

## **HDL Right of Reply.**

### **Submissions on behalf of Solid Energy New Zealand Limited by Mark Christensen, David Horne, Mark Pizey.**

Solid Energy's Stockton mining operation is an important stakeholder for the Stockton Plateau hydro project in a number of regards. Firstly, for the physical aspects of the requirement for HDL to cross Solid Energy land in order to build and operate the Stockton Plateau hydro project; secondly, for HDL to design the project so that the project imposes no constraints on Solid Energy's mining operations; and thirdly, so that HDL designs the projects to provide maximum advantage to Solid Energy as operators of Stockton mine in terms of (1) reducing the costs of mining; (2) facilitating mining areas which otherwise would be problematic without the AMD collection facilities provided by the Stockton Plateau hydro project; and (3) by substantially reducing the costs of mining operations by providing far more effective, reliable and efficient ways of dealing with the effects of mining, particularly the chemical aspects of acid mine drainage.

In providing this rebuttal, HDL wish to record that throughout the development of the SPHP HDL has proceeded on the basis that a strong and lasting relationship will be developed with Solid Energy in the fullness of time. HDL believes that this will achieve the aforementioned benefits for Solid Energy in particular, but also the flow-on benefits for both the environment and the Buller community; and indeed, in fact, the national community, as is stated in both HDL's AEE and in Solid Energy's evidence. The operation of the Stockton mine is critical to the Coast. This has been a position of HDL throughout, where the shareholders of HDL, and in fact the entire community that we are committed to, sees mining of the Stockton Plateau to under-rite the viability of not only our businesses, our lifestyles and enjoyment of this part of the world. HDL has no interest whatsoever in placing these at risk.

HDL is of the opinion that the construction of the Stockton Plateau hydro project will substantially de-risk the mining operation and establish the green credentials of Solid Energy.

It is our that the current operations at Stockton mine, while a huge improvement on those occurring 10 years ago, still create significant environmental effects. This is not a criticism. It is simply HDL observation that the processes being followed by Solid Energy are less than optimal and that there are other ways of achieving better outcomes, at less cost and with greater certainty.

It is useful to review the history of the water management operations at Stockton and the strategy that Solid Energy is currently following. This is all public knowledge but as you have seen from our evidence, we have intimate knowledge of all operations that are currently taking place at Stockton mine.

At the commencement of the current water management strategy (which in Solid Energy's evidence is referred to as SWAMP - Stockton Water Management Plan), Solid Energy received advice that it was unlikely that it would be able to design an AMD collection system and ocean outfall that would meet reasonable discharge conditions. Hence the option of an ocean outfall was taken out of the set of viable strategies moving forward and relegated to a lower priority study. In 2006, at the time HDL investigations started to gain momentum, SENZ commissioned URS to look at the opportunities for an ocean outfall. URS looked at a number of opportunities

that would discharge untreated mine water to ocean. Their conclusion was that it was likely to be expensive and in the worse case dilution ratios of 1000:1 may be required. URS, using OCEL explored the use of micro-tunnelling to discharge beyond the wave break zone. HDL has built on this component of those earlier studies.

SENZ concluded that it did not wish to pursue the investigations and saw no conflict of interest in HDL pursuing a hydro project with an ocean. No conflict of interest was perceived in John Easter working for both Stockton Mine and HDL during the period of the development of the SPHP. Combined with open information sharing of technical information, this has ensured that the Stockton Plateau hydro project is compatible with the development of the Millerton pit, the development of the Cypress pit (which includes connections between those two pits) and hence all currently active and planned mining areas on the Stockton mine CML and mining permit 41 1515. HDL has ensured that SPHP will not interact with the mines operations, current or future, in any adverse way whatsoever.

In earlier evidence HDL stated that any mining activity could take place upstream of the SPHP provided that any diversion or take, once taken is discharged back into the CML or MP 41515. David Horne has confirmed in his evidence this is SENZ intention. Loss of water in the mining process, such as the proposed evaporative processes suggested by Mark Pizey in his verbal evidence would not have any effect on the viability of the SPHP as the amount lost to evaporation is obviously immaterial compared to the total volumes of water discharged through the Stockton Plateau hydro project. To be even more specific; mine water taken within the Mangatini catchment could be discharged into the St Patrick's catchment, either into Plover, Fly or into St Patrick's itself, or vice versa. From the point of view of hydro scheme operation, any diversion that delays the flood peak reaching the reservoirs and detains water, whether through a sump or whether through a diversion channel, is of benefit to the scheme. This is shown by the spill volumes in all the hydro modelling reports.

The SPHP will only be affected if substantial and large volumes of water were extracted from the catchment upstream of the stream diversions through to a different outfall location. Mark Christianson in his evidence referred to clause (c) in paragraph 4.2 "Mining operations shall not include any resource consent applications by Solid Energy for any hydro schemes" which reflects HDL's concerns in this regard.

The wording of clauses attached in clause 4.2 of Mark Christianson's evidence has been the subject of correspondence between Solid Energy and HDL during the hearing. HDL has made it clear to SENZ that it recognizes its need to have security for its operations. However, it believes that the threat perceived by SENZ is overstated, and is based on a poor understanding of the operation of SPHP and of Stockton mine's operational criticalities. A factual risk assessment of effects on its current and future mining operations and consents is required to validate SENZ's perceptions. The assessment by WCRC of current consents illustrates the lack of substance in SENZ's submission.

The condition of consent proposed by SENZ is clearly unworkable. The effect of HDL operating or exercising the consents covered by the application is to build permanent works in the way of permanent diversion, tunnels, intake towers, intakes, reservoirs, and ocean outfall. It is not possible for HDL to discontinue the exercise of those consents once they have been exercised.

It is also observed that HDL's consent applications provide for the collection of all water that reports to specific points where the diversions are constructed. The consents do not provide for a specified take at these points, rather whatever occurs at this point in the catchment. The catchments are already substantially modified by current land use which will be the environment and land use at the time the consents are issued. This environment and land use is defined by the CML and MP 41515. HDL could not claim that it is an affected party if land use continues as permitted by the CML, MP or any consents that are consistent with these.

HDL has proposed to SENZ that the appropriate mechanism to provide security to SENZ is through the access agreement, if not already provided through the CML as discussed above.

Turning to SENZ Stockton Plateau hydro project commissioning will change the parameters within which Solid Energy manages mine water. The basic requirements for management of mine water fall into two categories, 1) the control of the movement of silt from mining operations, 2) the control of AMD.

Commissioning of the Stockton Plateau hydro project will not change any existing requirement for the control of silt. It will change the existing requirement for the management of AMD by obviating completely this requirement. If one is to analyse the total costs of water management undertaken by Solid Energy, by far the greater cost relates to the management of acid mine drainage.

With respect to silt management, within the CML area overburden is predominantly Brunner Coal Measure, a sandstone overburden. Control of sediment should be a relatively straightforward process. Current silt discharge non-compliances (which occur less frequently than they have in the past but still frequently) can be attributed to poor mining practice and inappropriate infrastructure,. Both are recognized by SENZ.

All future mining operations that are currently being planned or will be implemented within the next year or so at Stockton mine will in fact have best practice duplicate sediment trap facilities in place. Solid Energy will achieve a much higher level of sediment control than they currently do. Solid Energy's strategy is to continue to improve the performance of sediment management. As has been covered by previous evidence, this is in fact an integral part of all future mines and can be discovered both by reference to the Millerton consent application water management strategy and the water management strategy that has been consented for Cypress mine, the two major sources of coal going forward for the mine.

With regard to AMD, HDL has established that the Stockton Plateau hydro project will obviate the need for the continuation of the construction of water treatment plants. Solid Energy will need to continue to operate plants until such time as the Stockton Plateau hydro project is commissioned in c 2016. The suggestion by Mark Pizey that the current company policy is to continue to maintain water treatment plants after the commissioning of the Stockton Plateau hydro project is unlikely to be the case. It would raise questions of financial and environmental accountability. It is highly unlikely that SENZ would continue to create environmental effects unnecessarily, continue lime dosing into a water system that was otherwise producing an acceptable ocean outfall, and hence compromise that ocean outfall, or continue to invest money in AMD treatment that was unnecessary. This would be of concern to SENZ Board and to the Ministry of Economic Development who are funding at least

50% of the current costs of lime dosing and other chemical water treatment processes.

Turning to the question of the costs that SPHP could impose on Solid Energy during the construction phase, HDL's previous evidence has covered that costs of access that would be required for the construction of the project and for the subsequent operation of the project are entirely project costs. The only conceivable costs that Solid Energy would incur would be additional mine management costs associated with induction processes and consequent to having 25 additional personal within the CML boundary at any time. These costs can be assessed and charged to the project as part of the access agreement and need not be an SENZ cost. With regard to the occupation at the Gravity site, the Gravity site is currently not used as part of the current coal mining operation although it may be useful in the future. HDL's occupation of the site need not be exclusive and is for a limited period. These matters are properly dealt with by an access agreement and are not a matter for the consent hearing.

In summary, we believe that the submission by Solid Energy is possibly an unfortunate outcome of perceptions of potential effects that will never be realized. Stockton mine management and staff are 100% committed to achieving improvements in past practice and apply their best efforts to achieving optimal environmental outcomes. It is our observation that Stockton mine staff appreciate that the construction of the Stockton Plateau hydro project will be beneficial to the mining operations. There is widespread grassroots support for the project amongst technical staff.

In presentation of SENZ evidence, Mark Christensen stressed the point that the submission should not be seen as an anti competitive submission related to Solid Energy's intention to further investigate a hydro scheme. Solid Energy have submitted that the construction of the SPHP will compromise future mining activities. At the same time, SENZ is spending considerable sums investigating a remarkably similar project which has a similar downstream hydrological extent, physical location, takes water from the same catchments and effectively discharges it through a similar process to a river or ocean outfall. HDL believes this is a fatal flaw in the submission and warrants that the credibility of the submission should be dismissed on these grounds alone.

We believe that the issues that have led to this submission are that Solid Energy requires security to undertake its mining operations. We believe that common sense will dictate that the security sought by Solid Energy can be provided by a number of mechanisms that are outside the consenting process. We do not believe that the issues raised in SENZ's submission are material to the consent application. We observe, as have indeed the Commissioners, that the scheme cannot be constructed without Solid Energy land owner agreement in some form, and we wish the Commissioners to direct that the submission is not relevant to this consent application in its entirety.