

Docket No. 151258456P1 & 160061354P1

**IN THE PROVINCIAL COURT OF ALBERTA**  
**CRIMINAL DIVISION**

BETWEEN:

**HER MAJESTY THE QUEEN**

-and-

**PRAIRIE MINES & ROYALTY ULC (formerly known as  
Coal Valley Resources Inc.)**

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**AGREED STATEMENT OF FACTS**

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1. Prairie Mines & Royalty ULC ("Prairie Mines") (formerly known as Coal Valley Resources Inc.) stands charged on Information No. 151258456P1 laid by the Alberta Energy Regulator, as amended, that:

*Count 1*

*On or between the 31<sup>st</sup> day of October 2013 and the 1<sup>st</sup> day of November, 2013, at or near the town of Hinton in the Province of Alberta, did release or permit the release into the environment of a substance in an amount, concentration or level or at a rate of release that causes or may cause a significant adverse effect contrary to section 109(2) of the Environmental Protection and Enhancement Act and did thereby commit an offence contrary to s. 227(j) of the Environmental Protection and Enhancement Act .*

2. Prairie Mines & Royalty ULC (formerly known as Coal Valley Resources Inc.) stands charged on Information No. 160061354P1 laid by Fisheries and Oceans Canada, as amended, that:

*Count 1*

*On or between October 31, 2013 and November 1, 2013, at or near Hinton, in the Province of Alberta, Prairie Mines & Royalty ULC (formerly known as Coal Valley Resources Inc.), did deposit or permit the deposit of a deleterious substance of any type in water frequented by fish or in any place under any conditions where the deleterious substance or any other deleterious substance that results from the deposit of the deleterious substance may enter any such water, in violation of subsection 36(3) of the Fisheries Act, R.S., 1985, c. F-14, s. 36; 2012, c. 19, s. 143 as amended, and thereby commit an offence under subsection 40(2) of said Act.*

*Count 2*

*That on or between October 31, 2013 and November 1, 2013, at or near Hinton, in the Province of Alberta, Prairie Mines & Royalty ULC (formerly known as Coal Valley Resources Inc.), did carry on a work, undertaking or activity that resulted in the harmful alteration or disruption, or to the destruction, of fish habitat, in violation of subsection 35(1) of the Fisheries Act, R.S., 1985, c. F-14, s. 35; 2012, c. 19, s. 142 as amended, and thereby did commit an offence under subsection 40(1) of said Act.*

3. At all relevant times, Coal Valley Resources Inc. ("CVRI") was a validly subsisting Alberta corporation. CVRI owned and operated the Obed Mountain Mine (the "Mine") starting in 2006. In January 2016, CVRI was amalgamated with Prairie Mines & Royalty ULC, a registered corporation in Alberta.

**Background**

4. The Mine is an open pit coal mine located about 15 km northeast of Hinton, Alberta. The Mine is located on mountainous and forested public land occupied pursuant to a licence of occupation issued by the Crown in right of Alberta.
5. The Mine site itself consists of mined out pits, a coal processing plant and administration/maintenance facilities. The Mine site also contains a number of tailings and water management ponds. Coal processing operations at the Mine began in 1984 under previous owners and ceased in 2013.
6. The Mine produced export-quality coal for the international market and operated under licenses and authorizations issued by the Alberta Energy Regulator ("AER") and Alberta Environment and Parks ("AEP").

7. At all relevant times, CVRI held authorizations under several provincial enactments pertaining to the operation of the Mine including the appropriate licence for occupation of public land and approvals under the *Alberta Coal Conservation Act*, the *Alberta Environmental Protection and Enhancement Act* (EPEA) and the *Alberta Water Act* (WA).
8. To produce marketable coal, the Mine used machinery to remove overburden (rock, soil and vegetation) in order to access mineable coal. The coal and any associated rock and soil were mined and hauled to the coal processing plant.
9. At the processing plant, larger pieces of rock in the mined material were separated from the coal and eventually dumped back into the mined out pits. The processing plant then used water and gravity to separate the coal from the remaining waste rock and other material. Marketable coal produced by the plant was then hauled from the plant and loaded onto rail cars for shipment.
10. Waste water, consisting of water used to separate coal from other materials and of removed solids, was pumped from the processing plant to a containment pond known as the Red/Green Pit. The solids, consisting of rock, clay and fine coal particles, would eventually settle on the bottom of the Red/Green Pit and the cleaner surface water pumped to the Mine's Main Tailing Pond ("MTP"). Water from the MTP was then pumped to the processing plant to be re-used to process more coal. Water from the MTP was periodically released into the upper Apetowun Creek in accordance with terms and conditions set out in an operating approval issued for the Mine under the EPEA.
11. The Mine's Main Tailings Pond was built by a previous owner of the Mine by constructing a large containment dyke. The MTP containment dyke incorporated a spillway to allow for the escape of wastewater in order to protect the dyke structure from catastrophic failure by an overflow over the structure, also known as "overtopping". The spillway drained onto a vegetated slope leading to the upper reaches of a nearby watercourse known as Apetowun Creek.
12. The Red/Green Pit is a large impoundment consisting of former mined out pits with earthen dykes built to close gaps in the pits and thus convert them into one large pit to contain wastewater from the processing plant. The Red/Green Pit is approximately 1 kilometre long and 100 metres wide.
13. One of the dykes built to create the Red/Green Pit, known as "Dyke E", was built in the fall of 1996 by a previous owner of the Mine. The design for Dyke E was prepared by a qualified professional engineering geologist and approved by the Alberta Energy

Resources Conservation Board, one of the regulators for the Mine at the time. The design specified the location, material and construction method for Dyke E. It also provided for eventual construction of a spillway to protect the dyke from overtopping.

14. After Dyke E was completed, employees of the previous owner of the Mine contacted the dyke's designer in approximately 2000 to support a project to build the dyke higher and allow for a greater volume of tailings storage in the Red/Green Pit. To the recollection of the designer, he would not support the project on the basis that Dyke E had not been built in the location specified in the design, and materials and construction methods were not adequately documented, including "as built" drawings as contemplated by the approved plan. As a result of these concerns, and again, based on the recollection of the designer, the wastewater level in the Red/Green Pit was restricted by the Mine to 1440 metres above sea level (ASL) to ensure the integrity of Dyke E.

#### **Defendants' Actions Prior to the Incident**

15. CVRI documents indicated that the wastewater level in the Red/Green Pit should not exceed 1440 metres. On June 15, 2010, the elevation of the wastewater in the Red/Green Pits was recorded by the Mine at 1441.4 metres above sea level (ASL). Dyke E was inspected at that time by a junior and senior engineer. The conclusion at that time was that Dyke E was stable.
16. In the summer of 2010, the designer of Dyke E, was at the mine site for an unrelated purpose. He recalled observing the wastewater level in the Red/Green Pit and became concerned because the wastewater level was close to the Pit's capacity. He reported his concerns at the time to CVRI engineers.
17. CVRI employees were aware at this time that no spillway had been constructed and that the wastewater level in the Red/Green Pit was managed by pumping water out of the Pit to other pits or for use at the coal processing plant.
18. On July 21, 2011, a CVRI engineer recorded the elevation of the wastewater in the Red/Green Pit at 1443.6 metres ASL.
19. In June 2012, a junior CVRI engineer and the CVRI operations manager inspected the Red/Green Pit and noted that the water level was the highest that they had observed. The engineer recommended that wastewater be pumped out of the Pit to reduce the water level and that a spillway be constructed to protect from water overtopping the Pit. No time frame for constructing a spillway was specified other than referring to it as a "long-term" solution. No urgency for a spillway was expressed by any of the CVRI

professional engineers as the containment structure had operated effectively for approximately 20-years. CVRI had taken steps in the past to repair another containment structure ("Dyke D") where immediate structural concerns were identified. No spillway was ever constructed at the Red/Green Pit.

20. On July 11, 2012, a CVRI engineer recorded the elevation of the wastewater in the Red/Green Pit at 1444.2 metres ASL.
21. Between February 1, 2012 and October 30, 2013, "Plant Tour Checklists" were completed twice daily by CVRI employees. As part of the checklist, employees were supposed to check the water level in the Red/Green Pit. Many of the checklists did not in fact record a water level or indicated that levels were full, high, very high or 100%. In other cases water levels were marked as good, ok or low. There were two recordings on the checklist in the week preceding the Incident. On October 24, 2013 the water level was marked as "Full". On October 30, 2013 the water level was marked as "High".
22. In November 2012, the Mine began to prepare for reclamation and stopped processing coal. About half of the Mine's employees were laid off and the pump removing water from the Red/Green Pit was shut down. When the pump was shut down, the Red/Green Pit continued to receive water from naturally occurring precipitation events; however, there was no mechanism to remove water from the Pit apart from a small amount of seepage from the base of Dyke E and evaporation. During the processing plant shutdown from November 2012 to October 2013, no steps were taken by CVRI to actively manage the wastewater level in the Red/Green Pit.
23. On October 8, 2013, the Mine's processing plant began processing coal again to use up a remaining stockpile before continuing with reclamation. The Mine's plan was to only operate for a short time and then immediately begin permanent decommissioning and reclamation of the Mine. Between October 8 and 31, about 37,000 cubic meters of tailings consisting of wastewater and solids from the processing plant were pumped to the Red/Green Pit. During this time period, a single pump was used to remove wastewater from the Red/Green Pit to the MTP; and the pump was only operational for 8½ days.
24. On October 31, 2013 a second pump was taken up to the Red/Green Pit because an increase in water seepage was observed around the base of Dyke E. The second pump was never put into operation.

### **Breach of Dyke E**

25. Dyke E failed catastrophically shortly before 7:30 p.m. on October 31, 2013.
26. At about 7:30 p.m. on October 31, 2013, CVRI employees at the Mine observed a very large and sudden flow of water from the Red/Green Pit.
27. Wastewater from the Pit, along with dirt from the failed dyke, flowed downhill through the Mine site approximately 1.3 km to the MTP, uprooting trees and knocking down power lines along the way. The sudden flow into the MTP resulted in an overtop of the MTP containment dam along most of its length. After the initial overtop of the MTP, the flow from the MTP became concentrated in the spillway. The spillway also started to erode due to the flow.
28. When the Dyke E failure first occurred, employees immediately began using heavy equipment in an attempt to direct the flow away from the mine's processing plant by constructing a large dyke. The result was to direct flow to the MTP.
29. The incident was reported by CVRI to the Alberta Coordination and Information Centre (emergency response line) in accordance with applicable regulatory requirements on October 31, 2013 at 11:37 p.m. Immediate efforts were made to confine and remediate the impacts of the release which included, but was not limited to, implementation of an Emergency Response Plan, immediate reporting to applicable regulatory authorities, immediate deployment of appropriate personnel, contractors and equipment, constructing a temporary dam across the Red/Green pit, implementation of measures to prevent further releases from the MTP, and implementing a pumping plan to redirect water to other containment areas.
30. CVRI also immediately retained the services of multiple experts to assist in managing the event and remediation.
31. In the immediate aftermath of the release, CVRI engaged the assistance of a consulting engineering geologist. This engineering geologist was the same individual who had created the original design for Dyke E.
32. The engineering geologist arrived at the Mine at 1p.m. on November 1<sup>st</sup> and at that time the flow from the MTP was limited to the spillway. The engineering geologist noted the rapid rate at which the spillway was eroding. He was very concerned that if this flow continued, the MTP containment dyke was also at risk of catastrophic failure. He interrupted a meeting of CVRI senior managers to emphasize the importance of mobilizing all available equipment immediately to block the spillway release with large

rock pieces. CVRI senior management supported the recommendations of the engineering geologist and the flow from the MTP was contained shortly after midnight on November 2, 2013.

33. BGC Engineering, retained by CVRI after the failure, did an assessment of the causation of the dyke breach. A detailed root cause report prepared by BGC was provided by CVRI to investigators which assisted them in their investigation. Satellite images show a rise in the level of wastewater in the Red/Green Pit in the days prior to the release. Precipitation data showed below normal rainfall for three months prior to the incident and no significant storms in late October 2013 that would have caused a rapid increase in the water level in the Red/Green Pit. The addition of the 37 000 m<sup>3</sup> of wastewater from the processing plant caused the water level in the Pit to reach 1445 metres ASL, which was the known low point on the dyke. The satellite images show that seven days prior to the release, wastewater appeared to be overtopping the dyke. BGC stated: "it appears most likely that the Red/Green Pit Containment Structure was overtopped due to a rise in the pond level sometime prior to October 31, 2013. The ongoing overtop then led to a progressive down cutting that allowed a flow to increase and be noticeable on the afternoon of October 31 followed by a full breach later that evening. Piping or retrogressive erosion of the upper loosed material may have contributed to the initial overtop."

#### **Release into the Environment**

34. The failure of Dyke E resulted in the release of approximately 670,000 cubic meters (670 million liters) of water and 90 000 tonnes of sediment into Apetowun Creek.
35. The Mine's Release Report dated November 8, 2013, which is required under, and in accordance with, Provincial legislation, stated that the release was ongoing from approximately 7:30 p.m. on October 31 to approximately 12:30 a.m. on November 2, 2013, for a total of approximately 29 hours.
36. Apetowun Creek is a small watercourse which flows northeast near the Mine through a forested landscape for approximately 22 km to where it joins a larger watercourse known as Plante Creek.
37. Plante Creek flows through the forest to the southeast from the junction with Apetowun Creek for approximately 6 km to its confluence with the Athabasca River.
38. The release from the MTP into Apetowun Creek contained water mixed with sediment, mainly fine-grain silts, clay, mud, shale and coal particles. CVRI reported that the release was comprised of approximately 30% sediment and 70% water. The sediments

were coal fines and naturally occurring materials and did not include chemical additives such as flocculants.

39. When the release travelled through the MTP spillway, it flowed approximately 420 m into a flat area known as a beaver meadow. The release then eroded a 584 metre long gully down a very steep slope before flowing into Apetowun Creek. Solid material removed from the spillway and the new gully was entrained in the flow which continued into Apetowun Creek.
40. As the release moved downhill, it created significant erosion and picked up additional natural material. For approximately 4-5 km of Apetowun Creek (known as upper Apetowun Creek), trees for many metres on both sides of the creek bed were pushed down, uprooted and carried downstream. Large log jams resulted. Creek banks were scoured, eroded and deeply undercut, leaving them unstable. The release removed soil, rock, vegetation and aquatic life, including fish, from the Creek and adjacent riparian area. Debris and sediment were deposited along the creek bed and riparian area.  
[See attached photo at Appendix A taken of upper Apetowun Creek in June 2015.]
41. Within upper Apetowun Creek, at a sharp bend and less steep slope, the wastewater spread and ran overland and into the adjacent forest. A large amount of water and sediment was deposited in the forested area. This resulted in the removal of some energy from the flow. The swath of the release here was approximately 60m wide. It created the appearance of a delta where there was once a narrow, deep creek channel.  
[See attached photo at Appendix B taken of upper Apetowun Creek in September 2014.]
42. Further downstream of this point, at the Dx Road, there was a culvert through which the creek normally flowed. Wastewater backed up at the culvert and created a debris dam of conifers/plants before the water washed out the Road. The backed-up water created a pool which protected some of the natural creek formation a few hundred metres upstream of the Dx Road, though up to 3 feet of sediment was deposited in the creek bed. Because the wastewater backed up and then blew out the culvert and Dx Road, the wastewater had energy again as it flowed down the Creek past the Road – scouring away banks and trees/plants, creating braiding, and depositing significant amounts of sediment for approximately 1200m downstream.  
[See attached photo at Appendix C taken of upper Apetowun Creek downstream of the Dx Road at approximately kilometre 3.5 in September 2014.]
43. After the first 4-5km of the Creek, the lower ~17km portion of Apetowun Creek experienced varying degrees of lesser impact with periodic sediment deposits and periodic scouring. Once the flow entered Plante Creek, particularly due to the steep



bedrock banks, the primary impact of the release was sediment deposited on the creek bed.

44. Once the release entered the Athabasca River it became entrained in the flow of water in the river. It created a visible and detectable plume of increased turbid water that CVRI monitored by remote stationary datasondes throughout the extent of the Athabasca River to the inlet of Lake Athabasca. As the zone travelled downstream, TSS concentrations declined, from concentrations of over 8,000 mg/L near the mouth of Plante Creek on November 1, 2013, to 876 mg/L at the Highway 658 crossing near Whitecourt on November 4, 2013. In the final three days of zone sampling (November 19 to 21, 2013), TSS concentrations within the plume were similar to background levels of less than 10 mg/L.

### **Environmental Impact**

45. The flow from the initial release would have been a significant physical hazard to any persons or wildlife directly in the path of the flow. There is evidence that there was occasionally some periodic human activity in the areas affected; however, there is no evidence of actual harm to humans or wildlife other than assumed impacts to fish and invertebrates.
46. At the time of the release, Apetowun Creek was known to contain rainbow trout, burbot, mountain whitefish and spoonhead sculpin. Plante Creek contained these fish species as well as arctic grayling. Downstream of Plante Creek, the Athabasca River contains the same fish species, as well as bull trout, longnose dace, longnose sucker, northern pike, pearl dace and white sucker.
47. Athabasca rainbow trout are listed as endangered by the federal Committee of the Status of Endangered Wildlife in Canada and as threatened by Alberta's Endangered Species Conservation Committee. Prior to the release, Apetowun Creek was a known spawning area for rainbow trout. These rainbow trout were believed to be Athabasca rainbow trout by Alberta Environment, but this was not confirmed until DNA sampling subsequent to the release.
48. CVRI has completed and continues to update multiple studies to assess the impacts of the release including:
- Impact Assessment Reports – 2014 and 2015.
  - Sampling and Monitoring Reports (Aquatics, Fisheries, Benthic Organisms, Wildlife, Vegetation, Water Quality) – 2014, 2015 and 2016.

- Human Health Risk Assessment – 2014, 2015, and 2016.

49. The environmental impacts of the release on the upper 4-5 kilometers of Apetowun Creek and the surrounding landscape were as follows:

- The force of the large volume of water and sediment destroyed aquatic life including fish, invertebrates and plant communities, as well as riparian trees/vegetation; No direct evidence of fish mortality was obtained. In such releases, dead fish could be expected to be washed downstream, or buried in sediment and debris;
- Destruction of natural streambanks; almost 100% of streambanks were eroded and devegetated; erosion of the creek bed;
- Destruction of 3.65 km of previously existing fish habitat including nursery, spawning, rearing, migration, over-wintering pools and food supply. The quality of this fish habitat varied.
- Significant deposits of fine sediments, which covered and eliminated fish and invertebrate habitat;
- Erosion of a gully on the slope leading to Apetowun Creek;
- Wildlife surveys post-incident have found small to large mammals in the area impacted by the incident.
- Assessments of post-incident terrestrial impacts indicate that soil within the upper Apetowun is suitable for establishment of vegetation and restoration of wildlife habitat.

50. The environmental impacts of the release on the lower ~17 km of Apetowun Creek were as follows:

- Less scouring with about 60% of streambanks altered; vegetation largely remained intact;
- Significant periodic deposits of fine sediments in the creek bed and riparian areas;
- Sediments covered some fish habitat for spawning, nursery and overwintering pools, as well as habitat for invertebrates.

51. The environmental impacts of the release on Plante Creek and the surrounding landscape were as follows:

- Some scouring with about 7% of streambanks altered,
- Periodic deposits of fine sediment.

52. The total suspended solids ('TSS', ie. suspended sediment) in the release into Apetowun Creek exceeded the Canadian Water Quality Guidelines for the Protection of Aquatic Life for short term exposure by 3000 times. The Guidelines are created by the Canadian Council of Ministers of the Environment and are nationally accepted guidelines for the protection of aquatic life. TSS levels in Apetowun Creek and Plante Creek returned to less than Guideline levels within 96 hours post incident.
53. Water quality sampling of the release, on November 1 and 2, 2013, in Apetowun and Plante Creeks found 11 metals and several PAHs which exceeded the Canadian Water Quality Guidelines for the Protection of Aquatic Life ('CCME Guidelines'). However, the initial physical impact of the large amount of sediment and debris on the fish would have overwhelmed any potential short-term toxic impacts on the fish in Apetowun and Plante Creeks during the release.
54. Fish and invertebrates have been returning to Apetowun Creek post-incident, including Athabasca rainbow trout. Recent studies suggest that mature rainbow trout have been found in upper Apetowun Creek indicating that they may have survived the initial release or colonized it from other locations. Recent preliminary studies show some similarities to pre-release population diversity and density of rainbow trout.
55. Studies in 2015 found that the residual metals and PAHs within the sediment and water in the creeks do not exceed CCME Guidelines and/or background levels. To date, testing and fish tissue sampling have found no chronic effects from residual metals and PAHs on fish in the creeks due to the release.
56. CVRI has undertaken stabilization efforts in respect of Apetowun Creek since the release occurred in October 2013 including: the 2014 Solids Recovery Program which included the construction of four sediment traps; recovery of deposited sediment; management of some downed timber; rehabilitation of some damaged sections of Apetowun Creek; installation of erosion control materials; and revegetation of some damaged areas with native species. Stabilization efforts in 2015 removed additional solids from the sediment traps. [See attached photographs in Appendix D]
57. Upper Apetowun Creek requires additional rehabilitation to recreate a fully functional fluvial system and fish habitat for all life-processes of fish. For instance: the gully that was excised into the slope leading to Apetowun Creek continues to erode delivering large quantities of sediment downstream which is harmful to fish and fish habitat; barriers to fish passage need to be removed; braiding needs to be removed and a channel deep enough for fish needs to be recreated; deep overwintering pools need to be created; creek banks need to be stabilized and vegetation replanted.

58. The cost of additional rehabilitation of upper Apetowun Creek is estimated to be more than \$6 million.
59. The environmental impacts of the release on the Athabasca River and surrounding communities and landscape were as follows:
- Downstream users of the Athabasca River were advised as a precaution not to use water from the river in the immediate aftermath of the release, however, there was no evidence of substances that would have been harmful to human health after normal water treatment.
  - Deposits of fine sediments within the first few kilometres of the Athabasca River downstream of Plante Creek.
  - TSS levels in the Athabasca River exceeded the Canadian Water Quality Guidelines for the Protection of Aquatic Life on November 1<sup>st</sup> - 5<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup>, 2013, and as far downstream as 400km on November 9<sup>th</sup>. Exceedances of the Canadian Water Quality Guidelines can occur naturally, including in the Athabasca River, and slight exceedances do not necessarily mean that the water is toxic to fish and other aquatic life. For instance, TSS concentrations are naturally high in the Athabasca River during the spring. However, high TSS during other times of the year can have chronic and/or acute toxicity to fish and other aquatic life. The release increased the 2013 total annual sediment load in the Athabasca River by approximately 0.5%.
  - On November 4, 2013, 4 metals exceeded the CCME Guidelines in the Athabasca River at Whitecourt, Alberta.
  - There is no evidence that fish died as a result of the release into the Athabasca River. The release had no long term impact on the Athabasca River or its fish populations.
60. The release from the Mine occurred at the beginning of the annual seasonal fishing closure for 2014. On April 1, 2015, the start of the 2015 fishing season, and continuing to the present, Alberta Environment and Parks has restricted fishing on Apetowun Creek, Plante Creek and a large portion of the Athabasca River to catch and release (zero harvest) for all species as a precaution to protect and aid in the recovery of fish populations. Prior to the release, harvest was allowed. Apetowun Creek and Plante Creek were not frequently used for recreational or other fishing and similar recreational experiences are readily available within 10 kilometres or less.
61. CVRI had a Human Health Risk Assessment completed for the incident. It was reviewed by Alberta Health. The Assessment evaluated the potential impact on onsite workers, recreational users, residential communities downstream and First Nations. The

Assessment concluded “that the release is not expected to result in acute or chronic effects on human health.”

#### **Post Incident Actions**

62. On November 19, 2013, Alberta Environment and Sustainable Resources Development issued an Environmental Protection Order (“EPO”) requiring CVRI to mitigate and rehabilitate the impacts of the release. CVRI/Prairie Mines has worked collaboratively with the Alberta Energy Regulatory (“AER”) to meet the conditions of the EPO. Significant sampling/monitoring and impact assessment has occurred, as well as written reports on same. Initial rehabilitation of upper Apetowun Creek has occurred.
63. Fisheries and Oceans Canada hired GeoProcess Research Associates Inc. to assess the fluvial geomorphology impacts of the incident and provide recommendations to rehabilitate the Creek. CVRI/Prairie Mines retained experts to make similar assessments and recommendations.
64. CVRI/Prairie Mines has worked cooperatively with both the AER and Fisheries and Oceans Canada to develop a final rehabilitation plan for upper Apetowun Creek to recreate a functional fluvial system and fish habitat for all life-processes of fish. Prairie Mines is committed to implementing the final rehabilitation plan and monitoring the effectiveness of the work. CVRI has provided a proposed final rehabilitation plan to provincial and federal regulatory authorities.
65. In total, the Accused have spent over \$55 million in response to the incident.

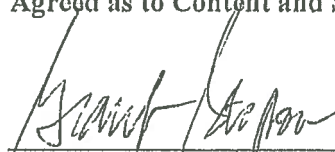
#### **Compliance History**

66. CVRI/Prairie Mines have no prior convictions. CVRI has no compliance history regarding the Obed Mountain Mine. CVRI has some compliance history related to the nearby Coal Valley Mine. CVRI received administrative penalties under the Alberta *Environmental Protection and Enhancement Act* in 2010 and 2013 for releases of high TSS wastewater from the nearby Coal Valley Mine.

#### **Financial Information for CVRI**

67. In 2013, CVRI’s total assets were \$611.3 million, revenue was \$287.3 million and net income was a \$78 million loss.

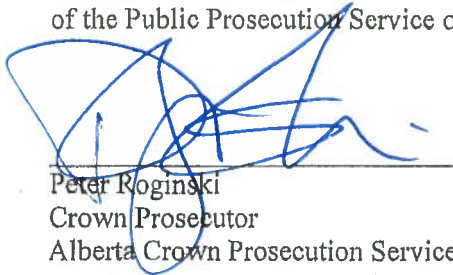
Agreed as to Content and Signed this 1 day of JUNE 2017



Grant Stapon/Brad Gilmour,  
Counsel for Prairie Mines & Royalty ULC



Erin Eacott/Dawn Poskocil  
Counsel, Office of the Director  
of the Public Prosecution Service of Canada



Peter Roginski  
Crown Prosecutor  
Alberta Crown Prosecution Service

## Appendix A



Photo of upper Apetowun Creek taken in June 2015 showing erosion and debris and sediment deposited from release along the creek bed and riparian area.

## Appendix B



Photo taken in September 2014 of upper Apetowun Creek showing significant sediment deposition and braiding of the creek, where pre-incident there was a distinct creek channel.

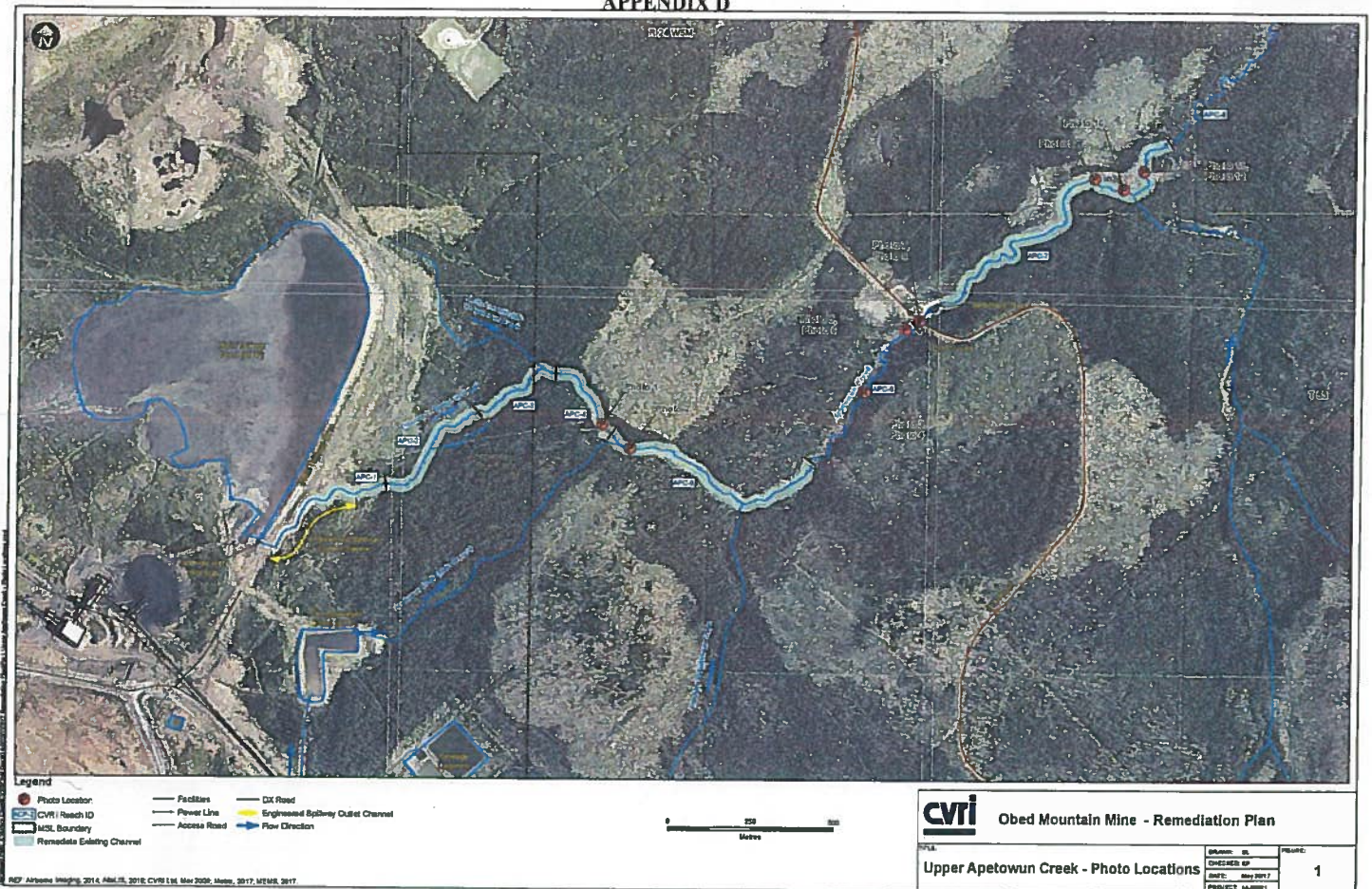


## Appendix C



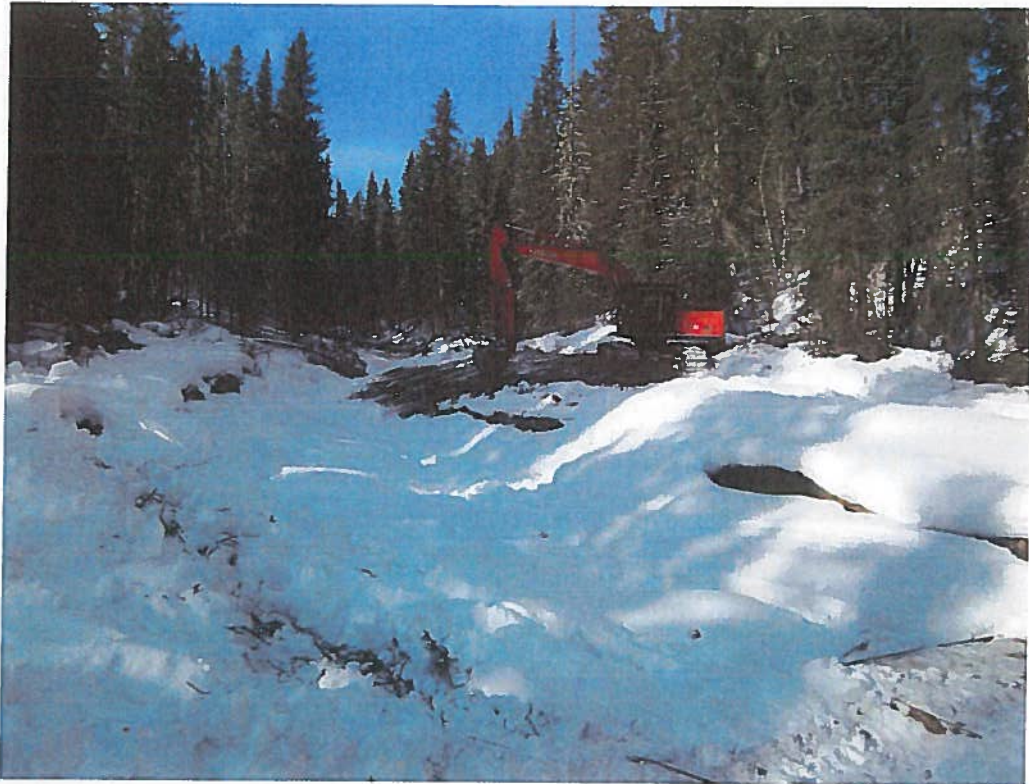
Photo taken in September 2014 of upper Apetowun Creek downstream of the Dx Road at approximately kilometre 3.5, showing the swath of trees and vegetation removed by the release.

# APPENDIX D





**Photo 1: Apetowun Creek within APC-4 (looking upstream; bank stabilization) – February 2014**



**Photo 2: Apetowun Creek within APC-5 (looking upstream; re-established vegetation) – June 2015**





**Photo 3: Apetowun Creek within APC-6 – May 2014**



**Photo 4: Apetowun Creek within APC-6 – July 2015**





**Photo 5: Apetowun Creek within APC-6 (looking upstream from the DX Road; removal of sediment) – March 2014**



**Photo 6: Apetowun Creek within APC-6 (looking upstream from the DX Road; re-established vegetation) – May 2017**





**Photo 7: Apetowun Creek within DX Road Culvert – November 2013 (outlet end) (date on photo is incorrect)**



**Photo 8: Apetowun Creek within DX Road Culvert – April 2014 (inlet end)**





**Photo 9: Apetowun Creek at APC-7 (looking downstream) – May 2014**



**Photo 10: Apetowun Creek at APC-7 (looking upstream) – July 2015**





**Photo 11: Apetowun Creek within APC-7 (area of furthest extent of disturbance) – March 2014**



**Photo 12: Apetowun Creek within APC-7 (area of furthest extent of disturbance) – July 2015**

