

## Sustainable Development

Environmental Stewardship Division
Environmental Approvals Branch
123 Main Street, Suite 160, Winnipeg, Manitoba, Canada R3C 1A5
T 204 945-8321 F 204-945-5229
www.gov.mb.ca/conservation/eal

File: 557.10

November 14, 2016

Mr. John Drapack Vale Canada Inc. 2060 Flavelle Boulevard Mississauga, ON L5K 1Z9

Dear Mr. Drapack:

Re: Vale Canada Incorporated – Environment Act Licence No. 960VC – Notice of Alteration – Thompson Concentrate Load Out Project

Receipt of your July 11, 2016 submission and November 8, 2016 Off Spec Material Handling Project Memo is acknowledged as a notice of alteration in accordance with Section 14 of *The Environment Act*.

The requested change to the Development as Licensed is the construction and operation of a dewatering plant, including a dry soda ash system, located within the mill facility's existing copper concentrate area and the construction and operation of a new copper concentrate load out facility located adjacent to the mill building at the Vale site.

The dewatering plant would include new facilities and equipment including a new dry soda ash system with wet scrubber, a high rate thickener and associated systems, filter press system, tanks, pumps and conveyors. The existing soda ash system will be decommissioned following commissioning of the new soda ash system.

The concentrate load out building will provide storage for a maximum of two days worth of dewatered nickel/copper concentrate, which meets material specifications, in two stockpiles of 1,000 tons of concentrate each. The concentrate load out building will be connected to the dewatering area and an excavator will be used to load the concentrate from within the building into trucks for transport.

The potential environmental effect of the requested change to the Development as Licensed is insignificant and considered to be a minor alteration in accordance with Section 14(2) of *The Environment Act*. Approval is hereby granted for the construction and operation of the dewatering plant and concentrate load out facility as described in the July 11, 2016 submission and November 8, 2016 Off Spec Material Handling Project Memo and subject to the following conditions:

- 1. The Licencee shall not cause or permit a noise nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.
- 2. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
- 3. The Licencee shall limit fugitive emissions from any source within the mine site such that:
  - a) distinct plume forming fugitive emissions do not exceed an opacity of 5%; and
  - b) non plume forming fugitive emissions are not visible at any time; when measured or viewed in the atmosphere at any point beyond the mine site in an area zoned commercial or residential.
- 4. The Licencee shall ensure that at any downwind point of impingement of air emissions off the property of the Development, ground level concentrations of suspended particulate matter (SPM) are not in excess of the corresponding limits for any of the listed measurement criteria:

Air Pollutant	Measurement Criteria	<u>Limits</u>
SPM	24-hour average	120 micrograms/cubic metre
SPM	200 00 00 00 00 00 00 00 00 00 00 00 00	70 micrograms/cubic meter
as determined from any ambient air sample or samples collected and analyzed in accordance		
with procedures and methods satisfactory to the Director, and corrected to a reference		
temperature of 25 degrees Celsius and a reference pressure of 101.3 kilopascals (760 millimeters of mercury).		

- 5. The Licencee shall restrict the storage of nickel/copper concentrate material which meets specifications to a maximum stockpile of no more than 2,000 tons at any time and shall store and contain the material within the concentrate storage and load out facility.
- 6. The Licencee shall restrict the storage of all nickel/copper concentrate material which does not meet specifications to a maximum stockpile of no more than 2,000 tons at any time and shall store and contain the material only within the VBN Receiving Building, the smelter intermediate storage area and/or thaw shed.
- 7. The Licencee shall transport all nickel/copper concentrate material in covered containers in such a manner to prevent loss of concentrate material to the environment to the satisfaction of an Environment Officer.
- 8. The Licencee shall, in order to prevent the spreading of nickel/copper concentrate material to the environment:
  - a) prepare a detailed plan to clean and maintain all vehicles and equipment used to handle and/or transport nickel/copper concentrate material;
  - b) submit the plan to the Director on or before March 31st, 2017; and
  - c) implement the plan as approved by the Director.
- 9. The Licencee shall dispose of all solid waste generated at the Development, which is not recycled, only to a waste disposal ground operating under the authority of a permit issued

pursuant to Manitoba Regulation 37/2016 respecting Waste Management Facilities or any future amendment thereof, or a Licence issued pursuant to The Environment Act.

- 10. The Licencee shall comply with all the applicable requirements of:
  - a) The Manitoba Dangerous Goods Handling and Transportation Act, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development;
  - b) Manitoba Storage and Handling of Petroleum Products and Allied Products Regulation 188/2001, or any future amendments thereto; and
  - c) the Office of the Fire Commissioner Province of Manitoba.
- 11. The Licencee shall install and maintain spill recovery equipment at the Development at all times.
- 12. The Licencee shall provide containment for all vessels containing chemicals in each area of the development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the National Fire Code of Canada (2010), or any future amendment thereof, such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater and surface water is prevented.
- 13. The Licencee shall collect, transport and store used oil or hydraulic fluids removed from onsite machinery in secure, properly labeled, non-leaking containers and shall regularly send them to a recycling or disposal facility approved to accept hazardous wastes.

## where:

"fugitive emissions" means particulate matter escaping from sources within the Development into the atmosphere other than through any of the emission stacks or vents;

"noise nuisance" means an unwanted sound, in an affected area, which is annoying, troublesome, or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to members of the public;

## if the unwanted sound

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b) or c) and the Director is of the opinion that if the unwanted sound had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household;

"odour nuisance" means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to members of the public;

if the odour, smell or aroma

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses a), b) or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b) or c) and the Director is of the opinion that if the odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household;

"particulate matter" means any finely divided liquid or solid matter other than water droplets;

"solid waste" means solid waste as defined in *Manitoba Regulation 37/2016*, or any future amendments thereto, respecting waste disposal grounds, excluding waste rock; and

"waste disposal ground" "means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with Manitoba Regulation 37/2016, or any future amendments thereto, or a Licence pursuant to *The Environment Act*.

If you have any questions, please contact Jennifer Winsor, P.Eng. at 204-945-7012.

Yours sincerely,

Tracey Braun, M.Sc.

Juney Beaun

Director

 c. Don Labossiere/Tim Prawdzik/Jeff Fountain – Environmental Compliance and Enforcement Branch, Manitoba Sustainable Development Jennifer Winsor – Environmental Approvals Branch, Manitoba Sustainable Development Dave McDonald - Vale Public Registries