

New Gold Rainy River Mine

**Environmental Assessment
Compliance Report
Reporting Period
January to December 2019**

Per Provincial Environmental
Assessment
Notice of Approval Condition 5
EA 05-09-02/EAIMS 13102

And

Per Federal Environmental Assessment
Decision Statement Condition 2.3



**BINDER 1 OF 2
AUGUST 27, 2020
Version 3**

newgoldTM Rainy River

Document Revision History

Revision	Revision Date	Purpose of Revision
1	March 31, 2020	2019 Annual Compliance Report
2	May 29, 2020	Updated as per MECP Comments received May 1, 2020.
3	August 27, 2020	Updated as per IAAC Comments received July 17, 2020.

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Figure 1 (Front Cover): Blue Heron Rookery on Highway 71 near Manitou Rapids May 2019

Figure 2: October Sunrise over the Mill 2019

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Executive Summary

The 2019 Annual Compliance Report covers the reporting period from January 1st to December 31st, 2019 for the New Gold Inc. (New Gold) Rainy River Mine.

The site is located within Chapple Township, approximately 65 kilometers northwest of Fort Frances in northwestern Ontario. In October 2017, the Rainy River Project transitioned from its construction phase to an operational phase known as Rainy River Mine.

To date, Rainy River Mine is an operational open pit mine producing approximately 250,000 ounces of gold annually. New Gold intends to pursue the opportunity to process higher grade ounces in the early years of production, while stockpiling lower grades for processing towards the end of the mine life with the intent of increasing cash flow and enhancing project economics.

The 2019 Rainy River Mine Environmental Assessment Compliance Report demonstrates New Gold's commitment to environmental performance and compliance with the Federal Environmental Assessment Decision Statement and in addition to satisfying reporting requirements for the Canadian Environmental Assessment Agency and the Ministry of Environment, Conservation and Parks.

This document has been created to meet the requirements of;

Provincial Environmental Assessment, Notice of Approval Condition 5 EA 05-09-02/EAIMS 13102; and the Federal Environmental Assessment Decision Statement Condition 2.3.

Key areas discussed in this report are; Aboriginal and community consultation, project development, reclamation activities, protection of fish and wildlife, migratory birds, health of Aboriginal peoples, site archaeology, heritage and cultural resources. This document also contains a summary of monitoring and research activities associated with water and air quality, wildlife and aquatic monitoring.



Figure 3 Elk in Field on HWY 617 October 2019.

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Acronyms

BMA	Bear Management Area
CEAA	Canadian Environmental Assessment Agency
CMP	Compliance Monitoring Plan
DFO	Department of Fisheries and Oceans
EA	Environmental Assessment
ECCC	Environment and Climate Change Canada
ECA	Environmental Compliance Approval
EMRS	East Mine Rock Stockpile
ERT	Emergency Response Team
FMP	Follow-up Monitoring Plan
LRIA	Lakes and Rivers Improvement Act
MDMER	Metal and Diamond Mining Effluent Regulation
ENDM	Energy of Northern Development and Mines
MNRF	Ministry of Natural Resources and Forestry
MECP	Ministry of Environment, Conservation and Parks
MRP	Mine Rock Pond
MSDS	Material Safety Data Sheets
NG	New Gold
PTTW	Permit to Take Water
PWQO	Provincial Water Quality Objectives
RRM	Rainy River Mine
SAR	Species at Risk
TK/TLU	Traditional Knowledge/Traditional Land Use
TMA	Tailings Management Area
WMP	Water Management Pond
WMRS	West Mine Rock Stockpile
STEAM	Science Technology and Math

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SECTION 1

NEW GOLD RAINY RIVER MINE

MINE UPDATE



Figure 4 Open Pit Mine July 2019

1.0 Mine Update

The Rainy River Mine (RRM) site is located in the Township of Chapple, approximately 65 kilometers, Northwest of Fort Frances in Northwestern Ontario. Owned and operated by New Gold Inc (New Gold). Physical works related to the RRM consists primarily of:

- Open pit (current)
- Overburden, mine rock and low-grade ore stockpiles,
- Primary crusher and process plant (completed 2017),
- Tailings management area,
- 230 kilovolt transmission line (completed 2016),
- Relocation of a portion of gravel-surfaced Highway 600 (completed 2016), and
- Associated infrastructure, buildings and facilities, supported by related pipeline and power infrastructure as required.

Construction of the RRM began in February 2015 after the Environmental Assessment (EA) process was completed, the Closure Plan was filed and the environmental approvals necessary for the work proposed were obtained.

During 2019, construction continued with the completion and commissioning of the first lift of the Tailings Management Area (TMA).

The subsections that follow provide an overview of the activities conducted onsite during 2019.

Health and Safety

Health and Safety is a primary focus of the Rainy River Mine. Table 1 outlines the project statistics from 2015 to 2019.

Table 1: Rainy River Mine Safety Statistics

Description	2015	2016	2017	2018	2019
Lost Time Incidents	0	1	2	3	5
Hours Worked on Project	1,265,699	2,899,056	3,726,628	2,586,258	2,854,063
Completed Site Health, Safety & Environmental Orientations	2,500	3,200	4,328	2,719	3031

2019 Highlights and activities within the Health and Safety Department include;

- 3 Ministry of Labor visits, including industrial hygiene, no major findings
- There was 1,612,282 Lost Time Injury (LTI) Free Hours for the site.
- Successfully completed 1 year in the WSIB Safety Group, submitting 5 (five) elements of our H&S management system
- 1,026 000\$ back in adjustment for our WSIB premium for the last 3 years based on our very good H&S performance
- First participation in regional underground rescue competition, won first place for obstacle course.



Figure 5 Industrial Hygienic sampling near maintenance wash trailers

Construction

At Rainy River Mine, 2019 marked the fifth year of construction. During 2019, the following major construction projects were completed:

- Tailings Management Area (TMA) North Dam raise to elevation 371.5m;
- TMA South Dam raise to elevation 369.0m;
- TMA South Dam Seepage Collection System;
- TMA Fence Realignment;
- Sediment Pond 3 and West Mine Rock Stockpile Permanent Ditching;
- Water Treatment Plant;
- Cell 3 Tailings Pipeline;
- Upgrade to the existing and installation of two new hydrometric stations.

Projects initiated in 2019 and scheduled to be completed in 2020 include:

- Tailings Booster Pumping Station;
- Mining Fuel Farm;
- East Mine Rock Stockpile (EMRS) Wick Drains;
- Biochemical Reactor 2 (BCR2);
- Mill Dry and Office;
- Mobile Maintenance Truck Shop;
- On-site warehouse.

TMA construction activities for 2020 will include a raise of the South Dam to elevation 371.5m and the installation of a reclaim water barge system.

a) BCR1 overview



a) BCR1 discharge in treatment line



Figure 6: Biochemical Reactor 1

Mine Operations

Open pit operations were completed in Phase 1 during Q4 2019 with a final elevation being reached of 155m ASL. The development of Phase 2 of the open pit proceeded down to the 280m ASL elevation. The mine also delivered construction material to the Tailings Management Area to support construction of the dams and water treatment facilities. During 2019 Non-Acid Generating (NAG) rock from East Outcrop (a quarry source adjacent to the open pit) was mined to supplement the various construction projects across site. Due to the expansion of the open pit in 2020 no mining in East Outcrop will be required.

Mining in the open pit will continue in Phase 2 and Phase 3 during 2020. The amount of overburden to be mined during this period will be significantly less than previous years with the increase in rock quantities being mined. During 2019 the mining of the overburden reached the final stages to achieve the recommended slope angle for the overburden, this activity will continue around the full boundary of the open pit.

Figure X below is an aerial photograph of Phase 2 looking in a North Westerly direction showing a large portion of the area that will be mined during 2020. The overburden sloping will can be seen in the top right-hand corner of the photograph.



Figure 7: Open Pit Mine aerial imagery October 2019 with final pit shell in yellow

Human Resources

As of December 31, 2019, there were 812 employees of New Gold at Rainy River. In December 2018 there were 682 employees. During the year we hired 287 employees and off-boarded 157 employees for an overall increase of 130 employees. Of the 812 employees;

- 67% were hired from the Rainy River District
- 2% were hired from the Kenora District
- 18% were hired from other locations in Ontario
- 12% were hired from Provinces or Territories within Canada, other than Ontario
- 1% were hired from outside of Canada
- 25% of New Gold employees at Rainy River self-identified as Indigenous, with the majority from local communities or affiliations.
- 15% of New Gold employees at Rainy River are female

The majority of employees work within the mine department, followed by maintenance, mill, and general operations departments (including finance, supply chain, environment, human resources, community and health and safety).

Training

In 2018 we introduced the Line of Progression (LOP) for production employees in the Mine, Mill, Maintenance, and Construction which outlines the training requirements and compensation structure of all of our production positions. In 2019, we further refined the requirements for the LOP in the Mine and Mill to make it easier for employees to progress as well as provide additional flexibility for the operation.

As part of our Impact Benefit Agreements, a Career Development Officer was hired in 2019 to provide support and guidance to all employees on training and career development.

Major Projects

In 2019, the HR team completed several major initiatives. The first major project completed was the implementation of applicant tracking software, SuccessFactors. This software helped to streamline the application process as well as allow candidates to apply using mobile devices, which previously had not been an option.

The second was the introduction of a Rewards and Recognition program which is intended to facilitate positive interactions and acknowledge employees that positively contributed to the work environment through safety and environment, values and ethics or productivity improvements.

Lastly, the introduction of an updated performance appraisal that allows employees to perform a self-evaluation happened in late 2019. The revised appraisal was developed to provide better feedback and allow for alignment between the employee and supervisor.

In 2020, New Gold will be introducing a mental health initiative called “Not Myself Today” to encourage employees to talk about and reduce the stigma around mental health.



Figure 8 New Gold employee by a drill



Figure 9 Mill operators

Community

New Gold RRM in 2019. In New Gold's second full year of commercial production, tours of the site and facilities continued to be very popular. Tours were provided to the general public, business partners, school groups, local service organizations, neighbours, Indigenous community members and to families of employees.

New Gold RRM also distributed two newsletters throughout the local communities, mailed locally and emailed to communities outside of the local mail distribution. New Gold also participated in the Christmas Parades in Emo and Fort Frances, a Winter Carnival hosted by Riverview School and STEAM events at other local schools. New Gold hosted annual Spring and Fall Ceremonies at the site as well as a Renewal Ceremony to demonstrate commitment to Agreement commitments and a pipe ceremony at the site of the planned roundhouse; officiants were Elder Laura Horton at the Spring Ceremony and Elder George Boshkaykin at the Fall Ceremony. All ceremonies were attended by New Gold employees and members of local Indigenous communities.

New Gold RRM has various existing partnerships with Indigenous groups and continued to engage through Participation and implementation committee meetings, site visits, business development assistance, and participation in community events. The community team for Rainy River includes a Community Manager, Community Coordinators, a Business Development Officer and a Commitments Supervisor.

New Gold is proud of the numerous sponsorships and donations it makes to local communities. New Gold RRM supports initiatives that focus on education, arts & culture, environment and health and wellness. In 2019, some of the sponsorships and donations by New Gold RRM included;

- Sponsorship of the Tour de Fort Canadian Concert Series;
- Support for local community gardens and park enhancements;
- Donations to local food banks and community Christmas dinners;
- Support of local fishing events;
- Support for local community Pow Wows;
- Support of local Canada Day events;
- Sponsorship of local hockey clubs;
- Sponsorship of a youth summer program in the Township of Emo;
- Support and participation in Indigenous Art Workshops on making bannock and birch bark baskets.

New Gold RRM will continue to be responsive to communities, ensuring community members are engaged with New Gold.



Figure 10: Sturgeon Creek School STEAM night (Corey Lablans, Geology)



Figure 11– Fort Frances Christmas Parade (Marg Rousseau and Anne Marie Rousseau)

Environment

As the Rainy River Mine advances, the Environmental Department continues to find efficient and effective means for conducting required monitoring. This includes incorporating new tasks into the department's routine such as groundwater and ambient air quality monitoring, which will aid in future mine reclamation.

Important highlights of 2019 include the completion of the first phase of the process water treatment system, and the first operations' discharge. The ability to treat and discharge compliant process water is crucial to ensure the continued operations of the mine. In addition, the first stage of the Environmental Management System was completed, and implementation began in Q4 of 2019. Also of note for the year, is the implementation of the site water balance management, allowing greater control of water infrastructures.



Figure 12: TMA Water Quality Sample Collection, April 2019

New Gold continues to involve the community and local organizations with projects on site. The Stewardship Rangers were onsite July 25 and worked with the environment team on erosion control materials and invasive plant removal.

New Gold began planting various species in a trial plot design to address key uncertainties surrounding re-vegetation at closure. The list of species was developed based on consultation in 2019 with First Nations and with Regulators in 2018. The planting is planned to be finished in 2020.

In 2019 archeological artifact cataloguing, and preparation of the final archaeological assessment stage 4 excavation reports took place. In November of 2019, the final archaeological assessment stage 4 excavation report for Campbell 2 site was completed and submitted to the Ministry of Tourism, Culture and Sport for review. During 2019, the 2018 preliminary archaeological assessment excavation reports for Campbell sites were reviewed by the Archaeological Unit of the Ministry of Tourism, Culture and Sport and entered into the Ontario Public Register of Archaeological Reports. A copy of the final archaeological assessment report for the stage 4 excavation of Campbell 1 will be prepared in early 2020.



Figure 13 Vegetation trial plots following fall planting.

During 2019, the GIS Team continued to manage and advance the internal New Gold Rainy River Web GIS System (NGRR GIS); a distributed client/server GIS environment that provides instant access to latest and historical geospatial information to all New Gold employees and registered consultants (users) via web GIS and mobile applications. The team completed the consolidation and migration of existing critical environmental and other data to an enterprise GIS SQL Server Spatial Geodatabase (SDE) at the mine site and developed a backup and replication routine to mirror site server data to a local SDE for increased security and rapid data access.

Data in the Web GIS portal have been organized to logical groups and the overall performance of the web GIS system has been improved by implementing several updates and improvements to the software and the virtual server environment. Additionally, the team introduced the concept of live GIS data dashboards and created a pilot Wildlife reporting dashboard project designed for high-level status updates and also developed several new mobile server-database synchronized applications for field data collection including the air quality and waste removal field forms.

As a part of an ongoing annual geospatial survey program, the GIS team facilitated the collection and acquisition of high-resolution multispectral orthoimagery in the spring and the fall of 2019, LiDAR topographic survey along with ultra-high resolution aerial imagery survey of the entire site in late August of 2019, as well as a bathymetry survey of the tailings management area.



Figure 14: Enviro/GIS Crew UAV Selfie.

In 2019, several environmentally significant construction projects were completed:

- Marr Ditch diversion channel, reconnecting the upper Marr and Loslo creeks to the West Creek Diversion and Upper Pinewood Watershed:
- Diffuser at Effluent Discharge Location 1 (EDL1) at the Pinewood River downstream of the McCallum Creek confluence:
- An upgrade to the existing H1 hydrometric station on the Pinewood River near EDL1 (formerly Site 19) to provide real-time discharge measurement and water level data with an acoustic doppler instrument
- Installation of two new hydrometric stations with acoustic doppler instruments located upstream of site on the Pinewood River at Heatwole Rd (H2), and on the West Creek Diversion in the Box Culvert (H3):
- Dust cement was applied on Cell 2 exposed tailings beach to prevent dusting.

In addition to the above projects, the environmental team continues to monitor air quality, wildlife, water quality, and waste and hazardous waste. Inspections of all site areas are completed weekly and all non-compliances are reported immediately.



Figure 15: Release of bear rescued as cub at RRM (2018), October 2019



Figure 16: Barn swallow box near Teeple Road

In January 2015 both a Federal Environmental Assessment Decision Statement and a Provincial Environmental Assessment Notice of Approval were provided to New Gold for the Rainy River Mine.

Throughout 2015 to 2019 earthworks construction of dams, water diversion systems, roads, and commissioning of mining operations were advanced based various permits and approvals granted by both the Federal and Provincial Governments.

Table 2 provides a summary of the environmental approvals related to the Rainy River Mine.

Table 2: Rainy River Mine - Environmental Permits and Approvals

Agency	Type	Number	Description	Comments
Ontario Ministry of Environment, Conservation and Parks	Permit to Take Water	7430-AYEN78	Renewed Tailings Management Area Construction	Expired June 22, 2019.
		8101-AY8HT5	Renewed Construction Minor Takings	Expired June 22, 2019.
		2558-AJ7HXF	Renewed Tait Quarry	
		1386-9VTP2H	Aggregate Sources (OC3, OC4, Roen)	
		7631-9VULMS	Mine Dewatering	
	Environmental Compliance Approval	0412-A2LR4V	Air / Noise	Amended
		8567-9ZXG8U	Air / Noise	Superseded
		5178-9TUDP9	Operations	
Ontario Ministry of Natural Resources and Forestry	Location, Plans and Specifications Approval <i>Lakes and Rivers Improvement Act</i>	FF-2019-01	Effluent Mixing Structure and Hydrology Gauge	
		FF-2017-03	TMA Cell #2	
		FF-2017-02	Sediment Ponds	
		FF-2017-01	West Creek Natural Channel Temporary Bypass	
		FF-2016-02 FF-2016-02A	Culvert Crossing CPL15	
		FF-2015-08	Culvert C15	
		FF-2015-07	Pinewood River Intake / Outfall	
		FF-2015-05 FF-2015-05A	Mine Rock Pond	
		FF-2015-04 FF-2015-04A FF-2015-04B FF-2015-04C	TMA	
		FF-2015-03 FF-2015-03A FF-2015-03B	Clark Creek Diversion	
		FF-2015-02 FF-2015-02A FF-2015-02B	West Creek Diversion	
		FF-2015-01	West Creek Diversion	
		FF-2015-01	Temporary Culverts C2, C6, C8	
	Work Permit/ Letter of Authority <i>Public Lands Act</i>	FF-2019-1916-AP001	Work in Water	
		FF11-2015/2016	Pinewood River Bridge Crossing	Expired December 30, 2016
		FF6-2015/2016	East Access Road Construction Amendment	Expired May 30, 2016
		FF2-2015/2016	East Access Road Construction	Expired May 30, 2016
	<i>Endangered Species Act Permit</i>	FF-C-001-14	Permit Under 17(2)(c)	
	Aggregate Resources Licence	625851	Tait Quarry	Rehabilitated in 2018
		626197	Laydown 4 Quarry	
	Overlapping Forest Resource Licence Agreement	Agreement with Resolute Forest Products 2018-2019.		Expires March 31, 2019
	Forest Resource Licence	B12157		2019-2020
	Harvest Approval/ Authority to Haul	219400		2019-2020
		219198, 218658, 219196		2018-2019
	Land Use Permit	1134-1003167	Transmission Line	
		1134-1003203	Four Safety Platforms	

Table 2: Rainy River Mine - Environmental Permits and Approvals

		1094187	Licence to Collect Fish for Scientific Purposes-Pinewood River	Expired December 31, 2019
		1093595	Licence to Collect Fish for Scientific Purposes-Site Waterbodies	Expired December 31, 2019
		1092647	Authorization to Trap and Transfer Black Bears 2019	Expires March 31, 2020
	Fish & Wildlife Collection Approvals	1094158	Wildlife Scientific Collectors Authorization - Turtle and Snake Relocation 2019	Expired December 31, 2019
Canadian Environmental Assessment Agency	Federal Decision Statement issued under Section 54 of Canadian Environmental Assessment Act, 2012	Provincial EA	90+ Federal EA Commitments	
Ontario Ministry of Environment, Conservation and Parks	Environmental Assessment Act Section 9 Notice of Approval to proceed with the Undertaking	EA Commitments	68 Provincial Commitments	
Environment Canada	Final EA Report Commitments Registry	Reporting Procedures for MMER	205 Commitments	
	Metal and Diamond Mining Effluent Regulations			
Ontario Ministry of Northern Development and Mines	Closure Plan	13+ approvals	Contains Closure Plan Commitments Registry Filed by Ministry of Northern Development and Mines (February 23, 2015)	
Ontario Ministry of Transportation	Entrance Permit	14+ approvals		
	Encroachment Permit	11+ approvals		No lighting or marking required
	Land Use	15-HCAA-00039		Renewal
Fisheries and Oceans Canada	Authorization	KE-12-0963	Section 35(2)	
	Letter of Advice	15-0045	Road Crossings	
Transport Canada	Letter	15-0046	Linear Structure	
	Letter	ATS-15-16-00026521	Blasting Zone	
	Clearance	16-2664	Transmission Line - Aeronautic Obstruction Clearance	
Canadian Nuclear Safety Commission	Nuclear Radiation Licence	15954-1-24.0	Nuclear Radiation Device License	
		15954-1-19.0	Nuclear Radiation Device License	Expired
Ontario Energy Board	Electricity Wholesaler Licence	EW-2014-0371		
Municipality	Occupancy Permit	N16-08	Admin Building – Process Plant Site	

