

# Mokau South Resources Ltd – Panirau Plateau Mine

Submission by Climate Justice Taranaki Incorporated, 2 February 2016

## Scope of Submission

1. Climate Justice Taranaki Incorporated (CJT)<sup>1</sup> is submitting on all seven resource consents relating to the proposed Mokau South Resources Ltd (MSR) Panirau Plateau Mine.
2. Based in Taranaki, CJT has insights and experience with the petroleum mining industry, the challenges that regulators face with assessing, monitoring and enforcing consent conditions, and the resulting impacts on the environment and local communities.
3. As a community group with deep interest in all aspects of the environment and the impacts of environmental degradation on communities (present and future), CJT is strongly opposed to the proposed coal mine.
4. CJT ask that the Waikato Regional Council (WRC) DECLINE all seven consent applications, considering the following key reasons, as elaborated in our submission:
  - i) Adverse effects on ecosystems of very high ecological values.
  - ii) Deficient information for robust assessment of adverse effects.
  - iii) Failure to consider the effects of climate change and cumulative effects.
  - iv) Particular regard to renewable energy.

## Adverse effects on ecosystems

5. The scale of the proposed project is enormous – across a coal mine licence area of over 740 ha, for up to 50 years, in a remote and environmentally sensitive area. The mine spans over 300 ha, may be as deep as 50 m, each year involves the removal of over 2 Million m<sup>3</sup> of ‘overburden’ – soil, rock, vegetation and all other life forms – to extract some 300,000 tonnes of thermal coal. It is hard to imagine no or ‘less than minor’ adverse effects on the surrounding environment.
6. MSR has applied for consents ‘to disturb soil and clear vegetation in association with coal mine development’ and ‘to discharge overburden to land...’ Sediment from the proposed mine will be treated and discharged through existing indigenous vegetation at a discharge point some 700 m from the Panirau Stream. “Although the upper catchments have high ecological values, they are fragile. Steep terrain combined with the mudstone/sandstone geology means that alterations to the landscape or to land uses can have significant effects on waterways... Panirau stream is located in a large gorge characterised by steep, forested hillslopes and exposed bluffs and scarps. The forest is dominated by cut-over tawa, although emergent old-growth podocarps such as rimu and kahikatea are still frequent...” Wildlands, 2015<sup>2</sup>.
7. New Zealand has already lost 70% of its indigenous vegetation and this loss is not just historic (Joy, 2014)<sup>3</sup>. Some 2788 species, amounting to a third of all plant and animal species in NZ, are listed as threatened or ‘at-risk’, with another one third listed as ‘data deficient’ (Seabrook-Davison, 2010)<sup>4</sup>, many

of which are potentially at risk or threatened. It is therefore of critical importance that any threats on the remaining indigenous vegetation and habitats are stopped wherever possible, and their adverse effects avoided, remedied and mitigated.

8. Notably, the proposed mine sits within the catchments of the Panirau and the Tikoputa Streams which flow into the notable Mokau River (WRC, 9/12/2015)<sup>5</sup>. Re Mokau River, MSR's own Assessment of Environment Effects / AEE states, "*Much of that catchment remains in close to its original state*" (Hazel Hewitt and Assoc., 2014)<sup>6</sup>. NIWA Freshwater Fish Database revealed records for at least five indigenous fish species, including 'At Risk' species, in the Panirau Stream (Wildlands, 2015). Both the Panirau and the Tikoputa Streams are classified as:
  - i. Natural State;
  - ii. Significant Indigenous Fisheries and Fish Habitat; and
  - iii. Significant Trout Fisheries and Trout Habitat.
9. MSR has applied for a consent '*to discharge treated pit water and stormwater to land and to land where it may discharge to water*'. It has also applied for a consent '*to dam and divert surface water in association with coal mining activities*'. Such activities should not be permitted in and near areas known to be natural and provide significant habitats.
10. In Taranaki, waterways, groundwater and soil have been contaminated by oil and gas waste storage and discharge into the environment, due to mismanagement, substandard on-site practices, inadequate waste treatment prior to discharge, accidental spills, extreme weather events such as heavy rainfalls, poor monitoring and/or the combination of the above (CJT, 2013<sup>7</sup> and 2015<sup>8</sup>). Breaches of consent conditions and legacy issues on the environment persist. An example, "*annual monitoring of the groundwater bore network detailed a significant impact ... this monitoring well is located down gradient of the storage pits. The analysis reported a significant increase in chloride and total dissolved solids as well as trace Monocyclic Aromatics such as benzene and toluene...*" (Taranaki Regional Council, 2015)<sup>9</sup>.
11. Such issues are not unique to the oil and gas industry. If similar problems happen at the proposed Panirau Plateau Mine, impacts on the significant waterways, groundwater and indigenous vegetation would be far reaching and likely reversible. Restoration measures could be futile even if there's the financial resource to undertake them.

## Deficient information

12. In CJT's considered view, the information provided by MSR is inadequate for robust assessment of adverse effects from the activities to be carried out under the proposed mining project. WRC (2015) gave detailed explanations of the deficiencies, based in part on independent advice (Beca Consultants, 2015)<sup>10</sup>. Beca's assessment that the level and quality of information provided was "*substantially below what might be expected*" was also consistent overall with the views of Council staff.
13. Notably MSR did not provide a detailed conceptual Erosion and Sediment Control Plan (ESCP) despite being requested by WRC. An ESCP is essential to assess the risks of stormwater discharges coming into contact with un stabilised surfaces and how such risks are proposed to be managed. Other concerns

associated with sediment control are also not adequately addressed, nor is the kind of treatment proposed for the discharge.

14. Streams, including some headwaters, within the area proposed to be mined have not been adequately identified, making the assessment of effects on them from diversion and other activities impossible.
15. The ecological assessment prepared by Wildlands Consultants is inadequate, as it examined only the Panirau Stream, and only one site visit was conducted, during winter, “...*due to time constraints only one downstream sample was able to be taken... the location of the proposed mine was not able to be visited due to the same constraints*” (Wildlands, 2015). “*The conclusions are based on assumptions, which themselves are based on very limited or no evidence*” (WRC, 2015).

## **Failure to assess the effects of climate change and cumulative effects**

16. The Resource Management Act 1991 (RMA) Section 7 clearly states that “...*all persons exercising functions and powers under it, in relation to managing the use, development, and protection of natural and physical resources, shall have particular regard to— (i) the effects of climate change*”.
17. MSR did not provide any assessment on the likely extreme weather events, notably severe rainfalls associated with climate change over the 50 years’ life time of the project (Stuff, 21 June 2015<sup>11</sup> and Photo 1). The proposed mine is located in an area of high rainfall, about 2,000 mm annually. NIWA has projected a 2.5-5.0 percent increase in rainfall between 1980-1999 and 2030-2049 (NIWA, 2008)<sup>12</sup>. MSR did not provide any risk assessment or mitigation plan for the event of extreme rainfall and floods which can compromise sediment containment and discharge control measures, jeopardising the health of the nearby streams and their capacity as significant habitats for indigenous species.
18. As a worst case scenario, the collapse of BHP’s Bento Rodrigues mine tailings dam last year took at least 12 lives, made 500 people homeless, and became one of the biggest environmental disasters in Brazil’s history (Guardian, 2015)<sup>13</sup>. What is in place to prevent or manage such a disaster happening at the MSR coal mine, should an extreme weather event (or earthquake) strike?
19. Moreover, it is increasingly clear that the effects of climate change threaten the life-supporting capacity of air, water, soil, and ecosystems which the RMA has been set out to safeguard (RMA Section 5(2)(b)). More specifically, climate change will further threaten the existence of ‘At Risk’ species such as those known to occur in the Panirau Stream, making them even more vulnerable to additional man-made impacts such as those resulting from the proposed strip coal mine. Councils, while implementing the RMA, must consider all these, including “*any past, present, or future effect*” and “*any cumulative effect which arises over time or in combination with other effects*” (RMA Section 3 (c) and (d)).

## **Particular regard to renewable energy**

20. The RMA Section 7 requires ‘*all persons exercising functions and powers under it,*’ to have particular regard to (i) ‘*the effects of climate change*’ and (j) ‘*the benefits to be derived from the use and development of renewable energy*’.
21. In the UN Climate Change conference in Paris last year, New Zealand, along with 194 other nations, agreed to “*Holding the increase in the global average temperature to “well below 2°C above pre-*

*industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change” (UNFCCC Paris Agreement Article 2 point 1(a)<sup>14</sup> and “Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets...” (Article 4 pt 4).*

22. The Conference of Parties also “Notes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2°C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2°C above pre-industrial levels by reducing emissions to 40 gigatonnes...” (Decision II.17)
23. Bill McKibben (2015)<sup>15</sup> explained, “Translated into carbon terms: you don’t get to go drilling or mining in new areas, even if you think it might make you lots of money... You’ve got to stop fracking right away (in fact, that may be the greatest imperative of all, since methane gas does its climate damage so fast). You have to start installing solar panels and windmills at a breakneck pace – and all over the world. The huge subsidies doled out to fossil fuel have to end yesterday, and the huge subsidies to renewable energy had better begin tomorrow...”
24. CJT ask WRC to seriously consider the benefits of renewable energy and support its development, by stopping any further fossil fuel mining application, thereby allowing opportunities and providing an enabling environment for renewable energy development and use.

## **CJT wish to speak at the public hearing.**

Photo 1. Taranaki Copper Moki wellsite during a rainstorm on 19 June 2015 (Source: Sarah Roberts)



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- <sup>1</sup> Climate Justice Taranaki (CJT) website: <http://climatejusticetaranaki.info/>
- <sup>2</sup> Wildlands, 2015. Ecological Assessment of a sediment discharge system for proposed strip coal mine on the Panirau Plateau, Mokau River catchment. Contract Report No.3723. Prepared for Hazel Hewitt and Assoc. for and on behalf of Mokau South Resources Ltd. August 2015.  
<http://www.waikatoregion.govt.nz/PageFiles/40814/Ecological%20assessment.pdf>
- <sup>3</sup> Joy, Mike, 2014. Paradise Squandered; New Zealand's Environmental Asset Stripping. The 2014 Bruce Jesson Memorial Lecture Mike Joy. <http://www.brucejesson.com/2014-bruce-jesson-lecture-available/>
- <sup>4</sup> Seabrook-Davison, M.N.H. 2010. An evaluation of the conservation of New Zealand's threatened biodiversity: management, species recovery and legislation: a thesis presented in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Ecology at Massey University, NZ.  
<http://mro.massey.ac.nz/bitstream/handle/10179/1246/02whole.pdf?sequence=1&isAllowed=y>
- <sup>5</sup> Waikato Regional Council (WRC), 2015. Notification Recommendation/Decision on Mokau South Resource Ltd: Panirau Coal Mine Proposal – report/recommendation/decision on notification. Prepared by M. Brockelsby, 9 December 2015.
- <sup>6</sup> Hazel Hewitt and Associates Ltd., 2014. Mokau South Resources Ltd. Panirau Opencast Mine Mine Development Plan and Assessment of Environmental Effects. October 2014. AUTH134168.01.01-AUTH134168.04.01  
<http://www.waikatoregion.govt.nz/Community/Whats-happening/Have-your-say/Significant-applications-hearings-and-decisions/Mokau-South-Resources-Ltd--Panirau-Plateau-Mine/#submit>
- <sup>7</sup> Climate Justice Taranaki, 2013. Submission to the Parliamentary Commissioner for the Environment: Investigation into hydraulic fracturing in New Zealand, with special attention to drilling waste management in Taranaki – landfarming. November 2013. <https://climatejusticetaranaki.files.wordpress.com/2013/03/cjt-3rd-submission-to-pce-nov2013-v8-final.pdf>
- <sup>8</sup> Climate Justice Taranaki, Sept 2015. 5<sup>th</sup> submission to the Parliamentary Commissioner for the Environment: Disposal of oil and gas waste – a review since June 2014. <https://climatejusticetaranaki.files.wordpress.com/2013/03/cjt-5th-submission-to-pce-v3-full.pdf>
- <sup>9</sup> Taranaki Regional Council, Sep 2015. *Waste Remediation Services Limited Symes Manawapou Landfarm Monitoring Programme Annual Report 2013-2014*. Technical report 2014-118. <http://www.trc.govt.nz/assets/Publications/technical-reports/oil-and-gas-compliance-monitoring-reports/1551929w2.pdf>
- <sup>10</sup> Beca Consultants, 2015. Mokau South Resources Mine Application Review. Prepared by Ross Winter and Paul Horrey, 29 January 2015. In Waikato Regional Council (WRC), 2015. Notification Recommendation/Decision on Mokau South Resource Ltd: Panirau Coal Mine Proposal – report/recommendation/decision on notification. Prepared by M. Brockelsby, 9 December 2015. Appendix B – BECA report.
- <sup>11</sup> Stuff, 21 June 2015. Hundreds flee rising floodwaters in North Island.  
<http://www.stuff.co.nz/national/69567269/Hundreds-flee-rising-floodwaters-in-North-Island>
- <sup>12</sup> NIWA, 2008. Map: Projected annual mean precipitation change between 1980-1999 and 2030-2049.  
<https://www.niwa.co.nz/our-science/climate/information-and-resources/clivar/scenarios#regional>
- <sup>13</sup> The Guardian, 25 Nov 2015. Brazil's mining tragedy: was it a preventable disaster?  
<http://www.theguardian.com/sustainable-business/2015/nov/25/brazils-mining-tragedy-dam-preventable-disaster-samarco-vale-bhp-billiton>
- <sup>14</sup> UNFCCC, 2015. Adoption of the Paris Agreement, Conference of the Parties Twenty-first session, Paris, 30 November to 11 December 2015. FCCC/CP/2015/L.9/Rev.1 <https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>
- <sup>15</sup> McKibben, B. 2015. Climate deal: the pistol has fired, so why aren't we running? The Guardian, 13 Dec 2015.