report to supervisor

	<ul style="list-style-type: none"> • ***At least two locks required for repair / unjam • Open side panel to release pressure • Remove any debris 	
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8. JOB SEQUENCE

Step No.	Task Steps	Possible Hazards / Concerns and Controls
1	Have a look at your See Level gauge and paperwork to double check how much product that you have collected that day.	<i>Caution: Not knowing how much product that you will be offloading could end up over filling the tank.</i>
2	Check the tank dip sheets to determine which tank is currently being filled and that there is enough room in the tank for the product that you intend on offloading.	<i>Caution: During burner fuel season, if you are offloading used oil or fuel, ensure that the tank is not tested product.</i>
3	Grab on oil absorbent pad and go up the stairs to pre-dip the tank that you intend on offloading into. Wipe the oil off of the dip stick to a level lower than the last dip that was recorded on the tank dip chart for that tank. Re dip the tank and confirm that it matches the last recorded dip.	<i>Caution: Ensure that you use three point contact while you ascend and descend the stairs on the tank.</i>
4	After confirming that the product will fit in the tank, you will connect the 4 inch hose from the manifold to your truck. You may require couplings/reducers to mate up with the offloading valve on your truck. You should place a drip tray at the point of connection to catch any spills/leaks prior to connecting the hose. Ensure that the 4 inch line is connected to the correct valve for the tank that you intend on offloading into.	<i>Caution: Ensure that the connecting end of the 4 inch line is higher that the lowest point in the line to prevent any possible residue from spilling onto the ground or equipment.</i>
5	Install or attach cam lock straps or bungies at every point of connection unless your fittings already have self-locking cam locks. A shim may be required in the ears of the cam lock fitting to ensure a tight fit.	<i>Danger: Failure to install cam lock straps could result in a leak or complete hose disconnect while transferring product.</i>
6	Engage the PTO to your pump and ramp up the RPM's accordingly.	<i>Caution: Listen carefully while you engage the PTO for any grinding or odd noises.</i>
7	Remove the pad lock from the manifold for the tank that you will be offloading into and store it in a safe place.	
8	Open all valves required to allow the product to flow unobstructed. Ensure that all truck internals are opened to avoid creating pressure in the tank. Double check that the bleeder valve on the manifold is closed.	<i>Danger: Failure to open all required valves will result in pressuring up the line(s) and a possible rupture of the lines.</i>
9	Slowly engage your pump while watching for leaks or a pressuring up of the line. Watch your See Level gauge to ensure that the product is offloading.	<i>Caution: If a leak is detected, put the pump in neutral and close the manifold valve. Clear the line and fix the leak.</i>
10	Once fully offloaded, you will put the pump in neutral and close the valve on the manifold. Open up the bleeder valve then go reverse your pump so that you can clear out the line. Walk the line while lifting the hose to ensure that you clear as much product as possible from the line. Once the line is clear, close the pump valve and put the pump in neutral. Close all remaining valves and internals. Turn off the PTO.	<i>Caution: Not closing all valves could cause a spill while disconnecting.</i>
11	Remove all straps (if required) and disconnect the line. Return the hose from the manifold to its original position.	<i>Caution: There may be residue in the hose. Keep the open end of the line elevated to prevent any spills.</i>
12	Place the lock back onto the manifold and ensure that it is closed.	
13	Re dip the tank that you offloaded into and record the volumes on the tank dip chart.	<i>Caution: Confirm that your dip closely resembles the volume that your See Level gauge stated.</i>



Title	Oil Truck Transfer (Loading From Tank Farm)		
Document No.	GFL-OLS-LIQ-3010-1ALW-SOP	Page No.	1 of 6
Document Owner	Oil Services Liquid West	Revision Number	1.0
Approved by	Jason Henkel	Document Revision Date	27-Jun-2022
Document Location: Workhub			

1. JOB INFORMATION

Purpose and Scope of Job	Materials and Equipment Required	Repetitiveness
The purpose of this work instruction is to ensure employees performing this task are aware of hazards and controls, so they can avoid injury and minimize spillage.	<ul style="list-style-type: none"> Spill response kit Rags and absorbents 	<input type="checkbox"/> 1 – Hourly <input checked="" type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW

This work instruction trains employees the correct procedure on collecting, handling and disposal processes for liquid waste. The employees will be trained in what products are TDG regulated and what regulatory requirements accompany these collections. Employees are made aware of the procedure to follow when at a customer site and there is unlabeled/unknown the customer wants to be collected and all PPE required to do waste collection.

3. HAZARDS AND RISKS (Under normal operating conditions)

Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Connecting hoses	Pinch Points	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Entering and exiting customer sites in truck	Motorized Equipment	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Getting in and out of truck	Fall Potential	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Splashing of liquid in eyes	Chemical Exposure	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
When entering and working on customer sites	Other Workers in Area	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2








4. TRAINING & COURSES REQUIRED





FREQUENCY OF RETRAINING

TDG training Internal Training	Every 3 years Once, during on-the-job training and when SOP is updated
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5. JOB PLANNING REQUIRED

Risk Mitigations	Additional Forms & Related Documents	Permits Required
<input type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input checked="" type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign Off <input type="checkbox"/> Pre-task Inspection <input type="checkbox"/> Post-task Inspection <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Purchase Order <input checked="" type="checkbox"/> Service Order <input checked="" type="checkbox"/> Bill of Lading <input checked="" type="checkbox"/> Customer / Client Signature Required <input type="checkbox"/> Managers Approval <input type="checkbox"/> Other: _____	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input checked="" type="checkbox"/> Traffic <input type="checkbox"/> Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Head	Standard hard hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.
 Eyes / Face	Sidewall safety glasses	CSA certified & approved safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved safety glasses complete with side-shields.
 Hearing	N/A	Earplugs as required (CSA Z94.2-02).
 Respiratory	N/A	
 Hands	Nitrile-dipped Gloves	Standard issue Nitrile-dipped gloves must be on the worksite for all hands on. Where needed, cut resistant, chemical resistant or hazard specific gloves, may be selected and used to address certain risks.
 Body / Clothing	High Vis, FR coveralls	Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).
 Feet	Steel Toed Boots	Boots must extend above the ankle and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, and be CSA approved Class 1 Steel Toe and Plate.

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Chemical / Decontamination	Eyewash kit available within 100m First aid kit available within 100m	
 Fire / Explosion	Fire extinguisher available within 100m	Current emergency plan reviewed Fire Extinguishers nearby
 Environmental Conditions	Building and truck box/trailer ventilated, no additional measures necessary	
 Environmental Damage	Spill kit available within 100m	Spill Kit on truck or in storage area and fully stocked with supplies.

7. EMERGENCY PROCEDURES		
Category	Procedure	Additional Details
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	Know where first aid kit is
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 20 minutes, seek medical attention 	See SDSs, as available
Skin	<ul style="list-style-type: none"> Wipe affected area down, Wash with soap and water, Monitor for any irritation, Seek medical attention if symptoms worsen 	See SDS, as available
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS, as available
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Any amount	<ul style="list-style-type: none"> Control spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report

7.4 EQUIPMENT FAILURES

Pump or tank failure	<ul style="list-style-type: none"> Report to home base 	Contact Supervisor
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8.1 JOB SEQUENCE Oil Truck Transfer

Step No.	Task Steps	Possible Hazards / Concerns and Controls
1	Complete morning pre-trip.	
2	Check if there is a height restriction for the truck.	
3	Locate collection point, Park truck in an area that least affects that business and which allows access to the required work area. Engage parking brake and block wheels.	<p>CAUTION: Follow traffic safety rules, get out of vehicle and do a walk around to ensure area is clear of other vehicles, overhead wires, clutter and pedestrians</p> <p>NOTE: If tight, move vehicles or materials or else get a spotter to help you access the area.</p> <p>NOTE: If vehicles/materials cannot be moved and there is no spotter available, assess if you can do the job without having a collision. If unsure, notify ops you are unable to access the area needed. Report this to your Supervisor and the Dispatcher.</p>
4	Attach the grounding strap to the truck frame.	DANGER: The movement of liquids can cause static electricity. Flammable liquids also create flammable vapor that can be ignited if static electricity sparks are created.
5	Check that the truck to be loaded into has enough capacity.	
6	Put down drip tray and/or spill pads where ever hose connections will be made.	
7	Hook up hoses and fittings, Secure locking pins or Velcro strips. Record fluid meter reading.	Note: Inspect all connections prior to loading for damage or loose fitment. CAUTION: Ensure Camlock fittings lock securely. If either "ear" of a Camlock fitting is missing OR if the connection otherwise does not seem to seal completely, take that hose out of service for repair/disposal and obtain a proper hose.
8	Open vent on truck tank or trailer to avoid creating pressure inside truck	
9	Open valves on tank farm and insure you are counted to correct tank, follow all pipes and make sure other tanks are closed and locked out.	Note: cross contamination can damage the load and cause adverse effects.
10	Open appropriate tank valves and engage PTO, if direct drive slowly remove foot from clutch to start pump / if hydraulically driven then proceed to slowly pull hydraulic pump handle. (Truck must be on as level of grade as possible to ensure accuracy of collection. Do not operate pump over 1000 R.P.M).	Note: Make sure pump is turning in correct direction before engaging. And correct valves are open or closed as required
11	Take sample vial and place under sample port spigot and open valve carefully so as not to overfill. Close valve and cap vial.	
12	Remain with the truck throughout the transfer. Allow the tank to load into truck. Monitor truck capacity throughout loading.	CAUTION: Remain near valves and pump shutoff throughout unloading in the event of a problem or spill.

8.1 JOB SEQUENCE Oil Truck Transfer		
Step No.	Task Steps	Possible Hazards / Concerns and Controls
		NOTE: In the event of a spill, stop the transfer immediately, contain it, notify manager and proceed with cleaning up the spill. Spills greater than 25 L must be reported internally. Spills greater than 200 L of Class 3 materials or of any material potentially entering a watercourse must be reported to the government.
13	When truck is a desired volume, close valve to tank farm, allow hoses to clear unhook hose from tank, return hose to truck, close valve to the suction side, shut off PTO pump.	Note: Be careful to watch for leaks and drips. NOTE: Make sure to hold lines up to ensure proper drainage. NOTE: Make sure to raise hose above pump level to ensure proper drainage.
14	Cap off hoses and secure in trays. Clean off hose, fittings and tools.	
15	Close any additional required tank farm valves	Note: leaving valves open could cause spills or issues for the next person that uses the load lines
16	Look over site to ensure you are not leaving any fittings, hoses or tools behind	
17	Clean up any oil that you have spilled and retain any materials involved in doing so. Dispose of them properly when you return to the yard.	
18	Read fluid meter, subtract this number from the previous number for total volume collected.	
19	Obtain the vial label number that matches the collection statement number on tablet and affix it to the sample vial. Affix the duplicate label to the chain of custody sheet.	
17	Make sure all information is correct.	
19	Be sure after completing the collection that all valves and hoses closed and secure before travelling.	
23	Unload into appropriate tank. Or travel to unload site	NOTE: Follow proper unloading procedures.
25	Complete an offloading docket or inventory Sheet that summarizes totals	
26	Clean truck floor of any leakage or garbage.	
27	Deliver daily paperwork.	

8. DIAGRAMS / PHOTOS

Step No.	Description



Title	Oil Truck Transfer (loading)		
Document No.	GFL-OLS-LIQ-3012-1ALW-SOP	Page No.	1 of 6
Document Owner	Oil Services Liquid West	Revision Number	1.0
Approved by	Jason Henkel	Document Revision Date	27-Jun-2022
Document Location: Workhub			

1. JOB INFORMATION

Purpose and Scope of Job	Materials and Equipment Required	Repetitiveness
The purpose of this work instruction is to ensure employees performing this task are aware of hazards and controls, so they can avoid injury and minimize spillage.	<ul style="list-style-type: none"> Spill response kit Rags and absorbents 	<input type="checkbox"/> 1 – Hourly <input checked="" type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW

This work instruction trains employees the correct procedure on collecting, handling and disposal processes for liquid waste. The employees will be trained in what products are TDG regulated and what regulatory requirements accompany these collections. Employees are made aware of the procedure to follow when at a customer site and there is unlabeled/unknown the customer wants to be collected and all PPE required to do waste collection.

3. HAZARDS AND RISKS (Under normal operating conditions)

Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Connecting hoses	Pinch Points	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Entering and exiting customer sites in truck	Motorized Equipment	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Getting in and out of truck	Fall Potential	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Splashing of liquid in eyes	Chemical Exposure	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
When entering and working on customer sites	Other Workers in Area	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2








4. TRAINING & COURSES REQUIRED





FREQUENCY OF RETRAINING

TDG training Internal Training	Every 3 years Once, during on-the-job training and when SOP is updated
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5. JOB PLANNING REQUIRED

Risk Mitigations	Additional Forms & Related Documents	Permits Required
<input type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input checked="" type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign Off <input type="checkbox"/> Pre-task Inspection <input type="checkbox"/> Post-task Inspection <input type="checkbox"/> Other: _____	<input checked="" type="checkbox"/> Purchase Order <input checked="" type="checkbox"/> Service Order <input checked="" type="checkbox"/> Bill of Lading <input checked="" type="checkbox"/> Customer / Client Signature Required <input type="checkbox"/> Managers Approval <input type="checkbox"/> Other: _____	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input checked="" type="checkbox"/> Traffic <input type="checkbox"/> Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Head	Standard hard hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.
 Eyes / Face	Sidewall safety glasses	CSA certified & approved safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved safety glasses complete with side-shields.
 Hearing	N/A	Earplugs as required (CSA Z94.2-02).
 Respiratory	N/A	
 Hands	Nitrile-dipped Gloves	Standard issue Nitrile-dipped gloves must be on the worksite for all hands on. Where needed, cut resistant, chemical resistant or hazard specific gloves, may be selected and used to address certain risks.
 Body / Clothing	High Vis, FR coveralls	Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).
 Feet	Steel Toed Boots	Boots must extend above the ankle and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, and be CSA approved Class 1 Steel Toe and Plate.

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Chemical / Decontamination	Eyewash kit available within 100m First aid kit available within 100m	
 Fire / Explosion	Fire extinguisher available within 100m	Current emergency plan reviewed Fire Extinguishers nearby
 Environmental Conditions	Building and truck box/trailer ventilated, no additional measures necessary	.
 Environmental Damage	Spill kit available within 100m	Spill Kit on truck or in storage area and fully stocked with supplies.

7. EMERGENCY PROCEDURES		
Category	Procedure	Additional Details
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	Know where first aid kit is
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 20 minutes, seek medical attention 	See SDSs, as available
Skin	<ul style="list-style-type: none"> Wipe affected area down, Wash with soap and water, Monitor for any irritation, Seek medical attention if symptoms worsen 	See SDS, as available
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS, as available
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Any amount	<ul style="list-style-type: none"> Control spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report

7.4 EQUIPMENT FAILURES

Pump or tank failure	<ul style="list-style-type: none"> Report to home base 	Contact Supervisor
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8. JOB SEQUENCE Oil Truck Transfer

Step No.	Task Steps	Possible Hazards / Concerns and Controls
1	Complete morning pre-trip.	
2	Check if there is a height restriction for the truck.	
3	Locate customer waste collection point, Park truck in an area that least affects that business and which allows access to the required work area. Engage parking brake and block wheels.	<p>CAUTION: Follow traffic safety rules, get out of vehicle and do a walk around to ensure area is clear of other vehicles, overhead wires, clutter and pedestrians</p> <p>NOTE: If tight, ask Customer to either move vehicles or materials or else provide a spotter to help you access the area.</p> <p>NOTE: If vehicles/materials cannot be moved and there is no spotter available, assess if you can do the job without having a collision. If unsure, notify Customer you are unable to access the area needed and will return later. Report this to your Supervisor and the Dispatcher.</p>
4	Attach the grounding strap to the truck frame.	DANGER: The movement of liquids can cause static electricity. Flammable liquids also create flammable vapor that can be ignited if static electricity sparks are created.
5	Check that the truck to be loaded into has enough capacity.	
6	Put down drip tray and/or spill pads where ever hose connections will be made.	
7	Hook up hoses and fittings, Secure locking pins or Velcro strips. Record fluid meter reading.	Note: Inspect all connections prior to loading for damage or loose fitment. CAUTION: Ensure Camlock fittings lock securely. If either "ear" of a Camlock fitting is missing OR if the connection otherwise does not seem to seal completely, take that hose out of service for repair/disposal and obtain a proper hose.
8	Open vent on truck tank or trailer to avoid creating pressure inside truck	
9	Open appropriate tank valves and engage PTO, if direct drive slowly remove foot from clutch to start pump / if hydraulically driven then proceed to slowly pull hydraulic pump handle. (Truck must be on as level of grade as possible to ensure accuracy of collection. Do not operate pump over 1000 R.P.M).	Note: Make sure pump is turning in correct direction before engaging. And correct valves are open or closed as required
10	Take sample vial and place under sample port spigot and open valve carefully so as not to overflow. Close valve and cap vial.	
11	Remain with the truck throughout the transfer. Allow the tank to load into truck. Monitor truck capacity throughout loading.	<p>CAUTION: Remain near valves and pump shutoff throughout unloading in the event of a problem or spill.</p> <p>NOTE: In the event of a spill, stop the transfer immediately, contain it, notify manager and proceed with cleaning up the spill. Spills greater than 25 L must be</p>

8. JOB SEQUENCE Oil Truck Transfer		
Step No.	Task Steps	Possible Hazards / Concerns and Controls
		reported internally. Spills greater than 200 L of Class 3 materials or of any material potentially entering a watercourse must be reported to the government.
12	When customer tank is empty, allow hoses to clear unhook hose from stinger or tank, return hose to truck, close valve to the suction side, shut off PTO pump.	Note: Be careful to watch for leaks and drips. NOTE: Make sure to hold lines up to ensure proper drainage. NOTE: Make sure to raise hose above pump level to ensure proper drainage.
13	Cap off hoses and secure in trays. Clean off hose, fittings and tools.	
14	Look over customer site to ensure you are not leaving any fittings, hoses or tools behind	
	Clean up any oil that you have spilled and retain any materials involved in doing so. Dispose of them properly when you return to the yard.	
15	Read fluid meter, subtract this number from the previous number for total volume collected. .	CAUTION: The parking brake will prevent or limit unintentional vehicle movement due to uneven surface or collision from another vehicle.
16	Obtain the vial label number that matches the collection statement number on tablet and affix it to the sample vial. Affix the duplicate label to the chain of custody sheet. Store the sample vial for later transfer to the tank farm for later transfer to the tank farm	
17	Make sure all information on collection screen is correct.	
18	Have customer sign collection screen on tablet.	
19	Be sure after completing the collection that all valves and hoses closed and secure before travelling.	
20	Repeat procedure throughout work day.	
21	Once full or pickups are complete for the day, return to GFL home base.	CAUTION: Follow traffic safety rules.
22	Upon arriving at the GFL yard: - Inform Shop Supervisor	NOTE: Inform Operations Supervisor of any special handling needs.
23	Unload into appropriate tank.	NOTE: Follow proper unloading procedures.
25	Complete an offloading docket or inventory Sheet that summarizes totals	
26	Clean truck floor of any leakage or garbage.	
27	Deliver daily paperwork and sample to office for Entry.	

9. DIAGRAMS / PHOTOS	
Step No.	Description



Title	Bulk Waste Shipping – Waste Fuels		
Document No.	GFL-OPS-LIQ-9018-1ALW-SOP	Page No.	1 of 5
Document Owner	Director of Operations	Revision Number	1.0
Approved by	Andrew Gingrich	Document Revision Date	29-Jun-2022
Document Location:	WorkHub		

1. JOB INFORMATION

1.1 Purpose and Scope of Job	1.2 Materials and Equipment Required	1.3 Repetitiveness
<p>Purpose This SOP's purpose is to make aware of the various hazards that present themselves when loading fuel onto a unit for transport. After review of this document, an employee should understand the process as well as the reasons for why the listed precautions have been implemented.</p> <p>Scope This SOP is to be reviewed by any employee directly involved or assisting with the transfer of fuel to a vessel intended to be transported.</p>	<ol style="list-style-type: none"> Standard PPE <ul style="list-style-type: none"> Hard Hat Safety Glasses Gloves Steel toes boots / rubber boots Coveralls Site Specific PPE for the area as required Multimeter (Grounding) Grounding Cables Fall Arrest 	<input checked="" type="checkbox"/> 1 – Hourly <input type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW






This SOP covers the process of set-up, transfer, and tear down in relation to loading fuel onto a vessel for transport.







3. HAZARDS AND RISKS (Under normal operating conditions)

Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Product Spillage throughout process.	Other	3 - Serious Injury Requiring Medical Aid	1 - Injuries not Requiring First Aid	3 - Possible occurrence	1 - Doubtful occurrence	2
Fire/Explosion	Physical hazards	4 - Serious Injury Resulting in Hospitalization	2 - Minor Injury or First Aid	3 - Possible occurrence	1 - Doubtful occurrence	3
Falling off vessel during product volume check	Fall Potential (Pit / Edge)	4 - Serious Injury Resulting in Hospitalization	1 - Injuries not Requiring First Aid	3 - Possible occurrence	3 - Possible occurrence	4

4. TRAINING & COURSES REQUIRED		FREQUENCY OF RETRAINING
Internal Training		Annual

5. JOB PLANNING REQUIRED		
5.1 Risk Mitigations	5.2 Additional Forms & Related Documents	5.3 Permits Required
<input checked="" type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign off <input checked="" type="checkbox"/> Pre-task inspection <input checked="" type="checkbox"/> Post-task inspection <input type="checkbox"/> Other: _____	<input type="checkbox"/> Purchase Order <input type="checkbox"/> Service Order <input checked="" type="checkbox"/> Bill of Lading <input type="checkbox"/> Customer / Client signature required <input type="checkbox"/> Managers Approval <input type="checkbox"/> Other: <u>If other, include here.</u>	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input checked="" type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input type="checkbox"/> Traffic <input checked="" type="checkbox"/> Other: <u>If other, include here</u> Fall Arrest Training

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Head	Hard Hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.
 Eyes / Face	Foam Framed Safety Goggles	ANSI Z87.1 for protection from radiant energy, flying sparks, splatter
 Hearing	Earplugs	N/A
 Respiratory	Full/Half Mask	CSA / ANSI Z49.1 Depending on the work being performed full face or half mask respirator may be required
 Hands	Leather Gloves	CSA / ANSI Z49.1 Flame Resistant Gloves

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
 Body / Clothing	High Vis, Fire Retardant coveralls	Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).
 Feet	Internal Met-Guard Boots	Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate.
 Chemical / Decontamination	Eyewash kit available within 100m First aid kit available within 100m	DAP Decontamination Procedures – Remove soiled clothing, wash affected area with mild soap and water. SDS information reviewed prior to job task for chemicals or products (SDS attached to SOG).
 Fire / Explosion	Fire Extinguisher	Emergency plan reviewed and current. Fire Extinguishers available within reach and checked for function.
 Environmental Conditions	Building airflow controlled	No additional measures necessary
 Environmental Damage	Spill Kit	Spill Kit in place and fully stocked with supplies. Review protocols for any spill and thresholds for escalation. Available within 100m

7. EMERGENCY PROCEDURES		
Step No.	Task Steps / Photo	Possible Hazards / Concerns and Controls
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	See lockout procedure
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 15 minutes, seek medical attention 	See SDS attached

Skin	<ul style="list-style-type: none"> Wipe affected area down, wash with soap and water, monitor for any irritation, seek medical attention if symptoms worsen 	See SDS attached
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS attached
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Under 5 L	<ul style="list-style-type: none"> Control Spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report
Over 200 L	<ul style="list-style-type: none"> Control spill as much as possible Report to supervisor immediately Activate internal spill response procedures 	Contact Supervisor Complete internal spill report
7.4 EQUIPMENT FAILURES		
Overheat / Seize	<ul style="list-style-type: none"> Turn off equipment Disconnect power 	Report to supervisor
Medium Jam	<ul style="list-style-type: none"> Lock out equipment ***At least two locks required for repair / unjam Open side panel to release pressure Remove any debris 	Report to supervisor

8. JOB SEQUENCE - PROCEDURE

Step No.	Task Steps / Photo	Possible Hazards / Concerns and Controls
1	Ensure park brakes are engaged on the unit to be filled.	
2	Fix chock blocks under the wheels of the unit to ensure no rolling takes place.	
3	Ensure that the vessel which is to be loaded is empty.	
4	Turn off cell phone and other electronic devices. If using a radio, make sure it is intrinsically safe. Otherwise, turn off the device.	
5	Ground the unit by attaching a grounding cable to the trailer and a grounded source. Ensure grounding with use of a multimeter, making sure there is no electrical current.	This process generates static electricity. Grounding is necessary to ensure that a fire/explosion doesn't occur.
6	Place drip trays under hose connections to ensure that the ground isn't contaminated throughout the process.	
7	Hook up hose from the source to the unit's vessel.	
8	Ensure that the hose is secured with use of straps on the hose's ears.	Movement of a unit's pump can vibrate a fitting's ears free, causing an environmental spill. The use of straps minimizes this risk.
9	Open up compartments on the vessel.	
10	Perform a circle check, making sure there are no potential blockages or leaks.	Think about where the pressure is going and ensure that the product has a clear path to your vessel.

11	Open valve on loading source (if applicable).	
12	Engage the pump to begin loading.	
13	Periodically check for leaks or malfunctions by performing a circle check.	
14	Continuously monitor the vessel's load level to ensure that the unit isn't overfilled.	Risk of overflowing vessel. This risk is increased when a unit is able to maximize the volume due to the low weight of the product being loaded. Ensure that the product level is being monitored to reduce this risk. If no gauges are available to check the product level, fall arrest will be required to manually check it.
15	Once load is complete, shut the fuel source's valve.	
16	Walk out the hose line to ensure residue product is loaded and not present in the hose.	Excess product may be left inside the transfer hose. To reduce the likelihood of a spill occurring while disconnecting, ensure there is no chance for product to be left contained inside the transfer hose.
17	Close the unit's loading valve and shut off pump.	
18	Perform circle check to ensure of no fluid leaks.	
20	Attach TDG placards with appropriate UN# to the unit which is to contain the transported fuel.	
21	Make sure B.O.L. and product's MSDS are on hand before departure.	



Title	Tank Farm Operations		
Document No.	GFL-PRF-LIQ-0010-1ALW-SOP	Page No.	1 of 4
Document Owner	Processing Facilities	Version Number	1.0
Approved by	Chad Wood	Document Revision Date	01-Feb-2021
Document Location:	Workhub		

1. JOB INFORMATION

Purpose and Scope of Job	Materials and Equipment Required	Repetitiveness
The scope of this SOP is to cover the general operation of a tank farm. Specific procedures will be referenced as required.	<ul style="list-style-type: none"> Tank Farm Inventory Report Tank Farm Inspection Pen Hoses Spill Trays Fall Protection Harness (as required) Ice Cleats (as required) Headlamp (as required) Safety Pylons (as required) 	<input type="checkbox"/> 1 – Hourly <input checked="" type="checkbox"/> 2 – Daily <input type="checkbox"/> 3 – Weekly <input type="checkbox"/> 4 – Monthly <input type="checkbox"/> 5 - Annually

2. PROCESS OVERVIEW

Tank farm operations include proper facility inspection, inventory verification, offloading and loading of trucks, as well as tank to tank transfers and product sampling tasks.

3. HAZARDS AND RISKS (Under normal operating conditions)






Hazard / Risk	Category	Severity of Consequences		Likelihood of Outcome		Overall Risk (A+B)
		Without Controls	With Controls (A)	Without Controls	With Controls (B)	
Chemical Exposure (Ingestion, Inhalation, Splash)	Chemical Exposure	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Spill	Environmental	4 - Major	2 - Minor	2 - May occur in exceptional circumstances	1 - Doubtful occurrence	3
Fall from heights	Fall Potential	5 - Catastrophic	2 - Minor	3 - Possible occurrence	1 - Doubtful occurrence	3
Vehicle and equipment movements	Motorized Equipment	4 - Major	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Icy and/or muddy and uneven terrain	Slips Trips	3 - Moderate	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Climate	Climate (Heat / Cold)	2 - Minor	1 - Negligible	3 - Possible occurrence	1 - Doubtful occurrence	2
Pressurized Lines	Line of Fire	4 - Major	2 - Minor	3 - Possible occurrence	1 - Doubtful occurrence	3


4. TRAINING & COURSES REQUIRED

FREQUENCY OF RETRAINING

Internal training and SOP review. Fall Arrest training.	Annual.
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5. JOB PLANNING REQUIRED		
Risk Mitigations	Additional Forms & Related Documents	Permits Required
<input checked="" type="checkbox"/> LMRA <input type="checkbox"/> Toolbox Meeting <input type="checkbox"/> FLRA <input type="checkbox"/> Rescue Plan <input checked="" type="checkbox"/> JSA/JHA <input type="checkbox"/> Supervisor Sign Off <input checked="" type="checkbox"/> Pre-task Inspection <input type="checkbox"/> Post-task Inspection <input type="checkbox"/> Other: _____	<input type="checkbox"/> Purchase Order <input type="checkbox"/> Service Order <input type="checkbox"/> Bill of Lading <input type="checkbox"/> Customer / Client Signature Required <input type="checkbox"/> Managers Approval <input type="checkbox"/> Other: _____	<input type="checkbox"/> Hot Work <input type="checkbox"/> Confined Space <input type="checkbox"/> LOTO <input type="checkbox"/> Excavation <input type="checkbox"/> Critical Lift <input type="checkbox"/> Working at Heights <input type="checkbox"/> IDLH <input type="checkbox"/> Traffic <input type="checkbox"/> Other: _____

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
Category	Common Name	Additional Details
 Head	Standard hard hat	CSA certified & approved hard hat (CSA Z94.1-05). The hard hat is to be worn in the manner the manufacturer suggests – with the peak facing forward. The exterior of the hard hat should be maintained in a clean condition. Only required stickers shall be on the hard hat.
 Eyes / Face	Sidewall safety glasses	CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields. For Saskatchewan and Manitoba (or site specific requirement) please follow: CSA certified & approved foam lined safety glasses (CSA Z94.3-07 / Z93.3-02 / Z94.3-99). Prescription eyewear must also be CSA approved foam lined safety glasses complete with side-shields.
 Hearing	N/A	Earplugs as required (CSA Z94.2-02).
 Respiratory	N/A	Half-Mask APR w/ Honeywell 75SCL Defender cartridges (or equivalent). Operator must be fit tested to use APR or SCBA equipment.
 Hands	Leather Gloves	Standard issue leather-palmed gloves must be on the worksite for all hands on. Where needed, cut resistant, chemical resistant or hazard specific gloves, may be selected and used to address certain risks.

6. PERSONAL PROTECTIVE EQUIPMENT AND MEASURES FOR SPECIFIC TASK		
 Body / Clothing	<p>High Vis, FR coveralls</p>	<p>Standard issue Fire Resistant (FR) rated Class 1 reflective coveralls Z96-09 (R2014).</p>
 Feet	<p>Safety Boots</p> <p>Met-guard boots</p>	<p>Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate.</p> <p>For Saskatchewan and Manitoba (or site specific requirement) Boots must extend above the ankle, have Metatarsal protection, and additionally be CSA approved with Grade 1 protection. Rubber boots must meet CSA Z195-09 / ASTM F2413-11 or OSHA standard ASTM F2413-05, MT/75 Metatarsal Protection standards, and be CSA approved Class 1 Steel Toe and Plate.</p>
 Chemical / Decontamination	<p>Eyewash kit available within 100m</p> <p>First aid kit available within 100m</p>	<p>DAP Decontamination Procedures – Remove soiled clothing, wash affected area with mild soap and water.</p> <p>SDS information reviewed prior to job task for chemicals or products (SDS attached to SOP).</p>
 Fire / Explosion	<p>Fire extinguisher available within 100m</p>	<p>Emergency plan reviewed and current.</p> <p>Fire Extinguishers nearby and checked.</p>
 Environmental Conditions	<p>Building airflow controlled, no additional measures necessary</p>	
 Environmental Damage	<p>Spill kit available within 100m</p>	<p>Spill Kit in place and fully stocked with supplies.</p> <p>Review protocols for any spill and thresholds for escalation.</p>

7. EMERGENCY PROCEDURES		
Category	Procedure	Additional Details
7.1 MEDICAL EMERGENCY - TRAUMA		
Minor	<ul style="list-style-type: none"> As per site Emergency plan 	See lockout procedure
Major	<ul style="list-style-type: none"> As per site Emergency plan 	Call 911 for major emergencies
7.2 MEDICAL EMERGENCY – CHEMICAL EXPOSURE		
Eyes	<ul style="list-style-type: none"> Wash eyes x 15 minutes, seek medical attention 	See SDS attached
Skin	<ul style="list-style-type: none"> Wipe affected area down, wash with soap and water, monitor for any irritation, seek medical attention if symptoms worsen 	See SDS attached
Ingestion	<ul style="list-style-type: none"> Do not induce vomiting Seek medical attention 	See SDS attached
7.3 ENVIRONMENTAL RELEASE PROCEDURES		
Under 5 L	<ul style="list-style-type: none"> Control Spill using absorbent pads Use spill kit 	Contact supervisor Complete internal spill report
Over 200 L	<ul style="list-style-type: none"> Control spill as much as possible Report to supervisor immediately Activate internal spill response procedures 	Contact Supervisor Complete internal spill report
7.4 EQUIPMENT FAILURES		
Overheat / Seize	<ul style="list-style-type: none"> Turn off equipment Disconnect power 	Report to supervisor
Pump/Hose Failure	<ul style="list-style-type: none"> Close valves Lock-out pump power supply (electric or pneumatic) Remove any debris, assess failure mode 	Report to supervisor

8. JOB SEQUENCE		
Step No.	Task Steps	Possible Hazards / Concerns and Controls
1	Complete tank farm inspection prior to any other tasks. Reference document GFL-PRF-LIQ-0002-1ALW-SOP for specific procedures.	
2	Verify all inventory and tank levels prior to beginning other tasks. Update tank farm inventory tracking sheet.	
3	Load any scheduled outbound units. Refer to [SOP] for specific procedures.	
4	Offload any scheduled inbound units. Refer to [SOP] for specific procedures.	
5	Conduct any transfers as required. Refer to [SOP] for specific procedures. This can include: <ul style="list-style-type: none"> Oil / fuel blending Oil / fuel skimming (water tanks) Production to sales tank transfer 	
6	Complete tank farm housekeeping items as required including: <ul style="list-style-type: none"> Empty and clean manifold cabinets and drip trays Empty and clean portable spill trays 	<i>Wear chemical resistant gloves, and use absorbent material to clean spills, leaks.</i>

	<ul style="list-style-type: none"> • Empty tank farm garbage can • Clean the containment ring exterior • Clean hose trays and check for leaks • Empty and clean sample port drip trays • Empty agitator containment pails 	
7	<p>Complete tank farm safety and security items including:</p> <ul style="list-style-type: none"> • Check all fire extinguishers and place them correctly • Test the high level alarm of each tank by pressing the Test button. The alarm will produce sound if it is in working condition • Verify all containment structures including the tanks themselves • Close and lock all tank, manifold, and sample port valves • Clear standing water from the containment ring • Pressure test all hoses as required <ul style="list-style-type: none"> ○ Each hose sent for pressure testing must first be cleaned ○ Use a vac truck to clear the hose of liquids ○ Use a pressure washer to further clean any remaining residues ○ Palletize and wrap all hoses to be sent for pressure testing • Clear all obstructions from tank farm access and egress routes • Ensure windsock is visible and intact • Test each gauge board <p>Notify a supervisor of any deficiencies.</p>	
8	<p>Inspect the pumps and pump shack.</p> <ul style="list-style-type: none"> • Verify compressed air supply • Close pump bleed valves • Secure all hose connections with cams and straps. • Empty and clean the filter baskets • Empty and clean the pump containment tray • Check spare parts stock, notify supervisor if more parts are needed 	

9. DIAGRAMS / PHOTOS	
Step No.	Description
Step No.	Description



OPERATIONS PLAN

**GFL Environmental Incorporated
Winnipeg 1090 Kenaston Office and Facility**

1090 Kenaston Boulevard
Winnipeg, Manitoba
Client File No.: 4320.10
License No.: 334 HW
Permit: 23647

06 Mar 2023

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
 1090 Kenaston Boulevard, Winnipeg, MB
 06-Mar-23

EXTERNAL EMERGENCY CONTACT LIST

Agency	Phone Number	Notes
Winnipeg Fire Paramedic Service	911	
Winnipeg Police Service	911	
RCMP	911	
Manitoba Environmental Emergency Hotline	(204) 944-4888	24-hour Emergency Line
GFL Emergency Hotline (Manitoba)	(204) 987-9600	24-hour Emergency Line
GFL Incident Reporting Hotline	1(866) 417-2797	24-hour Emergency Line
Manitoba Poison Centre	1 (855) 776-4766	24-hour Emergency Line
Manitoba Hydro	(204) 480-5900 in Wpg or 1 (888) 624-9376	24-hour Emergency Line
Canadian National Railway Police	1(800) 465-9239	24-hour Emergency Line

FACILITY PROFILE

Facility Location: 1090 Kenaston Boulevard
Winnipeg, MB

GPS Coordinates: 49.838888° N
97.208127° W

Land Location: Lot 3, Plan 9153, WLTO in OTM Lots 60 to 63, Parish of Saint Boniface

Facility Area: 1.25 hectares (3.1 acres)

Emergency Contact: (204) 987-9600 (24 Hours)

Approval No.: 334 HW Operating License pursuant to *The Dangerous Goods Handling Transportation Act* (No Expiry)
 23647 Permit to Operate a Petroleum Storage Facility pursuant to the *Storage and Handling of Petroleum Products and Allied Products Regulation*
 MBG04810 Generator Registration for 1090 Kenaston Blvd., Winnipeg (No Expiry)
 MBC20058 Hazardous Waste Transportation Licence (No Expiry)
 MBR04811 Receiver Registration for 1090 Kenaston Blvd., Winnipeg (No Expiry)

Issuing Authority: Manitoba Sustainable Development

Proposed Operations:

1. Bulking, processing, and blending of designated hydrocarbons with used oil
2. Temporary storage of hazardous waste
3. Bulking of non-hazardous waste streams
4. Bulking of hazardous waste streams
5. Processing and recycling of used oil filters
6. Processing and recycling of aerosol containers
7. Drum washing and rinsate collection
8. Temporary storage, bulking and treatment of non-regulated industrial wastewater

Authorized Materials: Class 2.1 – Flammable Compressed Gas
 Class 2.2 – Non-Flammable, Non-toxic, Compressed Gas
 Class 2.3 – Toxic Compressed Gas
 Class 3 – Flammable Liquids
 Class 4.1 – Flammable Solids
 Class 4.2 – Spontaneously Combustible

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
 1090 Kenaston Boulevard, Winnipeg, MB
 06-Mar-23

- Class 4.3 – Water Reactive
- Class 5.1 – Oxidizing Substances
- Class 5.2 – Organic Peroxides
- Class 6.1 – Toxic Substances
- Class 8 – Corrosive Substances
- Class 9 – Miscellaneous Products and Substances (including, but not limited to: environmentally hazardous substances, lithium batteries, nitrate fertilizers)

Site Sensitivity: (line of sight measurements)

Nearest surface water: 240 metres (m) (Southwest)
 675 m (West)
 1,000 m (Northeast)

Nearest residence: 500 m (East)

Nearest water well: Water well locations not field confirmed in area

Nearest school: 1.4 kilometers (km) (Southeast, Linden Meadows School)
 1.6 km (East, Van Wallegghem School)

Nearest hospital: 5.3 km (Southeast, Victoria General Hospital)

Nearest prison: 3.7 km (North, Winnipeg Youth Centre)
 13.0 km (Northwest, Women’s Correctional Centre)

Emergency Access: Primary Site Access: North Gate – Entrance off Lawson Crescent

Response Distance:

Fire Station No.12: 1.2 km (North, 1780 Taylor Avenue)
 Fire Station No. 22: 5.1 km (Southeast, 1567 Waverly Street)
 Fire Station No. 11: 6.1 km (North, 1705 Portage Avenue)

Storage Capacity:

Tank ID No.	Contents / Process	Capacity (L)
Main Tank Farm		
K1	Waste Hydrocarbons	119,300
K2	Waste Hydrocarbons	119,300
K3	Waste Hydrocarbons	119,300
K4	Waste Hydrocarbons	119,300
K5	Waste Hydrocarbons	119,300
K6	Waste Hydrocarbons	119,300
K7	Waste Hydrocarbons	124,500
K8	Waste Hydrocarbons	124,500
K9	Waste Hydrocarbons	124,500
K10	Waste Hydrocarbons	124,500
K11	Waste Hydrocarbons	124,500
K12	Waste Hydrocarbons	124,500
F1	Waste Hydrocarbons	640,000
F2	Waste Hydrocarbons	640,000
Process Tank Farm		
P1	Waste Water / Oil / Light Ends	60,000
P2	Waste Oil	60,000
P3	Processed Oil	60,000
P4	Waste Oil	60,000
Interior Process Tanks		
P5	Process Oil	15,230
P6	Process Oil	15,230
P7	Process Oil	15,230
P8	Process Oil	15,230
PST1	Process Sludge Tank	4,600

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
 1090 Kenaston Boulevard, Winnipeg, MB
 06-Mar-23

Tank ID No.	Contents / Process	Capacity (L)
Ancillary External Tanks		
FPT1	Filter Press Tank	5,000
B1	Waste Hydrocarbons	50,000
S1	Virgin Solvent	4,510
Wastewater Treatment Plant		
Tank 1	Wastewater	12,000
Tank 2	Wastewater	12,000
Tank 3	Wastewater	12,000
Tank 4	Wastewater	20,000
Tank 6	Wastewater	20,000
Tank 7	Wastewater	20,000
Tank 8	Wastewater	10,000
Tank 9	Wastewater	20,000
Tank S1	Wastewater	31,000
Tank S2	Wastewater	31,000
Tank 10	Wastewater	11,000
Tank 11	Wastewater	11,000

Shipping Modes: Single axle, Tandem, Triaxle, and Dry Van Trailers
 Highway Transport Dry Van Trailers
 Bulk Liquid Tankers
 Vacuum Trucks

Security Features:

1. Perimeter barbed wire chain link fence
2. Authorized access policy with Visitor Sign-In.
3. Security night lighting
4. Camera surveillance of processing and outdoor storage areas, exterior yard, and shop interior
5. 24hr fire and smoke detectors

Safety Features:

1. High level alarms on single walled storage tanks containing hazardous materials
2. Strategically installed fire extinguisher stations
3. Strategically installed spill stations
4. Emergency decontamination shower
5. Emergency medical and eye wash stations
6. Wind socks
7. Secondary containment (110%) for all storage tank areas
8. Automatic external defibrillator (AED) installed in Main Office of Building A

Environmental Monitoring:

1. Daily facility inspections
2. Scheduled monitoring and sampling of 8 on-Site groundwater monitoring wells

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

RECORD OF REVISIONS

Revision Number	Date (dd-mmm-yyyy)	Revision Description
1.0	27 Mar 2020	Initial development
1.1	12 Sep 2022	Changes from new licence 334 HW General Update
1.2	24 Nov 2022	Addition of 2 wastewater tanks Addition of Air Management Section General update
1.3	06 Mar 2023	Removal of WWTP from wastewater treatment Revised Burner fuel processing Added specifications for burner fuel processing General updates

TABLE OF CONTENTS

EXTERNAL EMERGENCY CONTACT LIST	I
FACILITY PROFILE	I
RECORD OF REVISIONS	IV
TABLE OF CONTENTS	V
1 INTRODUCTION	1
1.1. SITE DESCRIPTION	1
1.2. SITE SECURITY	1
1.3. SAFETY FEATURES	2
2 FACILITY MAINTENANCE	2
2.1. FACILITY RECORDS	2
2.2. FACILITY INSPECTIONS	2
2.3. GROUNDWATER MONITORING WELLS	2
2.4. SPILLS & REMEDIATION	3
3 WASTE ACCEPTANCE	3
3.1. ACCEPTABLE WASTES	3
3.2. PROHIBITED WASTES	4
3.3. WASTE PROFILING	4
4 GENERAL FACILITY OPERATIONS	4
4.1. WASTE RECEIVING AREA	4
4.2. DRUM STORAGE AREA	5
4.3. LIQUID STORAGE	5
4.4. WASTE OIL SAMPLING	5
4.5. OIL FILTER PROCESSING	6
4.6. BURNER FUEL PROCESSING	6
4.6.1. Pre-treatment	6
4.6.2. Treatment	6
4.6.2.1. Filtration.....	6
4.6.2.2. Dewatering	7
4.6.2.3. Purification.....	7
4.7. PLASTICS PROCESSING	7
4.8. DRUM CRUSHER	7
4.9. PAINT PROCESSING	7
4.10. AEROSOLS PROCESSING	7
4.11. GAS PROCESSING	8
4.12. HAZARDOUS AND NON-HAZARDOUS WASTE BULKING	8
4.12.1. Pumping	8
4.12.2. Small Means of Containment Bulking	8
4.13. WASTEWATER TREATMENT	8
4.14. STORM WATER MANAGEMENT	8
4.15. WASTE STORAGE	8
4.16. DECONTAMINATION, NEUTRALIZATION, RINSING AND PURGING	9

4.17. WASTE CHARACTERIZATION AND ANALYSIS.....	9
4.18. SHIPPING/ RECEIVING.....	9
5 AIR EMISSIONS MANAGEMENT.....	9
6 ENVIRONMENTAL MONITORING.....	9
6.1. REGULATORY GUIDELINES – GROUNDWATER.....	9
6.2. GROUNDWATER MONITORING & SAMPLING METHODOLOGY.....	9
6.3. QUALITY ASSURANCE / QUALITY CONTROL.....	10
7 GENERAL HEALTH & SAFETY.....	11
7.1. PERSONAL PROTECTIVE EQUIPMENT.....	11
7.2. PERSONNEL TRAINING.....	11
7.3. FACILITY TOOLBOX MEETINGS.....	11
7.4. GROUND DISTURBANCE.....	12
APPENDICES.....	A-1
APPENDIX A: FIGURES.....	A-1
A1: Facility Location.....	A-1
A2: Facility Layout and Groundwater Monitoring Well Locations.....	A-2
APPENDIX B: MBCC PERMITS 334HW.....	B-1
APPENDIX C: PETROLEUM STORAGE FACILITY PERMIT 23647.....	C-1
APPENDIX D: ALTERNATE FUEL-FLAMMABLE SDS.....	D-1

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

1 INTRODUCTION

GFL Environmental Inc. (GFL) has developed this Operations Plan (OP) outlining general operational procedures at GFL's 1090 Kenaston Boulevard Facility (Facility) in Winnipeg, Manitoba (MB). The legal description of the property is identified as Lot 3, Plan 9153, WLTO in OTM Lots 60 to 63, Parish of Saint Boniface. The Facility operates under MB Conservation and Climate (MBCC) *Dangerous Goods Handling and Transportation Act* License 334 HW issued 6 April 2020 and Permit to Operate a Petroleum Storage Facility #23647. Copies of the License and Permit are provided in Appendix B and C. The Facility operates under the following registrations:

- MB Generator Number MBG0410
- MB Receiver Number MBR04811
- MB Carrier Number MBC20058

The location of the Facility is presented in Appendix A1, while the Facility layout, groundwater monitoring well locations and locations of emergency muster points are presented in Appendix A2.

This Plan has been developed based on the requirements of GFL's License. In addition to this manual, other documents related to the operation of the Facility include:

- Emergency Response Plan;
- GFL Safety & Health Plan; and
- Decommissioning and Reclamation Plan.

The operational year at the Facility runs from 01 January to 31 December of each calendar year.

1.1. SITE DESCRIPTION

The Facility is comprised of a 11,750 square metre (m²) fenced compound encompassing an office building with attached processing shop and wash bay approximately 750 m² in size within the central portion of Facility (Building A). GFL's Wastewater Treatment plant is located within a second building 375 m² in size located near the northeast corner of the Facility (Building B). Highway transport trailer units and intermodal shipping containers are located within the vicinity of the main building. Two AST compounds are located south of the main building. An inventory of Facility ASTs is updated with MSD as per Permit No. 23647. GFL completes daily inspections of the Facility and exterior facilities as well maintains a 24-hour spill response team to respond and remediate any release within the Facility property limits. Waste oil and filter collection trucks, vacuum trucks and specialized trucks are parked south of the main building and along the north property line in the vicinity of the process building. The northwest portion of the property is asphalt-paved from the entrance gate on Lawson Crescent to the southwest corner of the main office building. The remainder of the yard is surfaced with gravel.

Building A (Main Office and Processing Area) is a single story, slab on grade, pre-engineered commercial building that has been expanded several times since the building was originally constructed in the 1980s. Administrative spaces with reception, offices, supply storage, a conference room, and a lunchroom are located within Building A. All contractors, delivery personnel, and members of the public arriving at the Facility are required to sign-in with Reception in Building A and following sign-in and orientation, are escorted, as required, by a GFL representative. The office area is segregated from all other areas of Building A by lockable doors and is designated as a Personal Protective Equipment (PPE) free zone.

Building B (Processing Building) is a single story, slab on grade, pre-engineered commercial building located in the northeast corner of the Facility property. Building B is equipped with high efficiency ventilation, a lab/ office area for bench testing, storage areas for equipment and supplies, and a processing area.

1.2. SITE SECURITY

Site security at the Facility include the following measures:

- Perimeter barbed wire chain link fence
- Authorized access policy with Visitor Sign-In
- Security night lighting
- Camera surveillance of processing and outdoor storage areas and the exterior yard

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

- 24hr fire and smoke detectors

1.3. SAFETY FEATURES

Safety features or equipment at the Facility include the following:

- High level alarms on single walled storage tanks containing hazardous materials
- Strategically installed fire extinguisher stations
- Strategically installed spill stations
- Emergency decontamination shower
- Emergency medical and eye wash stations
- Windsocks
- Secondary containment (110%) of all storage areas (storage tanks and drum containers)
- Automatic external defibrillator (AED) installed in Main Office of Building A

2 FACILITY MAINTENANCE

2.1. FACILITY RECORDS

GFL records the dates of waste movements, inspections, findings, and all corrective actions taken in hardcopy, or an electronic database maintained for that purpose. Copies of all plans, records, inspection logs, waste acceptance documentation, and monitoring data will be retained in digital or hardcopy format until written authorization for disposal of documents is granted by MBCC.

GFL will cooperate fully with all requests pertaining to MBCC inspections or audits.

2.2. FACILITY INSPECTIONS

All inspections completed at the Facility are documented and digital copies of the associated forms retained. Inspections are completed in accordance with the requirements of the License and include:

- Daily site inspections:
 - Hazardous Waste processing and storage areas including: Building A; Building B; the yard; and aboveground storage tank (AST) farms and secondary containment.
- Daily equipment and pre-trip inspections
- Weekly site inspections:
 - Domestic Waste Disposal Collection Areas
- Monthly site inspections:
 - Fire extinguisher inspections and maintenance with third-party maintenance completed annually.
 - Monthly air horn testing

Each of the inspection types is completed as dictated by the respective forms. Each completed form is signed or initialed by the individual completing the inspection and dated.

Any unsafe operating conditions or spills/leaks are immediately reported to a Supervisor and through the GFL incident reporting system. The occurrence is also documented in hardcopy or digital format. GFL will repair, replace, or rectify any identified issues immediately to prevent further adverse effects or unsafe working conditions.

2.3. GROUNDWATER MONITORING WELLS

Groundwater monitoring wells installed at the Facility have been completed with locked stick-up protectors. Groundwater monitoring wells are routinely inspected for damage and to ensure locks are in place.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

2.4. SPILLS & REMEDIATION

Any spills or releases that occur at the Facility are immediately reported to the District Manager and through the GFL Mobile Safety App. GFL undertakes all appropriate measures to immediately stop, contain, and mitigate a spill or release if safe to do so. Remedial activities will be completed immediately, and all contaminated materials will be handled appropriately based on the nature of the material spilled.

Upon notification of spills considered reportable in the *MB Environmental Accident Reporting Regulation 439/87*, MBCC will be contacted, and the spill reported to the on-call Environmental Protection Officer immediately. If directed by MBCC, GFL will submit a spill report prepared by a Qualified Person.

Contents of the spill report will include, but not be limited to the following:

1. Name and telephone number of person reporting.
2. Name, address and telephone number of facility and owner /operator.
3. Date, time and type of incident.
4. Name and quantity of materials (s) involved.
5. Extent of injuries, if any.
6. An assessment of actual or potential hazards to human health or the environment, where this is applicable.
7. Corrective actions taken to mitigate or remediate the environmental impacts resulting from the incident.
8. Estimated quantity and disposition of recovered material that resulted from the incident.

Significant spills or releases may require activation of the Facility ERP and implementation of additional emergency measures. The Facility District Manager will assess the need to implement the ERP based on the size and nature of the release.

3 WASTE ACCEPTANCE

3.1. ACCEPTABLE WASTES

A list of permitted wastes for acceptance at the Processing Facility is provided below.

Depending on the nature and volume of the material as identified in the waste acceptance process, GFL will process, bulk, recycle, and/or dispose of the wastes at a third-party facility.

- Non-regulated waste materials
- Class 2.1 – Flammable Compressed Gas
- Class 2.2 – Non-Flammable, Non-Toxic Compressed Gas
- Class 3 – Flammable Liquids and Combustible Liquids
- Class 4.1 – Flammable Solids
- Class 4.2 – Spontaneously Combustible
- Class 4.3 – Water Reactive
- Class 5.1 – Oxidizing Substances
- Class 5.2 – Organic Peroxides
- Class 6.1 – Toxic Substances
- Class 8 – Corrosive Substances
- Class 9 – Miscellaneous Products and Substances (including, but not limited to: environmentally hazardous substances, lithium batteries, etc.)

Any materials that are determined unacceptable at the Facility will be temporarily stored on-site pending further characterization and transportation for off-site disposal or recycling.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

3.2. PROHIBITED WASTES

The following wastes are prohibited for acceptance at the facility:

- Class 1 – Explosive Substances;
- Class 6.2 – Infectious Substances;
- Class 7 – Radioactive Materials; and
- Polychlorinated Biphenyl (PCBs) in concentrations in excess of 50 ppm.

3.3. WASTE PROFILING

The majority of the waste received at the facility is from long term clients with established waste profiles. In these cases, the waste is scheduled for receipt at the facility using established waste codes based on previous profiling.

The evaluation of new wastes to be received at the site begins when the client sends GFL a request for quote or waste collection/delivery from their respective site. Once the communication from the client is received the following process is started:

- An SDS or any information that the client has the substance is requested by GFL
- If the information provided is sufficient to characterize the waste the waste is coded by the GFL West Technical Team
 - GFL has an internal waste code system that is used for tracing waste through the management system from receipt to either destruction or transfer to a third-party site.
- If the waste is deemed unacceptable or there is not enough information to characterize the waste a waste profile is then created. The waste profile will look at one or more the following items:
 - Mode of generation
 - Physical properties (pH, state, ignitability)
 - Mix of products
 - Laboratory analysis
- Once a waste is accepted it can either be coded to a pre-existing code based on GFLs history of waste receiving, or have a new code generated if the substance dose not match items received in the past
- When the waste is assigned a code, it can be scheduled for pick-up or deliver to site
- When received at site there are procedures in place to confirm the waste matches the cods assigned it.
 - Waste that does not conform to the assigned code triggers an investigation to potentially reclassify the waste to an appropriate code.

4 GENERAL FACILITY OPERATIONS

4.1. WASTE RECEIVING AREA

GFL utilizes van body and truck/trailer combination units to collect hazardous and non-hazardous wastes originating from non-GFL commercial and industrial waste generators throughout Manitoba as well from other GFL locations. Periodically, waste materials are delivered by third party carriers as well members of the public. Upon arrival to the Facility, incoming hazardous and non-hazardous wastes received in small means of containment (drums, intermediate bulk containers (IBCs), cylinders, pails, lab packs, and bins) are offloaded at the overhead door in the waste receiving area within Building A and catalogued by GFL's trained technicians. All containers are inspected by GFL personnel for proper identification/labels, damage, and leaks upon arrival at the Facility.

GFL procedures for handling and storage of different types of waste are accessible on the Workhub system.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

4.2. DRUM STORAGE AREA

Following the arrival of waste materials to the waste receiving area in Building A, the interior drum storage area is utilized for the temporary storage of up to 200 – 205 litre (L) drum equivalents of waste awaiting sampling and characterization, processing, treatment, bulking, or repackaging for off-site recycling or disposal. Incompatible wastes are segregated in different areas of the storage area to prevent accidental mixing. Drums of used lubricating and hydraulic oil, fuels, water, glycol, and solvents are transferred into dedicated ASTs within the Process and Main Tank Farms for further processing. Containerized waste is also stored in appropriate locations outside of Building A in specific locations in the yard. Anything stored outside is in good condition and only stored while awaiting processing and/or loadout to end disposal facilities.

4.3. LIQUID STORAGE

The Facility includes an AST tank farm containing both double walled tanks and single walled tanks inside of a secondary containment berm. All tanks present at the Facility are listed within the MBCC Permit. Hazardous and non-hazardous liquids as well as waste and virgin products are stored in these tanks and may contain:

- Waste oil;
- Wastewater;
- Virgin solvents;
- Waste flammable liquids; and/or
- Waste glycol.

4.4. WASTE OIL SAMPLING

The waste oil sampling program was developed to ensure that concentrations of contaminants in the waste oil are below the regulatory guideline values prior to shipping from the Facility to end users. For the purpose of this Protocol, “batch” means bulked waste oil collected from individual collection points and stored in a designated AST until the tank capacity is reached.

1. A 5 millilitre (mL) sample will be obtained from each collection point at the time of collection and will be retained until the Certificate of Analysis (COA) is obtained for the batch.
2. Waste oil will be collected and stored in a designated AST until the capacity of the AST is reached. The contents of the tank will represent one batch of waste oil.
3. The designated AST will be locked out and a representative sample will be collected and submitted to an accredited laboratory for analysis of the following parameters at a minimum:
 - flashpoint;
 - water content; and
 - PCB concentration.

Parameters in addition to the minimum requirements may be analyzed based on client/end-user requirements for each batch.

4. If concentrations of any constituents exceed regulatory guidelines, the AST will remain locked out and additional measures or processing will be required. Waste oil with elevated flashpoints or water contents may be blended or allowed to phase separate. Additional samples will be collected for laboratory analysis following processing to confirm that the designated AST meets required specifications.

In the event that PCBs are detected in concentrations exceeding the regulatory limits, GFL will immediately notify MBCC and Environment Canada. Each stored sample from the individual customer service orders will be sent for analysis to determine the source of the PCB contamination. The results of this analysis will also be forwarded to the appropriate authorities and GFL will make provisions for proper disposal of the contaminated batch.

5. No waste oil will leave GFL’s approved storage facilities for third-party sale, recycling, or disposal until the laboratory analyses confirms the batch meets regulatory guidelines. Copies of the laboratory results are available to the end-user for each outgoing shipment from the batch as requested.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

4.5. OIL FILTER PROCESSING

A self-contained oil filter processor is used to mechanically press residual oil from used oil filters and to reduce the volume of metal filters. Drums containing used oil filters collected from GFL customers are emptied onto a sorting table to manually remove foreign objects including non-confirming steel waste, and debris. The sorted filters are then loaded into the processor and consolidated into compressed metal bricks while recovering residual oil from within the filters. The processed brick is then transferred by conveyor to cut open totes. Drained bricks are staged for loadout to designated off-site recyclers. Used lubricating oil recovered from the processing of used filters is transferred to an exterior 5,000 L double walled AST equipped with a high level sensor and audible alarm. Once the AST reaches its rated capacity, the tank contents are transferred to the bulk tank farm for further processing.

Information on the maintenance and operation of the oil filter crusher is kept on file at the facility.

Drums used for the collection of used oil filters are inspected for damage and cleaned in a drum washer for resupply to client locations. Drums in poor condition are rendered unfit for reuse and placed in the scrap metal bin for off-site recycling. Plastic drums rendered unfit for reuse are currently placed in a GFL plastics trailer for off-site processing and recycling.

4.6. BURNER FUEL PROCESSING

GFL prepares burner fuel for use in commercial and industrial burner applications. The burner fuel is prepared by processing used lubricating oil and mixing with waste fuels at various ratios depending on customer specifications to create a fuel product with a flash point greater than 38° Celsius (C).

Upon arrival at the Facility, bulk used lubricating oil is offloaded to the Process Tank Farm to await processing.

Involves operations which will separate and remove contaminants and water in used oil so that this oil becomes suitable for reuse.

In this process used, lubricating oil is purified for reuse. Since the waste oil is collected from various sources, the composition of each batch will vary depending on the type and brand of oil, the additives used, the degree to which the oil and additives were used, and other factors..

Prior to treatment, GFL tests all used oil to ensure its suitability.

Treatment can be as simple as particle filtration or as complex as the integration of multiple unit processes for a complete oil treatment to meet the ASTM spec ROF4 through ROF6.

The standards used to determine quality of the product are defined in the SDS for Alternative Fuel-Flammable, Section 3: Composition/Information in Ingredients (refer to Appendix D)

Refer to Processing Oil into DAO SOP GFL-PRF-LIQ-0011-310A-SOP for a detailed description of the process. The SOP is kept electronically on the GFL Workhub system

4.6.1. Pre-treatment

Pre-treatment of used oil involves removing any free water within the oil. One way of doing this is by placing it in large settling tanks, which separates the oil and water, so that this oil becomes suitable for reuse.

4.6.2. Treatment

Further processing steps include:

- Filtration
- Dewatering
- Purification

4.6.2.1. Filtration

Particle filtration is a system that separates solids from liquids using either physical or mechanical means. When it comes to used oil, particle filtration is commonly one of the first steps in the treatment.

There are a number of different filters that can be used within particle filtration. A few options are available because certain aspects of the oil to be treated can vary greatly, depending on the system where the water is being used.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

The characteristics that most commonly affect filter choice include the density of particles, particle size, shape, quantity, and texture. Any other substances present within the oil also affect the type of filter required for the system. Three common filter types for particle filtration are bag, cartridge, and self-cleaning filters.

4.6.2.2. Dewatering

Water is found in used oil as free water or bound water, for example in emulsions. The term dewatering is usually taken to mean the removal of free water. Where water has been emulsified with oil, the emulsion has to be "broken" with a demulsifier before the water can be separated from the oil.

Dewatering is a simple process relying on the separation of aqueous and oil phases over time under the influence of gravity. The used oil is allowed to stand in a tank (raw waste oil) and free water drops to the bottom where it can be drained, treated (wastewater treatment) and discharged appropriately depending on quality and local regulations.

Heating and circulating the used oil in a tank and driving off the water through evaporation can speed up the dewatering process. The "dried" or dehydrated oil is then suitable for further processing if required.

4.6.2.3. Purification

Used oil feedstock is transferred to a reaction tank and mixed with a small quantity of surfactant and heated to about 75C°. The chemical surface-active reagent is added to the tank and after blending with the oil is allowed to stand. This allows the mixture to separate into two "phases" - i.e. oil and water-based or aqueous. The reagent causes the contaminants to accumulate in the aqueous phase, which settles to the bottom of the tank and is drained off as slurry. This phase contains water, used oil contaminants, including metals and some of the oil additives. The water is dried off, leaving a solid waste that must be disposed of.

Chemical analyses are carried out prior to the oil being introduced into the system in order to establish the condition of the used oil and to thus be able to define the intensity of treatment and additives that will be necessary to obtain the required end characteristics

4.7. PLASTICS PROCESSING

Currently, empty HDPE plastic oil jugs and bulk oil pails are collected from customer locations in drums and 6 mil polyethylene clear plastic bags for delivery to the Facility. Upon receipt, the jugs and pails are catalogued in the waste receiving area, inspected to ensure they are suitable for transport, and loaded into a GFL containment trailer until at full capacity and shipped off to an approved 3rd party processor.

4.8. DRUM CRUSHER

GFL utilizes a self-contained, drum crusher to compact surplus metal drums and drums that are not suitable for reuse. Prior to insertion in the drum crusher, residual liquids are recovered, and the drum washed in the drum washer. Following crushing, the drum is placed into the scrap metal bin for off-site recycling. Recovered liquids are collected in drums and once reaching the rated capacity are transferred to the Process Tank Farm for further processing.

Information on the maintenance and operation of the drum crusher is kept on file at the facility.

4.9. PAINT PROCESSING

All waste paints are shipped offsite to appropriate disposal facilities

4.10. AEROSOLS PROCESSING

GFL utilizes an aerosol can puncturing device to remove residual liquids from used aerosol cans received at the Facility so that the metal containers can be recycled, and the liquids bulked in drums for off-site recycling. Aerosols received by GFL primarily consist of paint cans with residual amounts of paint. The system is verified by the United States Environmental Protection Agency (EPA) and certified by the California EPA for the processing of waste aerosol cans. The processor safely punctures the can, allowing the contents to be released to a sealed drum equipped with an air purifying filter to remove organic vapours expelled from the drum. Once the drum reaches its rated capacity, the drum is sealed and prepared for transport to a certified recycler. The spent metal aerosol cans are placed into the scrap metal bin for off-site recycling.

Information on the maintenance and operation of the can puncturing device is kept on file at the facility.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

4.11. GAS PROCESSING

Gases that are not hazardous to the environment or humans are released in a controlled manner and the containment vessels punctured prior to recycling. Gases, which are hazardous to humans, the environment or otherwise forbidden by regulation such as the Environmental Code are packaged and transported off-site to an approved disposal facility.

4.12. HAZARDOUS AND NON-HAZARDOUS WASTE BULKING

4.12.1. Pumping

Flammable liquids as well as non-flammable liquids are pumped from small means of containment and intermediate bulk containers (IBCs) into tanks for storage or blending.

4.12.2. Small Means of Containment Bulking

Small containers such as consumer packaged brake fluid, lamp kerosene, portable fuel cans, etc. are bulked into small means of containment prior to further processing, or shipment for disposal or recycling.

4.13. WASTEWATER TREATMENT

Incoming wastewater is received from our customers in drums and IBC totes as well as bulk loads from vacuum trucks and transport trailers to Building B where a GFL trained technician performs initial characterization. GFL will send all received and accumulated wastewater to an appropriately licenced disposal well.

The current tank infrastructure associated with the wastewater treatment plant is summarized below.

- 2 – 12,000 L vertical polyethylene tanks – Tanks T1 and T3 (Inlet tanks).
- 3 – 20,000 L vertical polyethylene tanks – Tanks T4, T6 and T7 (Primary treatment tanks).
- 1 – 10,000 L cone bottom polyethylene tank – Tank T8 (Inlet settlement tank).
- 1 – 22,000 L vertical polyethylene tank – Tank T9 (Polishing tank).
- 2 – 31,000 L vertical single walled steel tanks – Tanks S1 and S2 (Secondary treatment tank).
- 2 – 11,000 L cone bottom polyethylene tanks – Tanks 10 and 11 (Storage tanks)

Currently, the total tankage volume available for wastewater treatment within Building B is 200,000 L. This volume is currently meeting our needs and is not expected to be expanded in the near future.

Waste sludge from the tanks is packaged and transported to GFL's Saskatoon Facility for processing and disposal.

4.14. STORM WATER MANAGEMENT

Surface water accumulating within the secondary containment structures the two Tank Farms is inspected on a daily basis. If sufficient volumes are encountered in the containment area, they are recovered with a GFL vacuum truck and transported to the WWTP for treatment prior to discharge to the City of Winnipeg Water Treatment Plant. If the WWTP is not able to treat the water based on incoming volumes, the collected water will be transferred to one of the ASTs within the Main Tank Farm for either treatment in the WWTP or for off-site disposal.

The area surrounding the Facility is slightly elevated and contained within perimeter berms to contain all surface water within the property limits. If substantial surface water accumulates within the property boundaries, GFL's vacuum truck is dispatched to collect the surface water and transport it to the WWTP. Surface water outside of the Facility does not enter the Facility as a result of site grading and the perimeter berms and is allowed to flow to the City of Winnipeg storm sewer system.

4.15. WASTE STORAGE

Containers (drums, IBCs, pails etc.) and bulk waste materials are temporarily stored in designated exterior storage areas or Building A in preparation for one of the other processes listed.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

4.16. DECONTAMINATION, NEUTRALIZATION, RINSING AND PURGING

Containers, vessels, equipment and materials previously containing or impacted with hazardous and non-hazardous waste are received at the Processing Facility and on the exterior processing pad. Decontamination, neutralization, rinsing and purging of containers, vessels, equipment and materials is completed to remove residual products. Residual products are bulked for further processing or off-site disposal while the decontaminated items are either stored for reuse within GFL, recycled, disposed or returned to vendors for recycling or disposal.

4.17. WASTE CHARACTERIZATION AND ANALYSIS

Many materials are sampled and analyzed before shipment off-site to ensure the product meets the requirements of end disposer/ recyclers or regulatory requirements. Most analysis is conducted by third party accredited laboratories, with some analysis performed in-house (non-accredited laboratory) when not needing to satisfy regulatory requirements. Samples are archived and stored until all materials that they represent are transported off-site.

4.18. SHIPPING/ RECEIVING

Hazardous and non-hazardous materials are received at the Facility in compliance with the Facility License. Accepted materials handled, processed, bulked, or treated at the Facility, are then shipped off site to end user disposal/ treatment/ recycling facilities that are verified to operate under the relevant regulations of the jurisdiction in which they operate.

5 AIR EMISSIONS MANAGEMENT

A dedicated air treatment system is located in Building A as listed in clause 61 of the permit. The tanks in this area are used for dewatering which requires heating of used oil that could potentially produce vapors that could be released to the environment. The tank vents are connected to a scrubber system to remove organic materials from the gas effluent stream prior to releasing from the building. The scrubber system is inspected daily, and the carbon media is replaced as per manufacturers recommended intervals.

Information on the maintenance and operation of the scrubber system is kept on file at the facility.

Tanks in building B are for wastewater, due to the nature of the material no air emission controls are in place.

All tanks located outside buildings as listed in clauses 58, 59, and 60 are used for storage purposes only. Under normal operating conditions these tanks produce negligible levels of emissions and therefore do not have a dedicated air management system in place.

There is an activated carbon filtration system available to be placed on the passive ventilation nozzle of any storage tank upon the request of an Environmental Officer.

6 ENVIRONMENTAL MONITORING

Environmental monitoring at the Facility is completed based on the requirements outlined in the License.

6.1. REGULATORY GUIDELINES – GROUNDWATER

The most appropriate comparative assessment values for groundwater samples collected from the Facility are the Canadian Council of Ministers of the Environment (CCME) Canadian Environmental Quality Guidelines (CEQG), 2015, for water quality, protection of aquatic life, freshwater. In addition, the Ontario Ministry of Environment and Climate Change (MOECC) Soil, Groundwater, and Sediment Standards – Environmental Protection Act (EPA), 2011, non-potable groundwater guidelines were also used for regulatory comparison.

6.2. GROUNDWATER MONITORING & SAMPLING METHODOLOGY

Groundwater monitoring and sampling at the Facility is to be completed on an annual basis.

Prior to each monitoring session, the locked monitoring wells will be unlocked, and the condition of the cover recorded on the groundwater monitoring log. Each groundwater monitoring well (MW) will be monitored for headspace combustible vapour concentrations (CVCs) using a combustible vapour analyzer, set to methane elimination mode, and calibrated to a known hexane standard. An oil/water interface probe will be used to measure the depth to groundwater (DTW), bottom (DTB), and LNAPL, if present, within each monitoring well in reference

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

to top of casing (toc) and recorded on the groundwater monitoring log. Clean dedicated disposal bailers will be used to bailer check the surface of the groundwater within each monitoring well to confirm the absence of LNAPL. Each MW will be purged of a minimum of 3 equivalent well volumes of water or until dry. The MWs will be allowed to recover to a minimum of 80% prior to sampling with a single-use disposable bailer. During sampling, each groundwater sample will be measured for field-based parameters of electrical conductivity (EC), pH, and temperature utilizing a multi-parameter water meter.

Groundwater samples collected from the monitoring wells will be transferred into clean, laboratory supplied bottles, field preserved as required and labeled according to a pre-determined sample identification protocol. Samples will be kept cool in an ice-chilled cooler until the samples were delivered to an accredited laboratory under COC documentation.

During the collection of groundwater samples at the Facility new, clean disposable nitrile gloves are worn for the collection of each sample and all sampling equipment is cleaned and inspected between samples or single-use disposable equipment is utilized to minimize the possibility of cross-contamination.

Groundwater samples will be submitted for laboratory analysis of the following parameters:

- Hydrocarbon Analysis will include: benzene, toluene, ethylbenzene, xylene (BTEX), PHC Fractions F1 (C₆ to C₁₀) and F2 (C₁₀ to C₁₆).
- Detailed Salinity/ Routine Analysis include: pH, Ca, K, Mg, Na, CO₃, HCO₃, SO₄, Cl, Total Dissolved Solids (TDS), and electrical conductivity (EC).
- Total and dissolved metals analysis will include: Al, Sb, As, Ba, Be, Bi, Cd, Cr, Co, Cu, Fe, Pb, Hg, Mn, Mo, Ni, Se, Ag, Sr, Tl, Sn, Ti, U, V and Zn.

MW locations are presented in appendix A2.

Results of the groundwater monitoring and sampling program will be summarized in the annual report as well the Annual Groundwater Monitoring and Sampling Report.

GFL will assess and evaluate the situation and potential risks and will determine an appropriate course of action. All corrective actions to address deteriorating groundwater conditions will be provided to MBCC for approval prior to implementation. GFL will implement the corrective actions immediately following receipt of regulatory approval.

6.3. QUALITY ASSURANCE / QUALITY CONTROL

Quality Assurance / Quality Control (QA/QC) measures implemented at the Facility are comprised of the following:

- Senior supervision of field staff;
- Use of third party trained personnel;
- Written field instructions;
- Documentation of all field activities;
- Duplicate soil samples were collected from the remedial excavation;
- COC documentation for sample submission;
- Use of an accredited laboratory;
- Adherence to laboratory sampling and analysis protocols including hold times, sample containers, preservatives, detection limits, and approved methodologies;
- Procedures to confirm accurate transcription of laboratory data into tables;
- Review of laboratory QC performance (standards, spike recoveries, etc.) to confirm results are within acceptable limits; and
- Decontamination of sampling tools between samples.

Blind duplicate samples will be submitted for laboratory analysis to assess potential sampling or laboratory error on a one-in-ten sample basis. For duplicate samples, the Relative Percent Difference (RPD) is calculated to assess the closeness of the results from the two samples. RPDs are calculated as follows:

$$\text{RPD (\%)} = 100\% \times \text{ABS} (X - Y) / [(X + Y) / 2]$$

X = the concentration of the original sample

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

Y = the concentration of the blind field duplicate sample

The RPD value is considered reliable if the calculated value is below 50 percent (%). RPDs were not calculated for parameters if the measured concentrations were less than five times the laboratory LDL.

7 GENERAL HEALTH & SAFETY

All GFL personnel working at the Facility must adhere to the GFL Health & Safety Plan and the requirements outlined therein.

7.1. PERSONAL PROTECTIVE EQUIPMENT

GFL is committed to the health, safety, and well-being of all Facility personnel. Minimum personal protective equipment (PPE) required by all staff at the Facility include:

- Flame-retardant (FR) coveralls;
- High visibility stripes or traffic vest;
- Safety glasses;
- CSA-approved safety boots;
- CSA- approved hard hat; and
- Task-appropriate safety gloves.

Additional PPE may be required depending on the task or location in which work is being completed and may include, but not be limited to:

- Hearing protection (required at all times when working on or near equipment with noise levels in excess of 85 decibels (dB)).
- Respirators with appropriate filter cartridges;
- Job-specific gloves (nitrile, rubber, cut-resistant, chemical-resistant, etc.);
- CSA-approved rubber boots; and/or
- Disposable coveralls.

Areas in the vicinity of the office and staff parking lots, and a pedestrian corridor from the main office/shop building to the Processing Facility have been designated as a PPE-free areas.

7.2. PERSONNEL TRAINING

At a minimum, all GFL Personnel working at the Facility will be trained in:

- Globally Harmonized System (GHS) and Workplace Hazardous Materials Information System (WHMIS);
- Transportation of Dangerous Goods (TDG); and
- GFL-specific training including, but not limited to Job Hazard Assessments (JHAs), Last Minute Risk Assessments (LMRAs) the contents of the Facility Operations Plan, the ERP, and Safety Program.

Depending on the role of personnel, more specific training may be provided such as First Aid / CPR; mobile powered equipment training for each specific type of equipment an individual may operate.

A record of all personnel training will be maintained, and renewal training booked accordingly.

7.3. FACILITY TOOLBOX MEETINGS

GFL operational personnel at the Facility participate in daily toolbox safety meetings at the start of each shift to identify and discuss the potential risks, hazards, and mitigation methods associated with the work scheduled for the day. All tailgate meetings will be signed by all personnel in attendance and copies of the documentation are retained.

Facility personnel are required to complete LMRAs throughout the day prior to completing tasks associated with their work. JHAs are completed for tasks considered to be more hazardous.

Example copies of the toolbox meetings and JHA forms are provided in Appendix E.

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

7.4. GROUND DISTURBANCE

Any ground disturbance activities completed at the Facility extending beyond 0.15 metres (m) below ground surface (bgs) must be completed in accordance with applicable provincial and federal ground disturbance requirements and procedures.

GFL will ensure that all personnel involved in the ground disturbance activities have received proper training in ground disturbance procedures (Ground Disturbance Levels I and/or II).

Prior to the initiation of any ground disturbance activities, GFL will contact MB One Call to arrange for underground utility locates to be performed within the work area. GFL will also contact any underground service providers with utilities in the area that do not subscribe to the One Call service to perform locates. A private utility contractor will also be contacted to provide utility locate services for privately owned utilities. The results of all locates completed will be documented and discussed with all personnel directly involved with the ground disturbance. Markings from underground utility locates are valid for 10 business days and must be renewed if work is not completed within that timeframe. Markings that are destroyed or not clear must also be re-marked by the utility locate service provider.

APPENDICES

APPENDIX A: FIGURES

A1: Facility Location

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

A2: Facility Layout and Groundwater Monitoring Well Locations

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

APPENDIX B: MBCC PERMITS 334HW

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

APPENDIX C: PETROLEUM STORAGE FACILITY PERMIT 23647

OPERATIONS PLAN

GFL Environmental Inc. – Kenaston Facility
1090 Kenaston Boulevard, Winnipeg, MB
06-Mar-23

APPENDIX D: ALTERNATE FUEL-FLAMMABLE SDS