



REGIONAL DISTRICT NORTH OKANAGAN

2020 Annual Report: Pottery Road Diversion and Disposal Facility

Ministry of Environment and Climate Change Strategy
Operational Certificate No. PR 15289

SUBMITTED TO:

Ministry of Environment and Climate Change Strategy, On-line Portal

PREPARED BY:

Dale Danallanko, Diversion and Disposal Facilities Operations Manager
Jim Schubert, P.Eng., Manager, Environmental Services
Jamie Jaffary, Engineering Technician

Submitted by:

Jim Schubert
Manager, Environmental Services

Reviewed and endorsed by:

Mike Fox
General Manager, Community Services

DATE:

February 2021

TABLE OF CONTENTS

1. INTRODUCTION 3

2. FACILITY OPERATIONS: 2020 3

3. CLOSURE 3

4. OPERATIONAL MONITORING/INSPECTIONS 4

5. ENVIRONMENTAL MONITORING..... 4

 5.1 2020 ANNUAL ENVIRONMENTAL MONITORING REPORT 4

 5.2 GROUND AND SURFACE WATER MONITORING RECOMMENDATIONS 4

6. FINANCIAL 5

ATTACHMENTS

ATTACHMENT A - 2020 Environmental Monitoring Report 6

1. INTRODUCTION

The Pottery Road Diversion and Disposal Facility (PRDDF) is located within Electoral Area 'B' in the Regional District of North Okanagan (RDNO) on Pottery Road, approximately 2 km east of the eastern boundary of the City of Vernon.

The legal description of the properties on which the PRDDF is situated is Lot 1, Plan 6531 and Lot 1 Plan 13751, Section 25, Township 9, Osoyoos Division Yale District. The site is approximately 12.6 hectares and served the City of Vernon, the District of Coldstream and the surrounding Electoral Areas ('B' and 'C') until it closed in 1986. Since 1984, RDNO managed the site under a 30 year Crown Lease (#331818) that expired in 2014 and was replaced with Lease #347347, expiring in May 2044. The location plan is presented as part of the 2020 Environmental Monitoring Report, Attachment A.

The works authorized are a closed landfill and related appurtenances.

2. FACILITY OPERATIONS: 2020

The Ministry of Environment Operational Certificate issued on January 21, 1998 (OC PR15289 (2)) specifies the maximum rate at which refuse may be discharged to the landfill as 0 tonnes/year.

The activities that took place at the PRDDF site in 2020 were periodic environmental monitoring by RDNO staff. The closure works as outlined in the Opus Dayton & Knight closure design were completed in the spring of 2015 and the right of way on the Wasylysyn property was purchased, allowing for the natural attenuation of the leachate plume west of the landfill footprint.

In 2018, the storm water diversion system was repaired to better control the increase in creek flow in the spring. An armoured swale was constructed to the east of the Fire Training Center (up-gradient) to divert creek water to a manhole.

3. CLOSURE

The final closure of the site was started in September 2014 and completed in May 2015 as per the design given conditional approval by the Ministry. The crown lease for the property was also renewed for another 30 years. The Fire Training Center onsite is leased to the City of Vernon. The closure included the following:

- Grading of slopes (except for the upper most bench that was not touched);
- Excavation of soil to the commencing layer and then addition of 300 mm of clay, 700 mm of variable fill and 150 mm of topsoil (fabricated from biosolids, sand and compost);
- Hydroseeding;
- Upgrading of the groundwater diversion system;

- Installation of a storm water management system;
- Installation of a passive landfill gas venting system; and
- Improved fencing and site security.

The landfill closure was funded for the most part by a \$1.8 million grant through the federal government Gas Tax Program.

4. OPERATIONAL MONITORING/INSPECTIONS

Other than the continued, ongoing environmental monitoring of the site by RDNO staff, maintenance of works, final closure and post-closure maintenance work, there are no future operational or capital plans for the PRDDF as it relates to solid waste management. The Post Closure Task Force determined that the preferred post closure use for the site should be recreational, specifically a disc golf course, trails and a bike skills park. This was endorsed by the Greater Vernon Advisory Committee and the Board of Directors.

5. ENVIRONMENTAL MONITORING

5.1 2020 ANNUAL ENVIRONMENTAL MONITORING REPORT

The Pottery Road Diversion and Disposal Facility, 2020 Environmental Monitoring Report, dated February 2021, prepared by Regional District of North Okanagan staff, is provided as Attachment A. The monitoring program is described and monitoring results are provided including the status of sampling points and recommendations for monitoring program improvements, where necessary.

5.2 GROUND AND SURFACE WATER MONITORING RECOMMENDATIONS

- a) Continue with the currently established sampling program, and assess trends of exceedances.
- b) Evaluate potential trends in Alkalinity, Ammonia, Arsenic, Cadmium, Chloride, Iron, and Manganese in 2021.
- c) Assess possible impacts and necessary changes to the Program due to landfill closure activities that took place late in 2014 and in 2015.
- d) Conduct the annual post closure inspection.

6. FINANCIAL

Approximately \$4,973 was spent on post closure environmental monitoring at the Pottery Road Diversion and Disposal Facility in 2020.

A Statutory Closure Reserve was established in 2010 for closure and post closure costs at all RDNO Diversion and Disposal Facilities. The balance in the Statutory Closure Reserve at the end of 2020 was approximately \$11,681,000. It is projected that the annual contribution to the Statutory Closure Reserve for 2021 will be approximately \$1,360,000.