



GOVERNMENT OF
NEWFOUNDLAND AND LABRADORGovernment of Environment and Climate Change

CERTIFICATE OF APPROVAL

Pursuant to the Environmental Protection Act, SNL 2002 c E-14.2 Section 83

Issue Date: ***October 20, 2022***

Approval No. AA22-105693A

Amendment: *May 02, 2023*

File No. 731.632.01

Proponent:

Vale Newfoundland & Labrador Limited
KMK Place, 2nd Floor
18 Hebron Way
St. John's, NL
A1A 0L9

Attention:

Mr. Jared Saunders, Environment Superintendent

Re:

Voisey's Bay Temporary Diesel Generator Units

Approval is hereby given for: the temporary installation and operation of 40 prime power diesel generator units at three locations at Voisey's Bay, Labrador.

This Certificate of Approval does not release the proponent from the obligation to obtain appropriate approvals from other concerned provincial, federal and municipal agencies. Nothing in this Certificate of Approval negates any regulatory requirement placed on the proponent. Where there is a conflict between conditions in this Certificate of Approval and a regulation, the requirement in the regulation shall take precedence. Approval from the Department of Environment and Climate Change shall be obtained prior to any significant change in the design, construction, installation, or operation of the Voisey's Bay Temporary Diesel Generator Units, including any future expansion of the works. This Certificate of Approval shall not be sold, assigned, transferred, leased, mortgaged, sublet or otherwise alienated by the proponent without obtaining prior approval from the Minister.

This Certificate of Approval is subject to the terms and conditions as contained therein, as may be revised from time to time by the Department. Failure to comply with any of the terms and conditions may render this Certificate of Approval null and void, may require the proponent to cease all activities associated with this Certificate of Approval, may place the proponent and its agent(s) in violation of the *Environmental Protection Act*, and will make the proponent responsible for taking such remedial measures as may be prescribed by the Department. The Department reserves the right to add, delete or modify conditions to correct errors in the Certificate of Approval or to address significant environmental or health concerns.

For **MINISTER**

TERMS AND CONDITIONS FOR APPROVAL No. AA22-105693A

May 02, 2023

General

1. This Certificate of Approval is for the temporary installation and operation of 40 prime power diesel generator units at three locations, as outlined in Table 1, at Voisey's Bay in Labrador. Future adjustments to the number or rating of the temporary diesel generator units or change of activities or change or addition of locations where these units are to be installed and operated may require a separate Certificate of Approval or an amendment to this Certificate of Approval.

Table 1 – List of Temporary Diesel Generator Units (TDGU) – Voisey's Bay						
Genset #	Make/Model	TDGU Rating	EDMS Location	Rental Unit #	Date of Engine Manufacture	Date of Installation (Date of Commissioning, if different)§
<i>Eastern Deeps Generator Pad</i>			00684			
01	Aggreko / GN1500CWEC48	1.5MW		XBXS008	22/12/2011	Dec 2020
02	Aggreko / GN1000CWEC48	1MW		XBHG 009	19/05/2011	Aug 2018
03	Aggreko / GN1500CWEC48	1.5MW		XBXS 011	19/02/2016	Dec 2020
04	Aggreko / GN1500CWEC48	1.5MW		XBTE 008	02/09/2011	Sep 2022
05	Aggreko / GN1000CWEC48	1MW		XBHG 015	26/05/2011	Aug 2019
06	Aggreko / GN1500CWEC48	1.5MW		XBXS 010	07/06/2011	Aug 2019
07	Aggreko / GN1000CWEC48	1MW		TBD	TBD	TBD
08	Aggreko / GN1500CWEC48	1.5MW		XBXS 009	23/12/2011	Dec 2020
09	Aggreko / GN1000CWEC48	1MW		XBHG 018	07/06/2011	Aug 2018
10	Aggreko / GN1000CWEC48	1MW		XBHG 008	21/04/2011	Mar 2021
11	Aggreko / TBD	1.5MW		TBD	TBD	TBD
<i>Reid Brook Portal</i>			00685			
01	Aggreko / GN1000CWEC48	1MW		XBHG 019	30/06/2011	Aug 2020
02	Aggreko / GN1000CWEC48	1MW		XBHG 016	01/06/2011	Mar 2020
03	Aggreko / GN1000CWEC48	1MW		XBHG 001	11/09/2009	Aug 2018
04	Aggreko / GN1500CWEC48	1.5MW		XBXR 316	19/11/2014	Aug 2022
05	Aggreko /	1MW		XBHG 007	19/02/2016	Apr 2020

	GN1000CWEC48					
06	Aggreko / GN1500CWEC48	1.5MW		XBNT 084	07/10/2010	Aug 2022
07	Aggreko / GN1000CWEC48	1MW		XBHG 002	06/05/2011	Aug 2021
08	Aggreko / GN1000CWEC48	1MW		TBD	TBD	TBD
09	Aggreko / TBD	1MW		TBD	TBD	TBD
10	Aggreko / TBD	1MW		TBD	TBD	TBD
<i>Reid Brook Surface Facilities</i>			00746			
01	Aggreko / GN1500CWEC48	1.5MW		XDAB 001	23/05/2016	Nov 2020
02	Aggreko / GN1500CWEC48	1.5MW		XBXS 012	03/05/2016	July 2022
03	Aggreko / GN1500CWEC48	1.5MW		XBXS 004	14/12/2011	Sept 2020
04	Aggreko / GN1000CWEC48	1MW		XBHG 006	16/12/2010	Sept 2021
05	Aggreko / TBD	1.5MW		TBD	TBD	TBD
06	Aggreko / TBD	1.5MW		TBD	TBD	TBD
<i>South Camp Generators Area</i>			00930			
01	Aggreko / GN1000CWEC48	1MW		XBVK 004	29/09/2011	Feb 2020
02	Aggreko / GN1000CWEC48	1MW		XBVK 002	26/08/2011	Apr 2023
<i>KM 2.2 Laydown Area</i>			00931			
01	Cummins / GHP/QSM11-G2 Nonroad 2	300KW		XARE 009	02/05/2006	Apr 2023
<i>Spare Generators that are not operating and may be brought into service to replace others</i>						
01	Aggreko / GN1000CWEC48	1MW		XBHG 010	04/04/2011	Aug 2018
02	Aggreko / GN1000CWEC48	1MW		XBHG 014	19/05/2011	Aug 2019
03	Aggreko / GN1500CWEC48	1.5MW		XBXS 013	29/07/2016	Aug 2019
04	Aggreko / GN1000CWEC48	1MW		XBHG 004	15/10/2010	Aug 2019
05	Aggreko / GN1000CWEC48	1MW		TBD	TBD	TBD
06	Aggreko / GN1000CWEC48	1MW		TBD	TBD	TBD
07	Aggreko / GN1000CWEC48	1MW		TBD	TBD	TBD
08	Aggreko / GN1500CWEC48	1.5MW		TBD	TBD	TBD
09	Aggreko / GN1500CWEC48	1.5MW		TBD	TBD	TBD
10	Aggreko /	1.5MW		TBD	TBD	TBD

	GN1500CWEC48					
NOTE:	§ Date of Installation (or Date of Commissioning if different) effectively means the date at which a particular temporary diesel generator unit in this Table is first used.					

2. Entries in Table 1 marked TBD shall be provided by **Vale** to the Department prior to the particular unit being put into service.
3. Certificate of Approval AA22-105693 is revoked and replaced by this Certificate of Approval.
4. Any inquiries concerning this Approval shall be directed to the St. John's office of the Pollution Prevention Division [telephone: (709) 729-2556; or facsimile: (709) 729-6969]
5. In this Certificate of Approval:
 - **Department** means the Department of Environment and Climate Change and its successors;
 - **DGSNL** means Digital Government and Service NL and its successors;
 - **EDMS** means Environmental Data Management System;
 - **GAP** means *Storage and Handling of Gasoline and Associated Products Regulations, 2003*;
 - **licensed** means has a Certificate of Approval issued by the Minister to conduct an activity;
 - **Minister** means the Minister of the Department;
 - **register(ed)** in the context of
 - storage tanks, means that information regarding the storage tank system has been submitted to a DGSNL office and a registration number has been assigned to the storage tank system; and
 - environmental site assessment and impacted site management work, means approved by the Department in accordance with departmental policy and guidelines;
 - **regulated substance** means a substance subject to discharge limit(s) under the *Environmental Control Water and Sewage Regulations, 2003*;
 - **Site Professional** means an individual who is registered with the Department to oversee environmental site assessment, remediation and contaminated site management work in Newfoundland and Labrador;

- **storage tank system** means a tank and all vent, fill and withdrawal piping associated with it installed in a fixed location and includes a temporary arrangement;
- **used glycol** means glycol that, through use, storage or handling, can no longer be used for its original purpose;
- **used oil** means oil that, through use, storage or handling, can no longer be used for its original purpose; and
- **Vale** means Vale Newfoundland & Labrador Limited.

6. All necessary measures shall be taken to ensure compliance with all applicable acts, regulations and guidance document, including the following, or their successors:

- *Environmental Protection Act;*
- *Water Resources Act;*
- *Air Pollution Control Regulations, 2022;*
- *Environmental Control Water and Sewage Regulations, 2003;*
- *Halocarbon Regulations;*
- *Storage and Handling of Gasoline and Associated Products Regulations, 2003;*
- *Used Oil and Used Glycol Control Regulations; and*
- *Guidance Document for the Management of Impacted Sites.*

This Approval provides terms and conditions to satisfy various requirements of the above listed acts, regulations and guidance document. If it appears that all of the pertinent requirements of these acts, regulations and guidance document are not being met, then a further review of the works shall be conducted, and suitable pollution control measures may be required by the Minister.

7. All reasonable efforts shall be taken to minimize the impact of the operation on the environment. Such efforts include:

- minimizing the area disturbed by the operation,
- minimizing air, water or soil pollution,
- finding alternative uses, acceptable to the Department, for waste or rejected materials,
- removing equipment or structures when they no longer have further use, and
- considering the requirement for the eventual rehabilitation of disturbed areas when planning the development of any area on the facility property.

8. **Vale** shall provide to the Department, within a reasonable time, any information, records, reports or access to data requested or specified by the Department.

9. **Vale** shall keep all records or other documents required by this Approval at the Voisey's Bay site for a period of not less than three years, beginning the day they were made. These records shall be made available for review by officials of the Department or DGSNL when requested.

10. Should **Vale** wish to request either an amendment of this Certificate of Approval or a temporary deviation in any way from the terms and conditions of this Certificate of Approval, a written request detailing the proposed amendment or deviation shall be made to the Department. **Vale** shall comply with the most current terms and conditions until the Department has authorized otherwise in writing. In the case of meeting a deadline requirement, the request shall be made at least 60 days ahead of the applicable date as specified in this Approval or elsewhere by the Department.

Waste Management

11. All waste generated at the locations on site where these temporary diesel generator units are approved to operate is subject to compliance with the ***Environmental Protection Act***. In this context waste shall be handled in accordance with the Voisey's Bay Waste Management Plan and other applicable requirements as per Certificate of Approval AA20-055659C and/or the applicable requirements of Certificate of Approval LB-WMS22-01024O, and their successors.

Emergency Response Plan

12. The existing Voisey's Bay Emergency Response Plan shall be implemented to address any spills or leaks that occur during the installation, operation and maintenance of these temporary diesel generator units and associated fuel storage tank systems and equipment. If necessary the Emergency Response Plan shall be amended and if the revisions are significant they shall be submitted to the Department for review.

Noise

13. Efforts shall be made to minimize and control noise resulting from the operations and maintenance of the 40 temporary diesel generator units at Voisey's Bay.

Spill and Leak Prevention and Containment

14. All on site storage of petroleum directly associated with the temporary diesel generator units shall comply with the ***Storage and Handling of Gasoline and Associated Products Regulations, 2003***, or its successor. Storage tank systems shall be registered with DGSNL.
15. Where applicable, all tanks and fuel delivery systems shall be inspected to appropriate American Petroleum Institute or Underwriters' Laboratories of Canada standards, or any

other standards acceptable to this Department. The required frequency of inspections may be changed at the discretion of the Department.

Rehabilitation and Closure

16. As part of the site decommissioning and restoration process, **Vale** shall employ a registered Site Professional to complete a site-wide environmental site assessment, as defined in the ***Guidance Document for the Management of Impacted Sites***. Should impacts be identified, **Vale** shall proceed through the process outlined in the Guidance Document to achieve regulatory site closure.

Fuel Consumption

17. **Vale** shall maintain, and submit to the Department, on a monthly basis, as per the ***Reporting*** section, the daily combined consumption of distillate fuels combusted by all of the temporary diesel generating units operating at each of the following approved locations:
 - Reid Brook Portal;
 - Reid Brook Surface Facilities;
 - Eastern Deeps Generator Pad
 - South Camp Generators Area; and
 - KM 2.2 Laydown Area.

Used Oil and Used Glycol

18. Used oil and used glycol shall not be mixed and shall be stored in separate:
 - closed containers;
 - registered tanks; or
 - tanks that have an active Approval from DGSNL.
19. Where greater than 205 litres of used oil or used glycol is stored in one or more containers, the storage shall require approval from the Department or DGSNL.
20. Used oil and used glycol shall be disposed of by a company licensed for the handling and disposal of such products.
21. Information on used oil and used glycol that is generated by the temporary diesel generator units shall be submitted to the Department for review by ***January 31*** of each year. This shall include a description of the:

- type(s) of oil and/or glycol used;
- approximate total volume of used oil and/or used glycol generated during the previous year; and
- method of disposal for the used oil and/or used glycol.

Ambient Air

22. Pending the results of any ambient air monitoring, stack emission testing, and/or dispersion modeling, the Department may require that **Vale** take measures deemed necessary to ensure the requirements of the *Air Pollution Control Regulations, 2022* are being met.

Annual Air Emissions Reporting

23. **Vale** shall submit an annual temporary diesel generator units Air Emission Report to the Department, as per the *Reporting* section, by **June 1** of the subsequent year. The report shall include the:

- estimated annual emissions of the following flue gas constituents:
SO₂, NO_x, CO₂, CO, TPM and PM_{2.5}; and
- actual calculations including factors, formulae and/or assumptions used.

Monitoring Alteration

24. Although a monitoring program is not part of this Approval, the Department may require a monitoring program when it is the judgement of the Department that:

- pollutants might be released to the surrounding environment without being detected, or
- an adverse environmental effect may occur.

Reporting

25. Monthly reports containing the environmental compliance monitoring information required in this Approval shall be received by the Department in digital format within 30 calendar days of the reporting month. All related laboratory reports shall be submitted with the monthly report in Extensible Markup Language (XML) format and Adobe Portable Document Format (PDF). Digital report submissions shall be uploaded through the EDMS web portal.

26. Each monthly and annual report shall include a summary of all environmental monitoring components and shall include an explanation for the omission of any requisite data. The monthly and annual summary reports shall be in Microsoft Word or Adobe PDF and shall be uploaded through the EDMS web portal with the data submissions.
27. All incidents of:
 - Emergency response activities for oil or hazardous materials spills associated with the operation of the temporary diesel generator units listed in Table 1; or
 - non-conformance of any condition within this Approval; or
 - a spill or leak of any amount of a regulated substance; or
 - verbal or written complaints of an environmental nature received from the public by **Vale** and related to the operation of the diesel generating units, including complaints submitted anonymously;

shall be immediately reported, within one working day, to the Department.

A written comprehensive incident report including a detailed description of the incident, a summary of contributing factors, and an Action Plan to prevent future incidents of a similar nature, shall be prepared. The report shall include a description of actions already taken and future actions to be implemented, and shall be submitted to the Department within 30 days of the date of the initial incident.

28. Any:
 - spill of gasoline or associated product in excess of 70 litres from a storage tank system, pipeline or vehicle; or
 - leak of gasoline or associated product in any amount from a storage tank system, pipeline, tank car or tank vehicle; or
 - spill of used oil or used glycol in excess of 70 litres from a storage tank system; or
 - leak of used oil or used glycol in any amount from a storage tank system;

shall be reported immediately through the Environmental Emergencies 24-hour report line at 1-800-563-9089.

Expiration

29. This Certificate of Approval expires **October 20, 2027**.
30. Should **Vale** wish to continue to operate any or all of the temporary diesel generator units listed in Table 1 beyond this expiry date, a written request shall be submitted to the Department for the renewal of this Approval. Such request shall be made prior to **April 20, 2027**.

cc: Ms. Julie Robbins
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