DEPARTMENT OF ENVIRONMENT

Chemical Storage Report
Wellfield Protected Area Designation Order

Name of Applicant:
Site Address:
Site Property Identification Number:
Date:
DENV File Number:

- CHEMICAL EVALUATION REPORT

  A report prepared by a Registered Professional Engineer or Geoscientist prior to an exemption being issued which includes 1) an evaluation of the chemicals which are the subject of the exemption application in accordance with the Department of Environment Chemical Assessment Process and, 2) any mitigative measures that are in-place, or are required to prevent the release of any chemicals, to limit the impact of a release, and to monitor the storage and handling of same.

- ANNUAL AUDIT REPORT

  A report prepared by a Registered Professional Engineer or Geoscientist, which indicates any mitigative measures that are in-place, or are required to prevent the release of any chemicals, to limit the impact of a release, and to monitor the storage and handling of same. Such a report may be required prior to or after the issuance of an exemption. Where necessary, the report should state that the mitigative measures that are in-place or have been adopted are acceptable.

CHEMICAL STORAGE WITHIN WELLFIELD PROTECTED AREAS

Section 14 of the *Clean Water Act* provides the Minister of the Department of Environment (Minister) with the authority to make an Order designating, as a protected area, all or any portion of the groundwater recharge area of a municipal wellfield. Pursuant to that section, the *Wellfield Protected Area Designation Order – Clean Water Act* (Order) came into force on October 1, 2000.

The Order provides standards for facilities that store chemicals within designated wellfield areas for the purpose of protecting the quality and quantity of drinking water. The Order subdivides each designated municipal wellfield area into Zone A, Zone B and Zone C. Zone A lies closest to the wellhead and therefore requires the greatest protection. The Order prohibits any activity, thing or use that is not expressly permitted in a designated wellfield.

The Order permits chemical storage on parcels of land located within Zones A, B and C as outlined in Schedule C of the Order. Existing and new chemical storage facilities that exceed the permitted quantities may require an exemption. Section 14.1 of the *Clean Water Act* allows the Minister to grant exemptions to persons who cannot comply with the Order.

For all initial exemption requests to the Minister, the applicant must acquire a Chemical Evaluation Report prepared by a Registered Professional Engineer or Geoscientist in the Province of New Brunswick. Thereafter, the applicant may require an Annual Audit Report, also prepared by a Registered Professional Engineer or Geoscientist in the Province of New Brunswick. The format of these reports is shown in the following six sections. The information requested in the following sections is the minimum level of information required by the Minister for both reports.

This form can be downloaded from the Province of New Brunswick web site at:
http://www.gnb.ca/environment

Hard copies of this form are available by mail from:

Wellfield Protection Program -Sustainable Planning Branch
NB Department of Environment
20 McGloin St, 3rd floor,
Fredericton N.B.
or phone: (506) 457-4846.

PART 1 of 6: PROPERTY INFORMATION

A. SITE LOCATION		
Municipality:		
Civic Address:		
Subject Facility PID Number(s):		
Wellfield:		
Zone A	B	C

B. CONTACT INFORMATION	
Owner:	
Mailing Address:	
Telephone : Home:	Bus:
Fax:	
Safety Coordinator:	
Telephone : Home:	Bus:
Fax:	

C. DESCRIPTION OF LAND USE Briefly describe the current use of the property.

PART 2 of 6: ENVIRONMENTAL DOCUMENTATION

A. ENVIRONMENTAL ASSESSMENT
Have any environmental investigations been carried out at the subject facility? Yes No
If yes, please complete section B

B. MANAGEMENT OF CONTAMINATED SITES
As a result of the environmental assessment, has there been any site remediation required?
Yes No
When:
If yes, has the site been remediated and a Record of Site Condition submitted?
Yes No
Date:
Has a Record of Site Condition been accepted by DENV?
Yes No
Date:
DENV Remediation File Number:

PART 3 of 6: STORAGE METHODS

The following sections provide specific details on the facilities chemical storage practices. Additional details (if required) should be attached to this Application along with the required Site Plan and Site Contingency /Emergency Response Plan.

History of Facility:(Provide a brief history of the facility and the storage of chemicals)

Site Infrastructure: (Provide details on the chemical storage system including details on containment , underground services,piping if any, etc.)

Site Operations:(Provide details on the daily operation of the storage facility including volumes of material entering and leaving facility)

Product Inventory Control Measures: (Provide details on the operational procedures in place to manage inventory)

Chemical Disposal (Provide details on disposal practices including types of chemicals diposed, volumes , and method(s) of disposal)

- Site Plan (attached) should show physical layout of the facility, the location and contents of each chemical storage area, underground services, and secondary containment (where applicable).

- Are there any floor drains, water wells or existing and abandoned/decommissioned monitor wells on site? Yes □ No□

  If yes describe in detail and provide a site map illustrating the location of each.

  _____
  _____
  _____
  _____
  _____
  _____

- Site Contingency/Emergency Response Plan (attach a copy of the Site Contingency/Emergency Response Plan). Refer to Appendix A for further details.

PART 4 of 6: INVENTORY of STORED CHEMICAL PRODUCTS

The permitted amount of chemicals within a wellfield protected area are shown in the table below. In this section, the Proponent must report all products/chemicals that exceed the permitted amounts. Department of Environment personnel will review this list and, if necessary, some or all of the chemicals listed may require further assessment in accordance with the Chemical Assessment Process as outlined in the Policy on Chemical Storage within a Designated Wellfield Protected Area.

SCHEDULE C (Regulation 2000-47 Clean Water Act)			
	Zone A	Zone B	Zone C
Acetone	10	15	100
Benzene	10	15	100
Bromoform	10	15	100
Ethylene glycol	5	15	100
Varsol	10	65	500
Methyl alcohol	5	50	100
Toluene	10	15	50
Xylenes	10	15	50
Phenol	0	0	0
Polychlorinated biphenyls	0	0	0
Chloroform	0	0	0
Chlorodibromomethane	0	0	0
Dichloroethane	0	0	0
Dichloromethane	0	0	0
Perchloroethylene	0	0	0
Trichloroethane	0	0	0
Trichloroethylene	0	0	0
All Other Chemicals*	20	50	100

*In this Schedule, "All Other Chemicals" means all chemicals that are not permitted, with or without conditions, in Schedule B attached with this Schedule, and are not referred to elsewhere in this Schedule.

All products on site **must** be reported using either Table A and/or Table B. For example, if a specific product contains only the chemicals listed in Table A, then this table must be used. However, should a product contain chemicals not listed in Table A, then Table B should be used. In the event a product contains some of the chemicals listed in Table A plus other chemicals, Table A should be used.

A. INVENTORY of CHEMICALS per PARCEL (Schedule C Regulation 2000-47 Clean Water Act)				
Product	Chemical Constituent	Volume on site** (litres)	Annual volume (litres)	Exceedance Y/N
	Acetone			
	Benzene			
	Bromoform			
	Ethylene glycol			
	Varsol			
	Methyl alcohol			
	Toluene			
	Xylenes			
	Phenol			
	Polychlorinated biphenyls			
	Chloroform			
	Chlorodibromomethane			
	Dichloroethane			
	Dichloromethane			
	Perchloroethylene			
	Trichloroethane			
	Trichloroethylene			

**Maximum quantity of chemicals at any one time.

B. INVENTORY of ALL OTHER CHEMICALS per PARCEL (Schedule C Regulation 2000-47 Clean Water Act)				
Product	Chemical Constituent	Volume on site**	Annual Volume	Exceedance Y/N

**Maximum quantity of chemicals at any one time.

C. COMPOUND(S) BACKGROUND INFORMATION
Key information on the Compound(s) for which exemption is being requested is contained on the MATERIAL SAFETY DATA SHEETS (MSDS) of each compound. Are MSDS available for all Schedule C chemicals? Yes □ No□ Are MSDS current? Yes □ No□ Are MSDS accessible to all users of the laboratory facilities? Yes □ No□ Copies of all current MSDS to be appended to initial Chemical Report and updated as required.

PART 5 of 6: OPERATIONS/INVENTORY MANAGEMENT

A. ENVIRONMENTAL MANAGEMENT SYSTEM		
Does facility have an environmental management system in place?	Yes □	No□
Has the system been audited?	Yes □	No□
Most recent Audit _____		
List corrective measures identified during audit.		
_____		
_____		
_____		
_____		
_____		
Have corrective measures been implemented?	Yes □	No□

B. STANDARD OPERATING PROCEDURES (SOPs)		
Does facility have SOPs for:		
(i) Receiving of Chemicals	Yes □	No□
(ii) Handling of Chemicals	Yes □	No□
(iii) Storage of Chemicals	Yes □	No□
(iv) Shipping of Chemicals	Yes □	No□
(v) Disposal of Chemicals	Yes □	No□
Are the SOPs audited regularily for compliance?	Yes □	No□
Do all employees have easy access to SOPs?	Yes □	No□

C. RECORD KEEPING All facilities must be able to provide annual reports. Records must be maintained for any repairs, sampling and testing, groundwater monitoring, and inventory control.

Are records of chemical inventory available for previous 12 months?
Yes □ No□

Do records indicate any uncontrolled release of chemical product in last 12 months?
Yes □ No□

If yes, describe uncontrolled release.

_____
_____
_____
_____

Has uncontrolled release been reported to DENV? Yes □ No□

Has uncontrolled release been addressed? Yes □ No□

D. SITE CONTINGENCY/EMERGENCY RESPONSE PLANS

Does the facility have a site contingency / emergency response plan that meets the minimum requirements as set out in Appendix A Yes □ No□

Comments:

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_____
_____
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Part 6 of 6: SUMMARY STATEMENT BY SITE PROFESSIONAL

Based on the available documentation and information for the facility, the undersigned Site Professional states that:

1. The chemical storage and associated infrastructure are in satisfactory condition.
□ Yes □ No

2. The practices of chemical delivery, handling, storage, utilization and transfer are consistent with the protection of the ground and groundwater from contamination.
□ Yes □ No

3. No further actions are required to reduce the risk of ground and groundwater contamination to acceptable levels.
□ Yes □ No

4. The chemical storage and associated infrastructure are in full compliance with all applicable laws, standards and regulations.
□ Yes □ No

If the answer to any of the above questions is no, please detail the deficiencies and recommended corrective action(s) in the table below:

Deficiency	Recommended Corrective Action(s)

Signature: _____ Date: _____

Name:
APEGNB Membership No:
Company:
Address:
Professional seal

Statement of Limitations

(Please provide a Statement of Limitations associated with the work undertaken in the preparation of this report)

_____
_____
_____
_____

Appendix A

SITE CONTINGENCY/EMERGENCY RESPONSE PLANS

All facilities requesting exemption must implement a Contingency /Emergency Response Plan which will be activated immediately upon detection of a chemical product release**.** The plan must have the full approval of management at a level of authority to commit the necessary resources to fully implement the provisions of the plan.

As a minimum the plan **must** contain:

- Outline of the type of chemical product in each container and its storage capacity.
- Release prevention measures, including procedures for the routine handling of products. Complete discussion of conformance with the applicable requirements and other effective release prevention and containment procedures.
- Confirmation that personnel have been trained in the operation and maintenance of equipment to prevent discharges, discharge procedure protocols, and applicable environmental laws and regulations.
- Confirmation that personnel are familiar with general facility operations and with the contents of the facility Contingency/Emergency Response Plan
- Confirmation that a person (name) has been designated to be accountable for discharge prevention and reports to facility management.
- Contact list and phone numbers for the facility response coordinator, cleanup contractors with whom agreements are in place to respond, and all appropriate federal, provincial, and municipal agencies who must be contacted in case of a release.
- Information and procedures for a person reporting a release to relate information about:
    - Exact address or location and phone number of the facility.
    - Date and time of the discharge.
    - Type of chemical product discharged.
    - Estimates of the total quantity discharged.
    - Source of the discharge.
    - Actions used to stop, remove, and mitigate the effects of the discharge.

- Appropriate spill containment, diversionary structures, or other equipment are provided and discussed.

All plans must contain a commitment by the Applicant to provide the required manpower, equipment, and materials to expeditiously control and remove any quantity of petroleum product released that may be harmful to human health or the environment. The plan should be prepared in accordance with good engineering practices.