

## Response ID ANON-URZ4-5FCQ-4

Submitted to Fast-track approval applications  
Submitted on 2024-04-21 14:54:57

### Submitter details

Is this application for section 2a or 2b?

2B

#### 1 Submitter name

Individual or organisation name:  
Hydro Developments (2013) Ltd - HDL

#### 2 Contact person

Contact person name:  
John Easterher

#### 3 What is your job title

Job title:  
Director HDL

#### 4 What is your contact email address?

Email:  
s 9(2)(a)

#### 5 What is your phone number?

Phone number:  
s 9(2)(a)

#### 6 What is your postal address?

Postal address:  
s 9(2)(a)

#### 7 Is your address for service different from your postal address?

No

Organisation:

Contact person:

Phone number:

Email address:

Job title:

Please enter your service address:

### Section 1: Project location

Site address or location

Add the address or describe the location:

The Project subject of this application is the Stockton Plateau Hydro Scheme (SPHS). The first attachment to this section provides consented project plans including location and cadastral plans.

Following award of consents in 2010, Stockton Mine proposed reconfiguration of the scheme of works within the environmental baselines established by HDL's consents and other water management consents and access rights held by the mine. Value engineering has continued with the current mine owner, BT Mining. The second attachment to this section shows the latest (May 2020) proposed staging for the implementation of the Project as a fast

track project. Content within the second attachment is referred to in responses to other questions in this submission.

The Project comprises 2 reservoirs, acid mine drainage (AMD) diversions to reservoirs, interconnecting tunnels, power stations and a tailrace discharging to an ocean outfall.

The reservoirs, diversions, tunnels and power houses are located on stewardship land immediately to the east and north of Stockton Mine. In 2012 DOC approved a land exchange and concession for the components to occupy stewardship land. HDL's shareholders own the primary exchange block for transfer to the conservation estate required to complete the land exchange. HDL's shareholders also own the land in Granity required to provide access to stewardship land at Granity where a power station and ocean outfall terminal will be located.

The tail race and ocean outfall tunnel passes beneath railway reserve, road reserve, foreshore and seabed. A permit is held for the ocean outfall. Agreements in principle have been obtained for access for the outfall pipeline beneath road, rail and public reserve land.

Access to the Project's components on stewardship land will be through existing access to Stockton Mine via public road and the ancillary coal mining license. Access through Stockton Mine for construction and operation of the Project was by formal agreement with Solid Energy (SE) in 2012. HDL understands that access for implementation of long-term water management infrastructure has been carried into the Sales Agreement with the current mine owner BT Mining (BT) (HDL has not sighted the Sales Agreement).

File upload:

Consented scheme plans.pdf was uploaded

Upload file here:

SPHS Revised Project Plan and Staging May 2020.pdf was uploaded

Do you have a current copy of the relevant Record(s) of Title?

No

upload file:

No file uploaded

Who are the registered legal land owner(s)?

Please write your answer here:

Stewardship land occupied by the scheme - the Crown.

Stockton Mine Coal Mining License (CML) area - BT Mining; to revert to the Crown at completion of mining by the Stockton Mine Sales Agreement.

Stockton Mine Ancillary Coal Mining License (ACML) area - license to occupy stewardship land held by BT Mining; to revert to the Crown at completion of mining by the Stockton Mine Sales Agreement.

Reserve land under which the ocean outfall will pass at Granity or Ngakawau - public ownership administered by Buller District Council, NZTA, KiwiRail, DOC.

Private land at Granity held for the ocean outfall terminal - JM & BJ Easther Family Trust (shareholders of HDL).

Private land at Fairdown held for the land exchange agreement - Riskworks Ltd (John Easther is a shareholder & director of Riskworks Ltd.)

Detail the nature of the applicant's legal interest (if any) in the land on which the project will occur

Please write your answer here:

John Easther (Director and shareholder of HDL) controls the primary exchange block through his company Riskworks Ltd, and controls land at Granity, held for the ocean outfall terminal, through his family trust.

The applicant has proposed that both parcels of land will be transferred to a Special Projects Vehicle (SPV) when the Project proceeds to the development stage. The proposed SPV will be established to undertake the Project, led by the generator that will build and operate the Project, in partnership with the Crown and other stakeholders.

## Section 2: Project details

What is the project name?

Please write your answer here:

Stockton Plateau Hydro Scheme

What is the project summary?

Please write your answer here:

The Stockton Plateau Hydro Scheme (SPHS) has been consented to manage the Crown's long-term liabilities to rehabilitate acid mine drainage (AMD), a legacy of c120yrs coal mining on Stockton Plateau. Diverted AMD will generate up to 240Gwhrpa hydro electricity. The scheme will result in restoration of the ecology of the Ngakawau River to pre-mining conditions.

HDL has produced the website [www.hydrodevelopments.co.nz](http://www.hydrodevelopments.co.nz) to assist with due diligence. The site provides details on the development of the Project and includes links to a repository of detailed background information.

The scheme is designed to capture ALL runoff from the areas of Stockton Plateau affected by coal mining, diverting to storage in reservoirs all acid mine drainage generated within waste dumps and historic mines. All incident rainfall is also diverted to the reservoirs, resulting in a reduction in the acidity of the water in the reservoirs so that, under normal conditions, untreated water can be discharged to Buller Bay without affecting ambient conditions in the Bay. The Project allows for the treatment of water prior to discharge to ocean potentially following extended drought when inflow to the reservoirs is dominated by leachate from waste dumps.

What are the project details?

Please write your answer here:

The Project is designed to replace the current process for treating acid mine drainage (AMD) from within the current coal mining license area (CML). The Project provides a more comprehensive and sustainable long-term solution for managing ALL AMD from both current (within the CML) and historic (beyond the CML) state-owned coal mines across Stockton Plateau. The current process is funded largely by the Crown as a condition of the sale of Stockton Mine to BT Mining. The Project will provide comprehensive management of the Crown's AMD liabilities until they expire (c100yrs hence) for a largely capped Crown contribution spread over the development phase. The contribution will be similar to, or less, than the NPV of the current limited coverage process. The scheme offers a much lower cost-risk profile for the Crown than continuing with the current process. It also offers significant economic benefits flowing to the regional community, which the current process does not.

By creating a water barrier around Stockton Plateau the scheme will control the effects of future mining of the remnant reserves and rehabilitation of the land form.

HDL's proposal must be considered in the context of the risk profiles of the current process, or alternatives. Ideally a long-term solution should be agreed before the current coal mining licenses expire in 2027. HDL's proposals have been with Stockton Mine since 2010 and with Government since 2017.

The existing process of neutralizing acidity by injecting lime reagents into tributary streams will not be sustainable for the required c100years after completion of mining when acidity may fall to natural background levels. The current process is incentivized, managed and funded as part of a coal mining operation. Only AMD from areas covered by the current coal mining license is managed, leaving AMD from historic mines outside the license area unmanaged. This is unlikely to remain acceptable, as are the current conditions of discharge consents, which significantly affect ambient conditions in receiving waters.

HDL's Project incorporates hydro generation. Revenue from hydro generation will subsidize the cost of the diversions required for long-term management of AMD, reducing the risks and costs to the Crown for managing its liabilities. The Project can be optimized to meet both the requirements of the Crown and renewable green energy investors.

The Project offers significant regional economic opportunities. This is a major project, but with civil components that can be constructed with the same local skills and resources that have supported the mining industry. The Project will attract to the region industry seeking green energy. Through its location and energy storage design, the Project offers firming power to support intermittent new generation planned for the West Coast and elsewhere.

Describe the staging of the project, including the nature and timing of the staging

Please write your answer here:

The attachment to Section 1 "SPHS Revised Project Plan and Staging May 2020" describes the latest staging developed in consultation with BT Mining. Under this strategy the first stage of the scheme's construction could start immediately after agreement is reached between the Government (including DOC), BT Mining and HDL.

It is proposed that staging is driven by the immediate needs of the Crown and miner to manage AMD under largely existing arrangements between the Government and the miner. This will enable an immediate start to the physical works components of the scheme of works under the ancillary mining license; components which will not be affected by later scheme optimization. While this is taking place, the Project's commercial structure and final configuration will be developed, optimized to meet AMD management and generation requirements.

What are the details of the regime under which approval is being sought?

Please write your answer here:

Resource Management Act 1991.

The consents held by HDL are augmented by consents and authorities held by BT Mining and The Treasury. Collectively they establish the environmental baseline within which the Project must be developed, which anticipate a staged process. Project optimization is expected to require re consenting of some of the components of the scheme of works within the baseline (historically covered by Variations).

Conservation Act 1987.

It is expected that the approved land exchange and concession agreements will require review due to the time lapsed since approval. Between 2008 and 2011 HDL worked with DOC on the preparation of a land exchange (for reservoir sites) and a concession (for tunnels, access roads and ancillary structures) for the entire Stockton Plateau Hydro Scheme. In 2011, HDL entered into an agreement with Solid Energy for Solid Energy to build the first reservoir. This required completion of the land exchange and concession agreements for the entire Project. DOC required that the "applicant" change from HDL to Solid Energy. DOC approval for the land exchange was issued to Solid Energy in 2012 leaving Solid Energy and HDL to complete the agreed land exchange conveyances. This has been delayed due to the sale of the mine and uncertainty of the Crown's position with respect to long-term management of AMD. The concession was agreed but held in "final draft" pending survey of final design, required to confirm the schedule of areas covered by the concession.

Crown Minerals Act 1991

It is expected that Stockton Mine's Coal Mining License (CML) and Ancillary Coal Mining License (ACML) will require Ministerial approval of extensions of the terms of the licenses well before their expiry in 2027. Grounds for extension will be rehabilitation of the site but may also include recovery of pockets of the original coal resource covered by the licenses, which may be commercially viable after cessation of export coking coal operations. As the Project will manage the rehabilitation of mine water it will require continuation of the access provisions of the ACML, either as continuation of the conditions of the existing ACML or by issue of a new license. It is proposed that the licenses be extended before 2026 (an election year).

If you seeking approval under the Resource Management Act, who are the relevant local authorities?

Please write your answer here:

West Coast Regional Council

Buller District Council

What applications have you already made for approvals on the same or a similar project?

Please write your answer here:

The Stockton Plateau Hydro Scheme was consented in 2010. In 2019 the lapsing date for the scheme was extended to 2026 with the consent of affected parties (including The Treasury) and the local authorities. The date for extension was aligned with similar extensions for consents held by The Treasury (for the Stockton Hydro Scheme) and BT Mining (for Lower St Pats Reservoir) both of which include provisions compatible with optimization of the Stockton Plateau Hydro Scheme.

Is approval required for the project by someone other than the applicant?

Yes

Please explain your answer here:

The Project will require an expression of interest from Government before it can proceed.

Due diligence by generators confirms that the Project is commercially viable for private sector energy investment if the Government supports the Project as the long-term solution for management of AMD and is willing to make a proportionate contribution to the capital cost. Investors are not prepared to invest in further participation in the scheme without an expression of interest from the Government.

Since 2017 The Treasury has been managing the Stockton Acid Mine Drainage Rehabilitation Project to recommend to Ministers a long term solution for managing the Crown's rehabilitation liabilities.

HDL has proposed the Stockton Plateau Hydro Scheme in response to The Treasury's 2017 "Market Sounding" and in their 2020 follow up "Request for Information".

HDL was advised in July 2023 that "a shortlist of remediation options had been provided to the Minister of Finance and that Treasury would be back in touch once Cabinet has received and considered the final Business Case to confirm a decision". Treasury's advice was that "a single-stage ministerial decision process is being applied to this business case, in accordance with Cabinet decisions. While the Treasury has presented a shortlist of AMD management approaches to the Minister of Finance, the Minister has not been asked to endorse the progress made and won't be asked to do so until the business case process is complete. Only then will Ministers be asked to make a decision on a preferred option. It is quite possible that there will be no RFP issued until there is more certainty around BT Mining's planned date of exit. "

It is of concern if the resolution of long-term AMD rehabilitation is dictated by the timing of the commercial interests of the miner.

If the approval(s) are granted, when do you anticipate construction activities will begin, and be completed?

Please write your answer here:

The attachment to our project description in Section 1 "SPHS Revised Project Plan and Staging May 2020" provides a proposed fast track staging and includes a gantt chart for the first stage.

The timeline will be initiated by a formal expression of interest from Government to support the project subject to the project meeting the Government's requirements for long-term management of AMD. This would need to be by way of an MOU or similar partnership agreement.

An alternative may be by way of a grant to proceed with the development phase, as HDL requested from the Provincial Growth Fund in 2018. This was shelved by MBIE pending outcomes of The Treasury's Stockton AMD Rehabilitation Project, still pending. HDL's 2018 application to the PGF provides detailed design, procurement, funding and scheduling information, which remains essentially unchanged other than for indexing of costs.

A high-level summary of the timeline is that work on site would commence within 3 months of completing an MOU or receiving notification of a development grant. The first stage, which provides the best option for addressing immediate needs to manage AMD, would be completed within 3 years. During that period, participation of energy investors and a generator would lead to scheduling of subsequent stages. Scheduling will be aligned with the changes that are likely at Stockton as export coal mining winds down and full rehabilitation of the site moves ahead.

### Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

In 2019 the consent authorities, Buller District Council and West Coast Regional Council, deemed the following parties were affected by HDL's application for extension of the project's lapsing date, all of whom consented to the proposed extension:

B T Mining Ltd (BT): Operators of Stockton Mine, owners of the land covered by the coal mining license, holders of the coal mining and ancillary coal mining licenses. BT manages existing processes to minimise the effects of acid mine drainage (AMD) on behalf of the Crown under the direction of The Treasury. Anecdotally, the Crown's sale agreement with BT defines BT liabilities for AMD generated by BT and the arrangements for settlement with the Crown when BT quits the mine (the sales agreement is confidential and has not been sighted by HDL). BT Mining will be affected by the Project's construction traffic on the mine's haul roads. Construction of the Project will simplify water management and provide the mine with access to remnant reserves that are not covered by existing water management diversions. HDL understands that approval for construction of the first stage of the Project (or equivalent infrastructure) is important to BT, which has been frustrated by the delays.

The Treasury: The Treasury advised the consent authorities that it was an affected party when HDL sought an extension of the Project's consents in 2019.

LINZ: LINZ manages on behalf of the Crown a number of parcels adjoining Stockton Mine that are affected by the mine's access roads and could potentially be partially inundated.

Department of Conservation: DOC manages the stewardship land that most of the Project will occupy. DOC's position has been that effects on the estate will be managed through the provisions of the Conservation Act for concessions and land exchange (DOC has made neutral submissions under HDL's previous RMA applications).

J M and B J Easter Family Trust: Owner of property held for the Project.

Te Rūnanga o Ngāti Waewae exercises kaitiakitanga over the Stockton Plateau.

Detail all consultation undertaken with the persons referred to above. Include a statement explaining how engagement has informed the project.

Please write your answer here:

The AEE for the Stockton Plateau Hydro Scheme Consent Application is attached. Pages 120-125 of the AEE detail the consultation undertaken to consent the project. The Decision with conditions of consent are attached to Section 5 of this application.

Consultative groups anticipated by the conditions of consent were established after the consents were granted in 2010. These were put in abeyance when it became evident that development of the Project would be delayed by Solid Energy's dissolution over the period 2011 to 2017.

Regional interests, affected parties and potential investors have engaged with HDL over this period in support of the Project, in submissions to Ministers, and subsequently as The Treasury has worked through its Market Sounding and RFI to consider the long-term solution for rehabilitating AMD.

Formal consultation will be resumed when the Government confirms its support for the Project.

Discussions have been held with Te Rūnanga o Ngāti Waewae and Ngai Tahu Holdings Ltd concerning their participation in the Project and The Treasury's RFI for the Stockton AMD Rehabilitation Project.

Upload file here:

HDL Resource Consent AEE.pdf was uploaded

Describe any processes already undertaken under the Public Works Act 1981 in relation to the land or any part of the land on which the project will occur:

Please write your answer here:

There has been no need for HDL to resort to the Public Works Act 1981. No private property is effected other than that owned by the consent holders.

## Section 4: Iwi authorities and Treaty settlements

What treaty settlements apply to the geographical location of the project?

Please write your answer here:

The Ngāi Tahu Settlement provides for the Right of First Refusal (RFR) on a large range of Crown assets.

The land covered by the Stockton Mine Coal Mining License (CML) is now held in freehold title by BT Mining Ltd (the mine also holds concessions for occupying parts of the conservation estate adjoining the CML for ancillary coal mining purposes).

HDL understands (anecdotally) that the Settlement Agreement for the sale of Stockton Mine to BT Mining requires transfer of the title back to the Crown when BT's license expires. The land will be offered to Ngai Tahu / Te Rūnanga o Ngati Waewae under the Right of First Refusal. If the RFR is not taken up, the land will be designated stewardship land administered by DOC.

While the Project components are unlikely to occupy the land covered by the RFR, HDL has proposed to Ngāi Tahu Holdings that participation in the governance of the Project, or as an investor, may provide a useful mechanism for Ngāi Tahu to strengthen its kaitiakitanga over the Ngakawau River.

In July 2022, the Manu Whenua Panel considering the proposed West Coast land reclassification, strongly supported the retention of stewardship classification for the stewardship land that would be occupied by the Project, specifically to provide for the construction of the Project to rehabilitate the land and Ngakawau River, should this be supported by Government.

Are there any Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 principles or provisions that are relevant to the project?

No

If yes, what are they?:

Are there any identified parcels of Māori land within the project area, marae, and identified wāhi tapu?

No

If yes, what are they?:

Is the project proposed on any land returned under a Treaty settlement or any identified Māori land described in the ineligibility criteria?

No

Has the applicant has secured the relevant landowners' consent?

Yes

Is the project proposed in any customary marine title area, protected customary rights area, or aquaculture settlement area declared under s 12 of the Māori Commercial Aquaculture Claims Settlement Act 2004 or identified within an individual iwi settlement?

No

If yes, what are they?:

Has there been an assessment of any effects of the activity on the exercise of a protected customary right?

Yes

If yes, please explain:

The Project will remove acidity and the effects of lime reagent neutralisation from the tributaries of the Ngakawau River, the lower reaches of the Ngakawau River, Ngakawau Estuary and the nearshore marine environment. Water affected by AMD will, instead, discharge into Buller Bay via an ocean outfall. The conditions of consent require an outfall management plan which will ensure that the ambient conditions in Buller Bay, beyond the specified mixing zone, are not compromised. Ambient conditions are assessed holistically and include cultural values.

The Project's Assessment of Environmental Effects attached to Section 3 of this application considers the effects on the coastal marine area. The Decision, including conditions of consent, are attached to Section 5.

Upload your assessment if necessary:

No file uploaded

## Section 5: Adverse effects

What are the anticipated and known adverse effects of the project on the environment?

Please describe:

The Project has been supported by environmental groups keen to rehabilitate the Ngakawau River.

Adverse effects of the occupation of stewardship land, previously highly modified by ancillary mining activities, will be offset by transfer of exchange blocks to the conservation estate. These have been identified and agreed with DOC.

Adverse effects of discharge of AMD to ocean will be managed in compliance with the Australian / New Zealand guidelines for an ocean outfall. The guidelines require that ambient conditions in Buller Bay must not be compromised. The guidelines require an holistic assessment of cultural, social and scientific values.

The Project's Assessment of Environmental Effects is attached to Section 3. Attached to this section is the "Decision and Recommendations of the Joint Hearing Committee" which summarizes their consideration of the effects on the environment and establishes the condition of consent.

More recent global concerns over acidification of the oceans has raised the philosophical issues of the Project discharging acid to Ocean. NIWA's "Ocean Acidification Assessment July 2022" prepared for inclusion in the Environment Aotearoa 2022 (EA22) report identified "Ocean acidity in sub-Antarctic waters near New Zealand increased by an average of 8.6 % over the 23 years from 1998 to 2020. This is within the range observed at other open ocean sites around the world ..... Ocean acidification at the coastal sites has not been measured for long enough for any long-term trend to be resolvable from the natural shorter-term variability. .... Factors influencing ocean acidification at the coastal sites include water temperature, freshwater and terrestrial input, biological activity, and currents and tides."

HDL recognizes that neutralization of AMD, however it occurs, will generate carbon emissions which will directly or indirectly contribute to acidification of the oceans. HDL's response is that it is seeking approval to manage an existing AMD legacy, which cannot now be reversed, through a process that will minimize the effects of the legacy on the environment. It is not creating a new legacy.

It is physically not possible to contain the legacy on site. Neutralization of the acidity will occur within the environment and will release similar carbon, with similar effects on the ocean ecology, whether neutralization be by land based treatment prior to discharge to waterways or by diversion to ocean.

AMD generated on Stockton Plateau cannot be treated and discharged to the Ngakawau River without adverse effects on the ambient conditions in the river and its tributaries. It can be collected and discharged to Buller Bay without affecting ambient conditions in Buller Bay, as proposed by HDL.

Upload file:

HDL RC08149 Decision.pdf was uploaded

## Section 6: National policy statements and national environmental standards

What is the general assessment of the project in relation to any relevant national policy statement (including the New Zealand Coastal Policy Statement) and national environmental standard?

Please write your answer here:

The term of HDL's consents were extended in 2020. This process confirmed that the scheme is consistent with changes in national, regional and district planning requirements.

HDL's application for the extension of lapsing dates is attached.

File upload:

HDL WCRC app for extension of lapse dates 2019.pdf was uploaded

## Section 7: Eligibility

Will access to the fast-track process enable the project to be processed in a more timely and cost-efficient way than under normal processes?

Yes

Please explain your answer here:

The fast track process will;

1. Avoid further delays in the Government's consideration of the long-term solution for managing the Crown's AMD liabilities by referral to the Ministers.
2. The Project, if supported by the Ministers and progressed under fast track, will provide a vehicle for encouraging and planning the economic development that will be required as export mining declines, and will provide rationale and support for the extension of the coal mining licenses, anticipated during the current term of Government.
3. If fast tracked, the process will enable private sector investment in the Project and downstream green-energy intensive industry: The Project can only proceed commercially if it is supported in-principle by Ministers. Listing via Part 2B will provide a positive signal for energy investors and high-use consumers to re-engage; parties who have previously undertaken due diligence, but held back due to uncertainty of Government support.
4. Avoid delays in DOC's review and confirmation of land exchange and concession agreements, previously approved in 2012.

5. Facilitate processing of variations in consents that can be anticipated during value engineering and final design.

HDL's proposed 4-stage implementation strategy described in the attachment to section 1 "SPHS Revised Project Plan and Staging May 2020" proposes sequential Government approvals for each stage, which will be aligned with private sector energy investment, but which will be dependent on in-principle support from Ministers initially, and subsequently, Government commitment to Stage 1. Stage 1 covers work required to meet existing responsibilities to manage AMD under existing arrangements with BT Mining and should be straightforward to fast track with Ministerial backing.

Physical works on Stage 1 of the Project can commence immediately after a concession for exploratory drilling is obtained (granted in 2010, now lapsed) and Land Exchange and Concession agreements for occupation of the estate are issued (approved in 2012).

In April 2018 HDL sought DOC advice on how to finalize the land exchange and concession agreements previously approved by DOC in 2012. In October 2018 DOC advised that a new application would be required. This despite no significant changes in the environment and proposed modifications to the scheme that would reduce the area of the estate occupied by the scheme. DOC proposed "The only alternative process to consider any proposal is under Part 3B of the Conservation Act. The proposal would have to be assessed against the tests outlined in the Conservation Act 1987 and in particular, against 17U - "Matters to be considered by Minister"." (DOC File Ref: 67826-OTH).

We believe Ministerial intervention will be required to avoid unnecessary rework by HDL and DOC, and lengthy delays within DOC. As there have been no significant changes to the stewardship land that will be affected by the Project since the original approvals were granted, HDL believes that DOC's review of prior approvals and approval to proceed should be straightforward to fast track.

Our experience is that West Coast Regional Council's consents team is efficient but its preference is to re-consent entire schemes requiring variations, rather than to manage variations as they arise through value engineering and final design. Our experience is that Buller District Council's consents team is under-resourced leading to lengthy delays and high costs. Re-consenting is inefficient for a scheme that has been consented on the expectation that it will be staged. A fast track process should apply to variations.

What is the impact referring this project will have on the efficient operation of the fast-track process?

Please write your answer here:

This application is made under Part 2B as Ministerial approvals will be required as discussed above.

All the ground work for this Project has been completed, but has been frustrated for years by delays which Ministers may be able to resolve through the Fast Track process. This will result in fast track delivery of infrastructure which will provide significant regional benefits and will resolve a potentially significant Crown environmental liability.

Has the project been identified as a priority project in a:

Central government plan or strategy

Please explain your answer here:

The Project has been submitted in response to The Treasury's 2018 Market Sounding and subsequent 2022 Request for Information for long-term solutions to manage the Crown's liabilities for rehabilitation of acid mine drainage from Stockton Plateau. Refer to The Treasury's "Stockton Acid Mine Drainage Rehabilitation Project" and the provisions in the Crown's accounts for resolution of the liabilities (\$78M non-contingent in the June 2022 accounts).

Construction of the Project and the renewable generation it will produce will support the Government's strategies for regional economic development and energy resilience.

The Project will deliver the Investment Objectives and meet the Critical Success Factors that The Treasury has established for the Stockton AMD Rehabilitation Project (issued by TSY to HDL 21-7-23)

Investment Objectives (IOs)

- 1) Progressively improve the health of aquatic ecosystems and streams, and maintain those health levels that exist at mine closure
- 2) Achieve water health conducive to mahinga kai within three generations
- 3) Ensure that current and reasonably foreseeable future regulatory requirements can be met, and
- 4) Adopt a management approach that reduces cost uncertainty for the management of AMD over the life of the Project.

Critical Success Factors (CSFs)

- 1) Timing: can it be implemented before BT Mining hand management back to the Crown?
- 2) Consentability: how likely is it that necessary approvals can be gained?
- 3) Risk and resilience of infrastructure (considering the unique environmental conditions on the Plateau)
- 4) Value for money: how the option performs compared to the existing arrangements
- 5) Supplier capacity and capability, and
- 6) Potential achievability: technical feasibility.

Will the project deliver regionally or nationally significant infrastructure?

Regional significant infrastructure



Please explain your answer here:

The scheme will provide up to 60MW / 240 Gwhrpa renewable energy which can be fed into the grid as firming power for new intermittent generation or into the local network to meet total future demand, including supplying high energy-use industries. The scheme could be operated symbiotically with Westpower's Waitaha Scheme to increase the value of both schemes to the regional economy.

The infrastructure established to build and operate the hydro facilities will provide the infrastructure required for the long-term management of the Crown's AMD liabilities.

The scheme's infrastructure will manage the long-term effects of historic coal mining on the environment. Operators of the hydro facilities will be incentivized to maintain and maximize diversions to capture runoff, including AMD, and to ensure water quality meets the conditions of the Project's consents, requiring no change in ambient conditions in the Ngakawau River and Buller Bay. This is not achieved by existing water management infrastructure.

Will the project:

address housing needs

Please explain your answer here:

It can be expected that most of the current work force at Stockton Mine will become redundant as export coking coal mining winds down over the next 5 years. Construction of the Project and downstream industries will offer employment to redundant workers.

Construction and operation of the Project and potential downstream industries will retain the current workforce on the Coast, retaining use of existing housing stock and avoiding pressure elsewhere as workers leave the Coast in search of employment.

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The civil components of the scheme is constructable using local expertise and resources. In excess of \$150M will pass through the West Coast economy during scheme construction, the exception being turbines and generation equipment which may be sourced offshore. The scheme, along with other planned generation, will make the Coast an attractive location for industry seeking renewable energy.

Will the project support primary industries, including aquaculture?

Yes

Please explain your answer here:

The Project should improve the reliability of supply and reduce the wholesale price of electricity at the local node. Supply is currently generated at Benmore with significant energy losses in transmission.

Will the project support development of natural resources, including minerals and petroleum?

Yes

Please explain your answer here:

The project will offer secure power supply for industries planning to extract rare earth minerals in the Buller District and will potentially provide for manufacture of specialist coal products from the residual coal deposits that will remain after the current bulk export of coking coal is no longer practical or economic.

Will the project support climate change mitigation, including the reduction or removal of greenhouse gas emissions?

Yes

Please explain your answer here:

The project is nationally one of the few new generation proposals that offer energy storage which can be managed to provide firming for other new, predominantly intermittent, generation. The predominance of intermittent generation in the new generation pipeline will frustrate the national goal to achieve 100% renewable generation without firming generation.

Will the project support adaptation, resilience, and recovery from natural hazards?

Yes

Please explain your answer here:

The Project provides an AMD treatment option which has been designed to adapt to climate change and manage the natural hazards that are anticipated (higher rainfall, storm surge and coastal erosion) and tectonic activity. Reservoirs are designed for probable maximum floods.

Existing processes for managing the Crown's AMD liabilities will be severely adversely affected by such events. If these processes are continued beyond cessation of mining, the heavy earthmoving resources to repair existing infrastructure will not be available on site (repair of waste dumps to limit production of AMD, diversions, sumps, access roads).

Will the project address significant environmental issues?

Yes

Please explain your answer here:

In 2000 the Ngakawau River was regarded as the most contaminated river in New Zealand with little or no freshwater ecology surviving in the lower reaches. The incentive to keep selling coking coal has seen some recovery. There is no incentive for this to continue post mining without the Project.

The managerial and physical infrastructure required for long-term operation of a hydro scheme will provide the Government with the infrastructure required to manage the Crown's long term AMD liabilities. The owner-generator will be incentivized, by the sale of energy, to maximize the collection and diversion of runoff from Stockton Plateau (i.e. AMD). The long-term nature of hydro investment will incentivize long-term compliance with conditions of consent. Such incentives will not exist for continuation of current AMD management practices.

Is the project consistent with local or regional planning documents, including spatial strategies?

Yes

Please explain your answer here:

As described in section 4, in 2020, the lapsing date for the consents for the Project was extended from 2020 to 2026. This required confirmation that the Project was consistent with local and regional planning documents, including spatial strategies. The Treasury supported the extension recognising the potential value of the scheme for long term water management.

Anything else?

Please write your answer here:

The government's delays in considering its support for the Project has frustrated private sector investment in the development of the scheme to the extent that parties will not re-engage until it is clear that the Government will consider support for the project.

The delays have resulted in the maintenance and development of water management infrastructure, funded by the government, which would not have been required had Solid Energy (acting for the government) supported the project when it was consented in 2010. Adverse effects on the Ngakawau River and its tributaries have continued unnecessarily. During this period, government officials have been largely silent on HDL's proposals despite encouragement from Ministers following approaches by HDL and its potential investors. Our observation is that the cost to the Crown of maintaining the status quo must be small compared to other national priorities. The significant regional benefits do not appear to have focused attention or priority on resolving the issues.

HDL is hopeful that the Part 2B fast track process will facilitate resolution. Listing of the Project is expected to reignite private sector investment.

Does the project includes an activity which would make it ineligible?

No

If yes, please explain:

## Section 8: Climate change and natural hazards

Will the project be affected by climate change and natural hazards?

Yes

If yes, please explain:

Projected increased rainfall will increase power output.

Projected higher intensity rainfall on waste dumps is likely to breach capping layers leading to increases in production of acid mine drainage and silt loads which would overcome existing processes. The Project is designed to manage these events.

Projected increases in sea level is accommodated by the elevation of the tailrace, the elevation of which is determined by projected storm surge (greater than projected sea level rise). Sea level rise will improve the efficiency of the outfall by increasing effective depth and distance of the diffusers from shore. The outfall pipelines are buried within the foreshore anticipating coastal erosion.

## Section 9: Track record

Please add a summary of all compliance and/or enforcement actions taken against the applicant by any entity with enforcement powers under the Acts referred to in the Bill, and the outcome of those actions.

Please write your answer here:

There have been no compliance or enforcement actions taken against HDL.

Solid Energy appealed the Project's consents to the Environment Court in 2010 on the grounds that the construction and operation of the Project would affect mining operations. The appeal was withdrawn.

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## Declaration

Do you acknowledge your submission will be published on environment.govt.nz if required

Yes

By typing your name in the field below you are electronically signing this application form and certifying the information given in this application is true and correct.

Please write your name here:

John Easterher

Important notes