



North Mackenzie District  
P.O. Box 2100  
Inuvik, NT X0E 0T0

Telephone: 867-777-8900  
Fax: 867-777-2090

September 29, 2011

Gwich'in Land and Water Board  
P.O. Box 2018  
Inuvik, NT X0E 0T0

**Attn: Robert Alexie, Executive Director**

**RE: Municipal Water Licence G99L3-003  
CLASS B - MUNICIPAL**

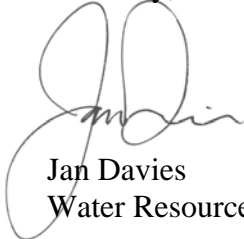
Dear Mr. Alexie,

Please find the enclosed Inspection Report for your review and/or records.

An electronic copy (un-editable Adobe pdf.) has also been provided by e-mail.

If you have any questions or concerns regarding the enclosed, and/or if additional information is required please contact me at (867) 777-8909.

Sincerely,



Jan Davies  
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Municipal Water Licence Inspection Report and Cover Letter (7 pages)



North Mackenzie District  
P.O. Box 2100  
Inuvik, NT X0E 0T0

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September 29, 2011

Hamlet of Aklavik  
P.O. Box 88  
Aklavik, NT X0E 0A0

**Attn: Evelyn Storr**

**RE: Municipal Water Licence G99L3-003 and N3L3-0570  
CLASS B - MUNICIPAL**

Dear Ms. Storr,

On August 26, 2011 an inspection was conducted of the Municipal Water Supply and Waste Disposal Facilities under the above mentioned Municipal Water Licences. Enclosed is a copy of the Municipal Water Licence Inspection Report.

The Hamlet of Aklavik staff and residents are to be commended for their efforts and the positive changes to the Waste Disposal Facilities. There have been improvements since the last inspection like the recent sewage lagoon sampling, waste segregation and more efficient use of space at the Solid Waste Disposal Facilities. There were a number of violations as depicted on page four of the Inspection Report. Some of the violations relate to reporting, signage, Surveillance Network Program responsibilities, administrative requirements and can be dealt with promptly. Please review and address the concerns throughout the Inspection Report.

While it is clear that progress is being made on many items, there continues to be terms and conditions of your Water Licence that are being neglected resulting in non-compliance/violations. Upon review of previous years Inspection Reports it is apparent that many of the violations and concerns outlined in the Report are consistent with those in previous years. Please address the aforementioned items as non-compliance with the Water Licences are a serious matter.

Please note that it is the Hamlet's responsibility to ensure compliance with all of the terms and conditions of its Water Licence. Aboriginal Affairs and Northern Development looks forward to working with you as much as possible to achieve compliance.

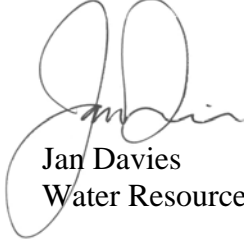
A copy of this report will be sent to the Northwest Territories Water Board and the Gwich'in Land and Water Board for their review and public records.



## MUNICIPAL WATER LICENCE INSPECTION FORM

If you have any questions/concerns regarding the enclosed, and/or if additional information is required, please do not hesitate to contact me at (867) 777-8909.

Sincerely,



Jan Davies  
Water Resource Officer

Cc: Conrad Baetz, District Manager, North Mackenzie District, Inuvik, NT

Enclosure: Water Licence Inspection Report (5 pages)

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## MUNICIPAL WATER LICENCE INSPECTION FORM

<b>LICENCE #:</b>	G99L3-003 and N3L3-0570	<b>EXPIRY DATE:</b>	November 20, 2014
<b>LICENCEE:</b>	Hamlet of Aklavik	<b>PREVIOUS INSPECTION:</b>	September 2, 2010
<b>COMPANY REP:</b>	Evelyn Storr	<b>INSPECTION DATE:</b>	August 26, 2011

### WATER SUPPLY

Source:	Peel Channel - Mackenzie River	Quantity Used:	31, 512 m <sup>3</sup>
Owner/Operator:	Hamlet of Aklavik/GNWT-DPW	Meter Reading:	N/I

**Indicate:**      **A - Acceptable**                      **U - Unacceptable**                      **N/A - Not Applicable**                      **N/I - Not Inspected**

Intake Facilities	A <sup>2</sup>	Storage Structures	A	Treatment Systems	A <sup>2</sup>	Recycling	N/A
Flow Meas. Device	A	Conveyance Lines	A	Pumping Stations	A	Chem. Storage	A <sup>1</sup>
						Modifications	N/A

### **Water Supply Comments:**

Concerns:

- In the chemical storage building it appears that the hypochlorite/hydroxide were mixed together but separate from the aluminum sulphate. Since aluminum sulphate is an acid it should be as far as possible from sodium hydroxide which is a base. Please remember to keep the chemicals separate from one another to avoid any reactions and mix up of chemicals. It is cramped in the chemical storage area and efforts to ensure more space would aid in easier and better organization of chemicals.
- See concerns in Fuel Storage Section.

Note:

- The Water Treatment Plant (WTP) Operator – Archie Arey makes a concerted effort to ensure clean and tidy operations. Chemical storage inside the WTP looked good, in addition to fuel storage and generator room. They were all clean and no issues were noted.
- New WTP, pump house and fuel storage tank are in operation and continue to function well.
- Continue to ensure proper disposal of empty chemical containers.

### WASTE DISPOSAL

Well Waste:	Off-Site Removal	N/A	Drilling Sump	N/A	Downhole	N/A	Land spread	N/A
Solid Waste:	Open Dump	N/A	Landfill	A <sup>1,2,4,10,11,12</sup>	Burn & Bury	Conditionally acceptable	Under ground	N/A
	Owner / Operator	Hamlet of Aklavik	Sludge Disposal	N/A	Other	N/A		
Tailings:	Tailings Pond	N/A	Natural Lake	N/A	Under ground	N/A		
Sewage:	Sewage Treat. System	A <sup>2,3</sup>	Camp Sump	N/A	Natural Water Body	A	Wetland Treatment	A
	Continuous Discharge	A	Inter. Discharge	N/A	Seasonal Discharge	N/A	Trench	N/A

**Indicate:**      **A - Acceptable**                      **U - Unacceptable**                      **N/A - Not Applicable**                      **N/I - Not Inspected**

Discharge Quality	A <sup>14</sup>	Construction	A	Disch. Meas. Dev.	A	Freeboard	N/A
Decant Structures	N/A	O&M Plan	U <sup>6,7,8,9</sup>	Dams, Dykes	N/A	Seepages	N/A
Dyke Inspections	N/A	A&R Plan	N/A	Erosion	A	Spills	A <sup>7,8,15</sup>
Conveyance Lines	N/A	Pond Treatment	N/A	Runoff Diversion	N/A	Sump Treatment	N/A
Sump Liners	N/A		SNP Samples Collected		Yes by Hamlet on July 15, 2011		
Periods of Discharge	Continuous		Effluent Discharge Rate		Natural outflow from lagoon		

### **Waste Disposal Comments:**

Concerns:

- Signs present for household garbage, wood products, tires, appliances, bulk waste. Ensure signage is in the appropriate location. Solid waste segregation is improving and will need to be continually maintained to further increase public guidance and assistance. For example if waste is disposed of in the wrong area it should be moved before other waste accumulates there as well. Further waste segregation signage is needed in the Solid Waste Disposal Facilities (SWDF) at each specific area. Signage should be present for but not limited to the following: bulk metal waste, white metal waste (fridges, washers/dryers, etc.), hazardous waste (oil, fuel, batteries, drums), empty drums, fuel tanks, tires, vehicles/ATVs/ skidoos, honey bag pit, waste animal pit, domestic/household garbage, paper/wood/cardboard- designated burning area, etc. Segregation will aid in an organized site that residents will respect and help maintain. This will also keep costs down in the future when it is time to recycle waste or abandon and restore the site.

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## MUNICIPAL WATER LICENCE INSPECTION FORM

2. Warning signage needed throughout water and waste facilities. This will inform the public of what these facilities are.
3. Evidence of erosion at the discharge chute. So far the damage isn't bad but tire stops and proper measuring up of the truck and its discharge hose would prevent this infrastructure from getting further erosion and unnecessary damage.
4. Access road built in between the flooded cell and the bulk waste area. Engines noted beside the access road (see Figure 1). Ensure they are emptied of all their fluids. The presence of vehicles, parts etc. are a contamination issue when they have not been cleaned out of their fluids properly. It would be appropriate for Solid Waste Disposal Facility (SWDF) maintenance that the Hamlet staff looks after the disposal of vehicles, parts etc to ensure they are empty for disposal.
5. SWDF including the bulk waste area have old drums present. Confirm they are emptied as per GNWT - Environment and Natural Resources Guidelines so they do not pose an environmental risk. This should be completed before being taken to the SWDF.
6. Household waste area with what appears as a new berm/road on north side of cell. There remains a presence of windblown debris and it appears that the waste cell is not being covered on a regular basis. Ensure waste is covered to control windblown debris and prevent wildlife issues. Bears have been present at the SWDF and create a public safety issue.
7. Waste oil containers need proper storage and disposal. Used containers – such as 5 gallon pails at the SWDF are a concern and need to be dealt with. The oil needs to be transferred to larger drums for secure storage and transportation. Hamlet needs to collect oil/glycol to send out for proper disposal and/or burn the oil in a used oil burner.

There was a large container ½ full of used cooking oil without a lid that had been left at the SWDF. It was stated by Hamlet staff that bears were eating the oil but there was a serious risk of it tipping over. Instructions were given to put a lid on the container and move it to ensure the container wouldn't be tipped over.

Following the inspection an update was received on September 9, 2011, the Hamlet Foreman – Dean Arey said the individual oil containers were emptied into 45 gallon drums. Upon inquiry about the large container of cooking oil it was commented that it had been tipped over by the bears. The foreman would check it and make sure it's not going to cause more problems. Further it was indicated on September 15, 2011 there had not been any spill since the bears were eating everything.

8. Ensure hazardous waste is stored in an area at the SWDF with a berm constructed around it to provide better containment (see Figure 2) as per Part D: Conditions Applying to Waste Disposal, Item 9, in Water Licence N3L3-0570. Hazardous waste(waste oil, batteries, barrels, etc.) should be temporarily stored and then disposed at approved and designated facilities. In the past spilled oil was noticed around the SWDF. When there has been spillage, make sure the soil and used oil is cleaned up, contained and properly disposed of. Ensure that the hazardous waste storage area is organized and materials stored properly. This will ultimately keep the area clean and encourage the public to segregate waste properly.
9. The Operation and Maintenance Plan (O&M Plan) needs updating and to be followed as there are components of the approved Plan that are not being adhered to which is a violation of Part E: Conditions Applying to Operation and Maintenance, Item 4, of the Water Licence N3L3-0570. It is understood from the 2010 Annual Report that the Hamlet will be reviewing the plan and updating it during this year. Hamlet Personnel need to be familiar with the approved O&M Plan and ensure it is implemented properly. A copy of the approved Plan needs to be onsite and readily available.
10. There were waste containers from the Water Treatment Plant operations present at the SWDF. Since these are containers for concentrated chemicals ensure they are rinsed and cleaned thoroughly prior to disposal.
11. Fuel and sewage tanks present at SWDF. They need to be empty so they don't cause further spills and sealed so there is no way for precipitation to infiltrate and cause problems.
12. Construction, demolition material present at SWDF and needs to be segregated (proper untreated wood items can be burned) and/or covered, to prevent danger to the public – There was wood with nails etc that would be easily accessible.
13. A Sewage Treatment Plan was due June 30, 2011 and has not been sent in to the Northwest Territories Water Board which is a violation of Part E: Conditions Applying to Operation and Maintenance, Item 2 of the Water Licence N3L3-0570.
14. At the time of Inspection the discharge quality was unknown but the Hamlet staff had sampled the sewage lagoon discharge on July 15, 2011. Sample results have since been provided and are well below discharge criteria which demonstrates that the Sewage Disposal Facility (SDF) is performing well. Sampling of the outflow of the SDF needs to occur once immediately after breakup and once prior to freeze-up during periods of open water, twice annually, as per Surveillance Network Program criteria Part B: General Conditions, Item 2, of the Water Licence N3L3-0570. (see Surveillance Network Program section)
15. A spill #11-205 – emergency release by the sewage trucks of about 34,000L of sewage occurred between the dates of May 21-23, 2011 when the access to the sewage lagoon for the Hamlet of Aklavik was inaccessible - washed out and closed due to flooding. The spill – emergency release was made to the Peel Channel of the Mackenzie River approx. 1 km down stream from the community and the airport. The spill was inspected and subsequently closed by Resource Management Officer III – Donald Arey on June 16, 2011.

While this incident can occur due to natural events there is a need for a Spill Contingency Plan with measures to handle this situation which would also include procedures in the Sewage Treatment Plan to reduce the need for an emergency release. The Hamlet is encouraged to be pro-active and prepare for the time of year when this type of event can occur. It is recommended to have mitigations in place prior to handling a flooding event such as this. This could include having extra sewage tanks for storage capacity and emptying sewage tanks on a daily basis prior to flooding season/event so capacity exists until the sewage lagoon is accessible again. There could be a designated bermed area the Hamlet could discharge into to allow filtration of the sewage before discharging into the river. These measures and others would allow the Hamlet to be in control during a flooding event rather than reacting to it. The Hamlet is encouraged to consult with the Water Resource Officer and the Northwest Territories Water Board about this issue.

### Notes:

- On September 9, 2011 the Hamlet Foreman – Dean Arey called to give an update: At the time of inspection the gated entrance and after hours drop off bin had been removed according to hamlet staff since it was too narrow for some large items, it was to be put back. The gate has been re-installed. A new sewage discharge chute has been installed
- A lot of work was done by the Hamlet to improve the Solid Waste Disposal Facility (SWDF). Fill has been placed over part of the bulk waste area, additionally it is now more spread out and has more crushed metal waste including vehicles (see Figure 3). Previously as of the last Inspection in September 2, 2010 an effort was made by the Hamlet to separate vehicles, crush them and put them in a designated cell. Waste vehicle cell filled with water, clear evidence of hydrocarbon contamination from vehicles and 2 new additions to waste vehicle cell area. Water samples were taken to find concentrations in water in amongst waste vehicle cell. Samples came back with below detection or low levels of oil present.

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## MUNICIPAL WATER LICENCE INSPECTION FORM

It was determined that the waste vehicles needed to be removed from the water and surface oil cleaned up as this is furthering contamination of the area. This was mentioned to the SAO during our site visit to the Solid Waste Disposal Facilities (SWDF) during the Inspection. Vehicles need to be above the water and it was discussed about them being on a gravel pad.

Vehicles etc have now been pulled from the flooded cell (see Figure 4). There is no longer a sheen/oil present in cell. There is an excavated ditch now connected to drain it.

- Many of the current waste cells have been covered over. Continue to operate the SWDF so waste cells continue to be properly maintained and capped. The location where the asbestos is buried needs to be on record and noted for future activities .
- It is understood from the 2010 Annual Report that the Hamlet is looking at a new location for the SWDF.
- Culvert was replaced on the gravel access road to the SWDF and the sewage lagoon. The ditch drainage for it has been cleaned out.
- New bermed area for honey bags noted on the left side of entrance to the SWDF.
- Construction debris, tires, fuel tanks, white metal waste(appliances) continue to be stored and efforts are being made to segregate. Ensure fuel tanks are emptied and valves are closed. To assist with this endeavour consult Government of the Northwest Territories - Environment and Natural Resources guidelines.
- Signs and fencing are being used to direct people where to dispose of various waste including household waste. Tires are being used to direct where to put waste appliances
- The Hamlet has designated a burn bin for burning approved materials. Reminder that municipal solid wastes that are conditionally suitable for open burning are paper products, paperboard packaging and untreated wood wastes according to the document from the GNWT Department of Environment and Natural Resources titled "Municipal Solid Wastes Suitable for Open Burning"
- Contaminated soil needs to be sent to a proper disposal facility or dealt with properly to ensure adequate remediation. There needs to be a liner under the contaminated soil with a berm to minimize the potential for migration of contaminants to the surrounding area. The presence of contaminated soil at the SWDF without proper containment is unacceptable and could lead to further contamination. Please note Part D: Conditions Applying to Waste Disposal, Item 7 and 8, of Water Licence N3L3-0570.
- **An Operation and Maintenance Plan is due June 30, 2012 for the Northwest Territories Water Board.**

### FUEL STORAGE

Owner:	Hamlet/GNWT-DPW	Operator:	GNWT-DPW	Condition of tanks:	A
Berms & Liners	N/A - double walled tank	Water within Berm:	N/A	Evidence of Leaks:	N/A
Drainage Pipes	A	Pump Station and Catchment Berm	N/A	Runoff Diversion	N/A
Pipeline Condition	A <sup>1,2</sup>	Not Applicable:	N/A		

### **Fuel Storage Comments:**

Concerns:

1. Still pipe hangers attached to Water Treatment Plant (WTP) building but supporting pipe on the fuel tank's side of the flex pipe (see Figure 5). The flex pipe is now showing signs of movement. It is questionable if this is appropriate because it does not appear that either the main building or the fuel tank are now fully independent of one another. Pipe hangers won't allow the pipe to move freely enough regardless of flex pipe being present. The piping set up should be repositioned so pipe hangers are attached to the fuel tank itself. This would allow the pipes of both the WTP and the fuel tank to move independently, if not there will be extra stress on the pipes and their connections which increases the risk of a spill. This is unacceptable since any spill would be going into the drainage, down the bank, and leading to the river where the water intake is located.
2. Chemical storage building has issues with the flex pipe from fuel tank piping to storage building. The flex pipe is twisted and pipe from the building is not straight which is causing issues (see Figure 6). This should be repaired and monitored to prevent a spill.

### SURVEILLANCE NETWORK PROGRAM

Samples Collected Hamlet	Samples were taken on July 15, 2011 from SNP 570-3 by Hamlet Foreman. <sup>2</sup>		
Samples Collected DIAND	None		
Signs Posted: SNP	SNP 570-3 sign present. SNP 570-1 was not inspected. No map submitted. <sup>1</sup>	Warning	No warning signs at Water Supply Facility, Sewage Disposal Facility and Solid Waste Disposal Facilities. <sup>3,4</sup>
Record & Reporting	A 2010 Annual Report was provided to the NWTWB on July 11, 2011 and the GLWB on May 9, 2011. Please note both reports were late after the April 30 deadline. - 2004, 2005, 2006, 2007, 2008, Annual Reports not received for Water Licence N3L3-0570 and are still due. The 2004 Annual Report has yet to be submitted for Water Licence G99L3-003. <sup>7</sup> - A Spill Contingency Plan has not been provided. <sup>5,6</sup>		
Geotechnical Inspection	N/A		

### **Surveillance Network Program Comments:**

Concerns:

1. Since SNP signage is no longer required for the Waste Facilities it is now necessary for the Hamlet to provide a map or drawing indicating the locations of the SNP sampling locations. In light of the recent workshop that occurred with the Northwest Territories Water Board in August 2011 there was a SNP map provided to the Hamlets and would fulfill the SNP map requirement by the Water Licence. The Hamlet has not provided a map; this is a violation of Part B: General Conditions, Item 4, in Water Licence N3L3-0570.
2. It is understood that the Hamlet staff sampled the sewage lagoon SNP-570-3 on July 15, 2011. Sample results have since been provided and are well below discharge criteria. Sampling is to be conducted once immediately after breakup and once prior to freeze-

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## MUNICIPAL WATER LICENCE INSPECTION FORM

up during periods of open water from the outflow (SNP 570-3) of the Sewage Disposal Facility. The Hamlet of Aklavik is required to conduct sampling twice annually as per the Surveillance Network Program criteria of Water Licence N3L3-0570.

3. It is noted there is a new Water Treatment Plant but a sign is still required to inform the public of Water Supply Facilities, and is a violation of Part B: General Conditions, Item 6, of Water Licence G99L3-003.

4. At the time of inspection the Solid Waste Disposal Facility and the Sewage Disposal Facility still needed a sign to be posted to inform the public, which is a violation of Part B: General Conditions, Item 5, in Water Licence N3L3-0570.

5. On February 1, 2010 a Spill Contingency Plan was due for the Gwich'in Land and Water Board and had not been provided which is a violation of Part F: Conditions Applying to Contingency Planning, Item 1, of Water Licence G99L3-003. Please note that this Plan can satisfy the requirements of both Water Licences. It is understood from the 2010 Annual Report the Hamlet is in the process of developing their Spill Plan for the community.

6. The Northwest Territories Water Board had not received a Spill Contingency Plan by June 30, 2010, which is a violation of Part E: Conditions Applying to Operation and Maintenance, Item 1, of Water Licence N3L3-0570. Please note that this Plan can satisfy the requirements of both Water Licences. The 2010 Annual Report stated the Hamlet is in the process of developing their Spill Plan.

7. Recently the Annual Reports have been provided for 2010 for both Water Licences and the Hamlet is to be commended for their efforts. There are a certain amount of outstanding reports and if data is limited, Annual Reports should be sent with what information is known so there are records available.

Annual reports are still required for 2004 – 2008 for Water Licence N3L3-0570, which is a violation of Part B: General Conditions, Item 1. An annual report is due for 2004 for Water Licence G99L3-003, which is a violation of Part B: General Conditions, Item 1.

Please note the requirements for the Annual Reports in both Water Licences. Each Annual Report needs to refer to the Water Licence number it is reporting on. It is permissible that one Annual Report could be submitted as long as the report acknowledges and satisfies the reporting requirements for both Water Licences.

When submitting an Annual Report for the Gwich'in Land and Water Board (G99L3-003) it needs to refer to the Water Licence number, state the year, and report on the other conditions required in the Licence: summary of modifications/maintenance work on the Water Supply Facilities, outline any spill training and communications exercises carried out, and any other details on water use requested by the Board by Nov. 1<sup>st</sup>. If no activity occurred or information is available please report this so the Board is kept informed.

### NON-COMPLIANCE/VIOLATIONS OF ACT OR LICENCE

#### Northwest Territories Water Board Licence - N3L3-0570

1. Part B: General Conditions, Item 1,

"The Licensee shall file an Annual Report with the Board not later than April 30th of the year following the calendar year reported..."

2. Part B: General Conditions, Item 4,

"The Licensee shall, within 60 days of the issuance of this Licence, submit to the Board for approval a map or drawing indicating the location of all Surveillance Network Program sampling stations."

3. Part B: General Conditions, Item 5,

"The Licensee shall, within 60 days of issuance of this Licence, post signs in the appropriate areas to inform the public of Waste Disposal Facilities. All postings shall be located and maintained to the satisfaction of an Inspector."

4. Part D: Conditions Applying to Waste Disposal, Item 9,

"The Licensee shall segregate and store hazardous Waste in a temporary storage area, to the satisfaction of an Inspector."

5. Part E: Conditions Applying to Operation and Maintenance, Item 1,

"The Licensee shall submit to the Board for approval by June 30, 2010 a Spill Contingency Plan in accordance with the Guidelines for Spill Contingency Planning, April 2007 developed by INAC-Water Resources Division."

6. Part E: Conditions Applying to Operation and Maintenance, Item 2,

"The Licensee shall submit to the Board for approval by June 30, 2011 a Sewage Treatment Plan..."

7. Part E: Conditions Applying to Operation and Maintenance, Item 4,

"The Licensee shall implement the Spill Contingency Plan, the Sewage Treatment Plan, and the Municipal Solid Waste Operations and Maintenance Plan as and when approved by the Board."

#### Gwich'in Land and Water Board Licence - G99L3-003

1. Part B: General Conditions, Item 1,

"The Licensee shall file an Annual Report with the Board not later than April 30th of the year following the calendar year reported..."

2. Part B: General Conditions, Item 6,

"The Licensee shall, within sixty (60) days of issuance of this Licence, post signs in the appropriate areas to inform the public of Water Supply Facilities. All postings shall be located and maintained to the satisfaction of an Inspector."

3. Part F: Conditions Applying to Contingency Planning, Item 1,

"The Licensee shall submit to the Board, within six (6) months of the issuance of the Licence, a Spill contingency Plan in accordance with the Guidelines for Spill Contingency Planning, April 2007 developed by INAC Water Resources Division."

Inspector's Signature: \_\_\_\_\_

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## MUNICIPAL WATER LICENCE INSPECTION FORM

### Inspection Images:



**Figure 1**

Engines noted beside the access road built in between the flooded cell and the bulk waste area. Ensure they are emptied of all their fluids. The presence of vehicles, parts etc. are a contamination issue when they have not been cleaned out of their fluids properly.



**Figure 2**

Ensure that the hazardous waste storage area is organized and materials stored properly. Ensure hazardous waste is stored in an area at the SWDF with a berm constructed around it to provide better containment.



**Figure 3**

Fill has been placed over part of the bulk waste area, additionally it is now more spread out and has more crushed metal waste including vehicles.



**Figure 4**

Vehicles etc have now been pulled from the flooded cell. There is no longer a sheen/oil present in cell.



**Figure 5**

Pipe hangers supporting on the wrong side of the flex pipe and it is now showing signs of movement. It does not appear that either the main building or the fuel tank are now fully independent of one another and won't allow the pipe to move freely enough. The piping set up should be repositioned so pipe hangers are attached and suspended from the fuel tank itself.



**Figure 6**

Chemical storage building has issues with the flex pipe from fuel tank piping to storage building. The flex pipe is twisted and pipe from the building is not straight which is causing issues. This should be repaired to be pro-active and monitored to prevent a spill.