

COASTAL PERMIT

West Coast Regional Council: Application RC08149/02

Pursuant to the provisions of section 119 of the Resource Management Act 1991, I Kate Wilkinson, Minister of Conservation, hereby grant Hydro Developments Limited a coastal permit (No. SAR-05-123-01-01) to erect and place an ocean outfall pipeline approximately 600m long and outfall diffuser within the coastal marine area off the coast of Granity in the Buller District, West Coast, generally in accordance with the application and subject to the attached conditions of consent. This coastal permit is granted for a term of 35 years.

Dated at *Christchurch* this *22nd* day of *December 2010*



Hon Kate Wilkinson

Minister of Conservation

CONSENT CONDITIONS ON COASTAL PERMIT SAR-05-123-01-01

Application RC08149/2 by Hydro Developments Ltd to erect and place an ocean outfall pipeline approximately 600 metres long and outfall diffuser within the coastal marine area, as part of the hydro electricity power generation scheme on the Stockton Plateau, West Coast.

Located approx: N5952750 E2414175

Specific Conditions:

1. The Consent Holder shall undertake the activities authorised by these consents in accordance with the latest certified version of the Construction Management Plan and Ocean Outfall Management Plan.
2. The disturbance shall be limited to that reasonably necessary to facilitate the installation of the sub surface pipeline to convey tailwater using micro-tunnelling method.
3. The pipeline shall be placed at a surveyed bed level of sufficient depth to ensure that the pipeline remains below the active sea bed level and is adequately protected throughout its operational life. Survey plans shall be provided to the Consents and Compliance Manager of the Consent Authority to confirm compliance with this condition within two months of the completion of ocean outfall pipeline and diffuser works.
4. No drilling fluid shall be released into the coastal marine area.
5. There shall be no storage of fuel or refuelling of vehicles and machinery within the foreshore of the coastal marine area.
6. In the event of the detection of any system failure in the ocean outfall pipeline and/or the diffuser, the Consent Holder shall notify the Consents and Compliance Manager of the Consent Authority within 24 hours of becoming aware of it, and provide details of:
 - (a) The nature of any failure; and
 - (b) Any remedial works to be carried out.
7. In exercising these consents the Consent Holder shall adopt the best practicable option to ensure that emission of noise from within the coastal marine area does not exceed the noise level standards laid down within the West Coast Regional Coastal Plan.

General Conditions A

1. Exercise of Consent

- 1.1 All activities authorised by these consents shall be undertaken in accordance with the information contained in the Application, Assessment of Environmental Effects ("Stockton Plateau Hydro Scheme") and all supporting documents and plans as provided to the Consent Authorities, except where inconsistent with these conditions.
- 1.2 The Consent Holder shall ensure all key staff and contractors are made aware of the conditions of these resource consents to ensure compliance with the conditions.

2. Fees

- 2.1 The Consent Holder shall pay the Consent Authorities such monitoring, supervision and administration fees, as are fixed from time to time by the Consent Authorities in accordance with Section 36 of the Resource Management Act 1991. The Consent Holder shall meet the reasonable costs of compliance of all requirements and conditions of these consents.

3. Lapsing of Consents

- 3.1 All resource consents shall lapse on the expiry of ten years after the date of issue of the consents unless the consents are given effect to before the end of that period.

4. Review of Conditions

- 4.1 Pursuant to Section 128(1) of the Act, the Consent Authority may review any of the conditions of these consents by serving notice within a period of three months commencing on the first, third and sixth anniversary of the date that these consents are first relied upon and five yearly thereafter for any of the following purposes :
 - i. To deal with any adverse effects on the environment which may arise from the exercise of the consents and which it is appropriate to deal with at a later stage; or
 - ii. To deal with any other adverse effect on the environment on which the exercise of the consents may have any influence.
 - iii. To deal with inaccuracies contained in the consent application that materially influenced the decision made on the application and is such that it is necessary to apply more appropriate conditions.
 - iv. To assess the appropriateness of imposed compliance standards, monitoring parameters, monitoring regimes and monitoring frequencies and to alter these accordingly.
 - v. To ensure the adequacy of the operation of the Traffic Management Plan, Landscape Management Plan, Scheme Rehabilitation and Weed Management

Plan and Construction Noise and Vibration Management Plan required under the conditions of these consents.

5. Bond

- 5.1 The Consent Holder shall provide and maintain a performance bond in favour of the Consent Authorities (jointly for their respective interests) with a financial institution of good repute. The purpose of the bond is to secure compliance with conditions of consent including completion of rehabilitation in accordance with the Landscape and Rehabilitation Management Plan.
- 5.2 The bond shall be in a form acceptable to both Consent Authorities (regional and territorial)
- 5.3 Unless the bond is a cash bond, the performance of the conditions of the bond shall be guaranteed by a guarantor acceptable to the Consent Authorities. The guarantor shall bind itself to pay for the carrying out and completion of any condition in the event of any default of the Consent Holder. If the Consent Holder is unable at any time to arrange a guarantor for the quantum as set out in Condition 5.6, the Consent Holder shall provide a cash bond or bonds for the quantum within 60 days of the date of the renewal.
- 5.4 The bond shall provide that the Consent Holder remains liable under the Resource Management Act 1991 for any breach of these consents which occurs before expiry of these consents and which become apparent during or after the expiry of the relevant consent.
- 5.5 The Consent Holder shall not exercise these consents until the bond has been executed by the Consent Holder and deposited with the Consent Authorities.
- 5.6 The amount (quantum) of the bond may be varied from time to time but at any given time shall be sufficient to cover the estimated costs at that time (including any contingency) of compliance with all conditions, including but not limited to:
 - a) Demolition and/or removal of temporary buildings and structures erected during the course of construction activities.
 - b) Rehabilitation by re-contouring, spreading sub-soils and topsoil, re-vegetation and weed control until disturbed areas have been re-established with suitable vegetation.
 - c) Stabilisation of earthworks and landforms.
 - d) Rehabilitation of watercourses disturbed by construction activities, including the installation of erosion protections works where necessary
 - e) Establishment of an on-site visitors interpretative display in the vicinity of Weka power station.

- 5.7 The initial amount of the bond shall be the quantum assessed under General Condition 5.5 for the activities covered by the first Annual Work Plan or fifty thousand New Zealand Dollars (NZ \$50,000), whichever is the greater.
- 5.8 5.8 Prior to commencing earthworks for the construction of either dam and/or undertaking works in streams, the Consent Holder shall review the initial bond quantum required under General Condition 5.7. The new bond quantum shall be set at the 80% level of confidence for the estimated costs determined by a suitably qualified specialist acceptable to the Consent Authorities in accordance with (Bond) General Condition 5.5, based on the first Annual Work Plan and probabilistic calculations using the Monte Carlo simulation technique. Thereafter, the same specialist, or an alternate specialist acceptable to the Consent Authorities, shall review and prepare a report for the parties on the bond quantum at yearly intervals or such other intervals as agreed in accordance with General Condition 5.5 based on the same methodology, but using the Annual Work Plan for the coming twelve months. If the reviewed bond quantum is higher than the current bond quantum, then the bond quantum shall be adjusted accordingly within 30 days of the parties receiving the report, unless the Consent Holder invokes (Bond) General Condition 5.8.
- 5.9 The term of the bond shall continue until:
- a) Rehabilitated sites have a 90% established planting cover in accordance with Condition 23 of Land Use Consents RC08149/10 -12 and RC08/131 A and B Condition 17; and
 - b) The Consent Holder has complied with all the terms and conditions of the resource consents; or
 - c) In the reasonable opinion of the Consent Authorities, the likelihood of an adverse effect on the environment arising from the land in respect of which the resource consents have been exercised, is not greater than that from adjacent undisturbed land.
- 5.10 If the consents are transferred in part or whole to another party or person, the bond shall continue until any outstanding work at the date of transfer is completed to ensure compliance with the conditions of these consents, unless the Consent Authorities are satisfied adequate provisions have been made to transfer the liability to the new Consent Holder.
- 5.11 In the event of any such transfer of the consents, the Consent Holder shall ensure that the transfer forthwith provides a replacement bond to the Consent Authorities on the terms required by the Bond Conditions.
- 5.12 The provisions of Section 109 shall apply to any bond, or bonds, required pursuant to the above.
- 5.13 The Consent Holder shall meet the costs of providing any bond, or bonds, including the costs of the bond and any substitute bond.

6. Notification

6.1 The Consent Holder shall notify the Consent Authorities in writing:

- a) Of the intention to commence geotechnical investigations a minimum of 10 working days prior to the commencement of the works.
- b) Of the intention to commence construction of scheme works, specifying a specific date, as soon as practicable of the date that activities first commence under these consents.
- c) As soon as practicable, the date that construction activities cease.
- d) Of the intention to commence power generation and the discharge to the ocean at least 1 month prior to these events.
- e) The time when 90% established planting cover in accordance with Condition 23 of Land Use Consents 149/10 -12 and RM08/131 A and B Condition 17 has been established.

7. Complaints and Non-compliance

7.1 The Consent Holder shall maintain and keep a complaints register for any complaints received in relation to construction activities and operation of the scheme. The register shall be maintained and publicly accessible on the web site www.hydrodevelopments.co.nz and shall record:

- i) The date, time and duration of the incident that has resulted in a complaint.
- ii) The possible cause of the incident.
- iii) Any corrective measures taken by the Consent Holder in response to the complaint, including the timing of that corrective action.

The complainant's name and details shall not appear on the web site.

7.2 The Consent Holder upon receipt of any complaint reported to it by either Consent Authority, shall promptly investigate the complaint, take action to remedy or mitigate the complaint, and inform the reporting Consent Authority of the details of the cause of the complaint and the action taken within 48 hours of receiving the complaint.

7.3 The Consent Holder shall inform the Consent Authority as soon as practicable, but no later than 48 hours of receiving a complaint, of the details of the complaint and the action taken.

7.4 The complaints register shall be made available to either Consent Authority within 48 hours of any formal request from that Consent Authority.

7.5 In the event of any breach of the conditions of these consents the Consent Holder shall notify the appropriate Consent Authority within 48 hours of the breach being detected. Within 5 days of any breach the Consent Holder shall provide written notification to the appropriate Consent Authority which explains the cause of the breach and if the cause was within the control of the Consent Holder, steps which were taken to remedy the breach and steps which will be taken to prevent any further occurrence of the breach.

Advice Note: For breaches of conditions of Resource Consents RC08149/1 to RC08149/42, the appropriate Consent Authority is the West Coast Regional Council. For breaches of conditions of Resource Consents RC08/131(A) to RC08/131(G), the appropriate Consent Authority is the Buller District Council. For breaches of the General Conditions of Resource Consents RC08149/1 to RC08149/42 and RC08/131(A) to RC08/131(G), the appropriate Consent Authority is both the West Coast Regional Council and Buller District Council.

General Conditions B

1. Scheme Design

- 1.1 The Consent Holder shall undertake geotechnical site investigations as appropriate to complete final design in accordance with the Building Act 2004 and Building (Dam Safety) Regulations 2008.
- 1.2 Prior to the commencement of construction of any structures required to exercise these consents, the Consent Holder shall forward to the Consents and Compliance Manager of the Consent Authority final design reports for certification after they have been peer reviewed and certified by an appropriately qualified and experienced engineer acceptable to the Consent Authorities". The design reports shall include detailed plans of the following:
 - a) Weka and Mt William dams, storage reservoirs and associated structures.
 - b) The spillway for Weka Dam shall have a maximum crest level of RL390 metres (reduced level above sea level) and the spillway for Mt William Dam which shall have a maximum crest level of RL 575 metres.
 - c) Stockton and Granity Tunnels and outlet portals (refer to General Condition 1.3 for specific details for the Granity outlet portal).
 - d) Weka and Granity power stations
 - e) Mine Creek, Mangatini Stream and Darcy Stream diversion tunnels.
 - f) Instream structures both temporary and permanent including all culverts, weirs and intake structures
 - g) Temporary and permanent transmission lines.
 - h) Granity access ramp, surge chamber and emergency outfall into Granity Stream.
 - i) Ocean outfall pipeline and diffuser and the emergency outfall into Granity Stream (refer to General Condition 1.4 for specific details for the ocean outfall).

- 1.3 The design report for the construction of the Granity outlet portal required in General Condition 1.2i) above, shall include the following details:
- i) Potential risk of instability at the tunnel portal.
 - ii) Proposed stabilisation and contingency measures.
 - iii) Proposed monitoring measures during construction to ensure satisfactory performance of the portal stabilisation works and contingency actions.
- 1.4 The design report for construction of the ocean outfall pipeline required in Condition 1.2i) above, shall include the following details:
- i) Interpretation of ground and groundwater conditions based on site investigations.
 - ii) Assessment of expected deformation and trigger levels for contingency actions.
 - iii) The proposed monitoring locations and procedures during construction.
 - iv) The process and expected outcomes for development of action and contingency plans should expected levels of deformation be exceeded.
 - v) A list of the buildings and structures that may be affected by groundwater and ground settlement changes and proposed methodology to reduce potential impacts.
- 1.5 The Consent Holder shall ensure that any variations to any building consent are approved by the issuing authority and copied to the Consent Authority.
- 1.6 The Consent Holder shall prepare and retain final "As Built" plans of all buildings and structures, copies of which shall also be forwarded to the Consent Authority.
- 1.7 As part of the scheme design the dam failure risks shall be re-assessed and the inundation maps reviewed once the final dam design has been completed. Copies of these re-assessments and maps shall be provided to the Consent Authorities before any physical work on dam construction commences.
- 1.8 The dam structures shall as a minimum be:
- (i) Designed and constructed in accordance with the New Zealand Society on Lar Dam's (NZSOLD) Dam Safety Guidelines that are current at the time the dam structures are constructed,
 - (ii) Maintained in accordance with the NZSOLD's Dam Safety Guidelines, November 2000 and any subsequent amendments for high potential impact dams.

Advice Note: The NZSOLD Dam Safety Guidelines, November 2000, were the current guidelines at the time that these consents were approved.

2. Management Plans

- 2.1 At least three months prior to commencement of construction of the scheme works authorised by these consents, the Consent Holder shall provide to the Consent Authority the following plans, as prepared by suitably qualified persons in accordance with General Conditions 3 to 5:

- a) Construction Management Plan.
 - b) Erosion and Sediment Control Plan
 - c) Landscaping and Rehabilitation Management Plan.
- 2.2 At least three months prior to commencing construction of the outfall pipeline (pursuant to Coastal Permit RC08149/2), an Ocean Outfall Management Plan shall be provided to the Consent Authority, as prepared by a suitably qualified person in accordance with General Condition 6.
- 2.3 Construction of the scheme works shall not commence until the certified management plans specified in General Conditions 3-5 below have been provided by the Consent Holder to the Consent Authority. Certification is defined as ensuring that the management plans contain the necessary information specified in General Conditions 3-5 and meet the requirements set out in more specific conditions of consent.
- 2.4 The Consent Holder may commence construction of scheme works once the management plans specified in General Conditions 3-5 below have been provided to the regional Consent Authority or after two months from the date that the relevant management plan required by these consents is submitted to the Consent Authority, whichever is the sooner, provided the required building consents are obtained.
- 2.5 The Consent Holder shall not commence discharge via the ocean outfall (Coastal Permit RC08149/5) until the Ocean Outfall Management Plan specified in General Condition 6 has been certified by the regional Consent Authority. Certification is defined as ensuring that the Management Plan contains the necessary information specified in General Condition 6 and meets the requirements set out in more specific conditions of consent. The Ocean Outfall Management Plan will be deemed to have the certification of the regional Consent Authority unless the Consent Holder is otherwise advised in writing within two months of submission of the Management Plan.
- 2.6 Subject to any other conditions of these consents, all activities shall be undertaken in accordance with the latest certified versions of the management plans.
- 2.7 The Consent Holder may review and revise any management plan at any time after they have been submitted to the Consent Authority on the following terms:
- a) The review shall be undertaken in consultation with and certified by the appropriate Consent Authority as still meeting the relevant consent conditions.
 - b) Such review is necessary to give effect to the purpose of the management plan.
 - c) The Consent Holder shall pay all actual and reasonable costs of the Consent Authority in connection to its certification of revised management plans.

- 2.8 If the Consent Authority has not advised the Consent Holder in writing whether or not it has certified the revisions within two months of receipt of those revisions, then the Consent Holder may operate under those revisions and the revised management plan shall be deemed to be the latest version of the management plan, unless the Consent Authority advises the Consent Holder after two months, but under no circumstances more than six months, after receipt of those revisions that it refuses to certify the revisions on the ground that they fail to meet one or more of the relevant consent conditions.
- 2.9 Management plans may be submitted in sections which cover discrete components of the scheme to allow for the staged development of the hydro scheme. When viewed as a whole the respective sections must be consistent with the requirements of General Conditions 3 to 7 and must achieve comprehensive management plans for the entire scheme.

3. Construction Management Plan

- 3.1 Prior to the commencement of construction of the scheme works, a Construction Management Plan shall be submitted to the Consent Authority. The purpose of the Construction Management Plan shall be to:
- a) To describe the methods proposed for the construction of the scheme and the programme for construction of each element.
 - b) Describe what actions will be taken to manage the actual or potential effects of construction activities associated with the scheme.
 - c) To describe the methodology and certification procedures for making changes to the Construction Management Plan.
 - d) To ensure that the practices and procedures for construction achieve compliance with the conditions of consent as they relate to construction work.
 - e) That the Consent Holder undertakes its best endeavors to ensure that the environmental nuisance effects of construction activities are minimised to the greatest extent possible.
 - f) To minimise the overall area of disturbance, so as to reduce the potential impact on vegetation, native fauna, and waterways.
 - g) To ensure the conservation of overburden, soil and vegetation for subsequent use in the rehabilitation.
 - h) To ensure that appropriate monitoring and reporting of all activities is undertaken in accordance with the resource consent conditions.
 - i) To control and minimise sediment generation and sediment laden runoff.
- 3.2 The Construction Management Plan shall as a minimum address the following matters:
- a) Construction programme and timetable detailing the works and proposed duration of each stage and the sequence of events.
 - b) Description of all construction works including the dams, storage reservoirs, diversion/intake structures, tunnels, roads, power stations, substations and

transmission lines.

- c) A site map which shows the buffer zones, sound bunds and fencing at the Granity construction area.
- d) Detailed plans and methods of construction of the ocean outfall pipeline and diffuser and the emergency outfall into Granity Stream. e) Details and site plan of all construction plant and buildings and storage areas to be used on-site.
- f) Detailed plans for both the temporary and permanent realignment of Repo Basin and Millerton walking tracks.
- g) Details of method of vegetation clearance and earthworks including disposal of stripped material, stockpiling activities and road construction and its use in rehabilitation.
- h) Details of the geotechnical investigations required for final design and construction.
- l) Detailed plans, methods and timing of instream works including the temporary dam sluices and temporary stream diversions and the permanent structures including the weirs, intakes and spillways.
- j) Measures for cleaning machinery and equipment prior to transport to the construction work areas on Stockton Plateau.
- k) Methods for management of solid waste generated during scheme construction including identification of solid waste, methods for minimising solid waste generation and description of disposal methods.
- l) Health and Safety measures to ensure public safety including hazard identification and management including erection of signs at appropriate locations warning public of dangers in construction areas.
- m) Methods for the management of nuisance dust generated as a consequence of construction activities.
- n) Details and locations of settling ponds, sediment traps or other treatment systems to be used for contaminated water retention and treatment prior to discharge.
- o) Traffic Management Plan which ensures a safe and efficient transport system including the improvements required for existing accesses, details of design of new accesses and roads, details of rehabilitation of temporary roads/accesses and details of traffic movements.
- p) The name and contact details of key positions and points of contact, including an appropriately qualified employee of the Consent Holder to manage environmental issues and any community complaints on site, that have responsibility for managing and responding to environmental issues, any community complaints and ensure management plans and consent conditions are adhered to throughout construction.
- q) Contractor training.
- r) Security and lighting management during construction.
- s) Hours of operation.

- t) To describe the methodology and certification procedures for making changes to the management plan.
- 3.3 The Construction Management Plan shall include a sub-section entitled: 'Hazardous Substances Management Plan' which shall detail the practices and procedures that will be used to ensure that hazardous substances are managed so that storage and use is carried out safely and will not adversely affect the environment. The Hazardous Substances Management Plan shall as a minimum address the following matters:
- a) Identify hazardous substances, including explosives, oils and fuels which are used in the construction phase and also the operation phase of the scheme.
 - b) Describe the storage and handling procedures for hazardous substances.
 - c) Provide details of the regular inspections and maintenance of the construction site, vehicles and equipment.
 - d) Practices and procedures for dealing with accidental spills of hazardous substances during construction, transportation or commissioning of the scheme to ensure spill response contingency plans will be met.
 - e) An emergency discharge response contingency plan.

4. Erosion and Sediment Control Plan

- 4.1 Prior to the commencement of construction of the scheme works, an Erosion and Sediment Control Plan shall be submitted to the Consent Authority. The purpose of the Erosion and Sediment Control Plan shall be to:
- To ensure construction activities achieve compliance with the conditions of consent for these activities.
 - To ensure that the effects of erosion on water quality are minimised.
 - To ensure consistency with Auckland Regional Council Technical Publications TP10 and TP90.
 - To undertake assessment of sediment movement within all the impacted watercourses and address ongoing procedures for sediment control once the scheme is commissioned.
- 4.2 The Erosion and Sediment Control Management Plan shall as a minimum address the following matters:
- a) Detailed design, location, operation and maintenance of stormwater runoff controls and sediment control facilities during construction activities at the site, including detailed engineering plans and design specifications.
 - b) Methods to minimise sediment generation and sediment laden run-off from the construction works.
 - c) Training and supervision of operators and contractors associated with sediment control activities.
 - d) Describe the existing (pre-construction) sediment movements for all the watercourses to be impacted by the scheme.

- e) Describe the measures to be implemented to control sediment within the reservoirs in order to minimise sediment discharges at the ocean outfall.
- f) Operational measures to control sediment entering the scheme, particularly while active mining is occurring in the catchment.

5. Landscape and Rehabilitation Management Plan

5.1 Prior to the commencement of the geotechnical investigations and construction scheme works, a Landscape and Rehabilitation Management Plan shall be submitted to the Consent Authority. The purpose of the Landscape and Rehabilitation Management Plan shall be to:

- Establish an indigenous vegetation cover on all disturbed areas appropriate to the respective construction site locations.
- To ensure short and long term stability of disturbed land and its surrounds.
- Visually integrate finished structures, landforms and vegetation into the surrounding landscape.
- To prevent weeds and pests invading the site so far as is reasonably possible, and otherwise to eradicate or control weeds and pests on the site.

5.2 The Landscape and Rehabilitation Management Plan shall as a minimum address the following matters:

- a) Construction sequence and timetable of rehabilitation activities.
- b) On completion of work at any location, all plant, equipment, fuels, hazardous substances, buildings, fencing, signage, debris, rubbish and any other materials brought onto site shall be removed, and the site left clean.
- c) Rehabilitation plans and specifications for all disturbed land resulting from exploration drilling operations and areas outside of permanent occupation.
- d) Rehabilitation plans and specifications for all disturbed land on the Stockton Plateau including roads, transmission lines, reservoir margins, dams/embankments, stream intake/weir structures, Weka power house area and Gravity construction site so that finished landforms and vegetation cover are consistent with the surrounding natural landscape.
- e) Landscaping strategies for the Gravity construction area as determined in consultation with the respective landowners and the Gravity Community Liaison Group.
- f) Rehabilitation plans and strategies for the progressive rehabilitation of the two sediment fill sites, once used as permanent fill sites.
- g) Rehabilitation plans and strategies for the realigned portions of the Repo Basin and Millerton incline walking tracks to achieve consistence with the surrounding natural landscape.
- h) The design and appearance of visitor interpretation displays and access tracks to connect the display area to the Repo Basin walking track.
- i) Measures to be implemented where direct vegetative transfer fails to

successfully establish.

- j) Methods for monitoring the success of revegetation planting to ensure a 90% established coverage of rehabilitated areas is achieved, as taken from initial coverage that existed pre-disturbance.

5.3 The Landscape and Rehabilitation Management Plan shall include a sub-section entitled "Weed and Pest Management" which shall provide details of weed and predator control measures and shall as a minimum address the following matters:

- a) Plan of the rehabilitation areas within which control will be undertaken.
- b) To define the specific exotic plant (including *Juncus squarrosus*) and/or animal predator species that will be targeted for control or eradication.
- c) A description of the control techniques that will be used, including cleaning of machinery prior to entering sites on the Stockton Plateau.
- d) The timeframe for and frequency of control operations, with control measures to be undertaken until such time as 90% established planting coverage on rehabilitated areas has been achieved.
- e) A description of the monitoring that will be undertaken to assess the effectiveness of control operations.
- f) Control of predators, particularly stoats and possums in the disturbed areas during construction and during the rehabilitation phase.

6. Ocean Outfall Management Plan

6.1 At least six months prior to commencing construction of the outfall pipeline (Coastal Permit RC08149/2), the Consent Holder shall submit an Ocean Outfall Management Plan shall be submitted to the Consent Authority. The purpose of the Ocean Outfall Management Plan shall be to:

- Describe additional water quality field trials, modelling and laboratory studies to be undertaken to verify predictions of the actual water quality to be discharged from the ocean outfall into the coastal marine environment.
- Describe the monitoring regime that will be implemented for the Weka Reservoir outfall to ensure the discharge meets ANZECC water quality guidelines at the edge of the mixing zone, as per conditions of consent.
- Describe the monitoring programme that will be undertaken to manage the actual or potential effects of the discharge on the coastal environment.
- Describe the mitigation measures that will be undertaken in the event that the discharge does not comply with conditions of consent.

6.2 The Ocean Outfall Management Plan shall as a minimum address the following matters:

- a) An analysis of the range of acidity, pH levels, constituent metal concentrations and required dilutions for the discharge to meet ANZECC (2000) 95% trigger values for those determinands 300 metres from the discharge point.
- b) An analysis of dilution at expected low, medium and high flows from the ocean

outfall to be used to assess whether the effluent will meet water quality guidelines, particularly pH at the edge of the mixing zone under all flow conditions.

- c) An analysis of the range of acidity and pH levels for the Weka Reservoir outfall discharge in order to assess the likely pH changes at the edge of the mixing zone and operational constraints.
- d) On determination of the range of operational discharges for the ocean outfall as per Conditions 6.2a) to c) above and f) below, the development of 30-day rolling median and 90 percentile discharge limits, and a monitoring programme, for the Granity powerstation tailrace discharge to check compliance with conditions of consent.
- e) Operational protocols for the ocean outfall to ensure compliance with conditions of consent.
- f) A one-off dispersion and dilution study to validate the predicted initial dilution results of the constituents of the ocean outfall [discharge] under reasonable worst-case conditions.
- g) Establishment of a marine baseline survey in the vicinity of the final diffuser location, with focus on benthic infauna, sediment chemistry and local physical oceanography characteristics.
- h) Monitoring programme of benthic infauna, sediment chemistry and discharge and receiving water quality including the timing, location and frequency of the sampling programme.
- i) Management measures to be implemented when extreme climatic conditions adversely affect water quality conditions within Weka Reservoir and create a potential for non-compliance with conditions of consent.
- j) To describe the methodology and certification procedures for making changes to the Ocean Outfall Management Plan.

7. Annual Monitoring Report and Work Plan Report

7.1 The Consent Holder shall prepare and submit an Annual Monitoring and Work Plan to the Consent Authority within 30 days of the anniversary of the commencement of exploration drilling (as authorised pursuant to Buller District Council's Land Use Consents RC08/131A and West Coast Regional Council's RC080149/9) and thereafter at yearly intervals until all rehabilitation requirements have been met. The purpose of the plan shall be to:

- Describe the operations and rehabilitation measures undertaken in the previous 12 months.
- Provide an overview of the monitoring and reporting work undertaken and any issues that have arisen during construction of the scheme.
- Describe the operations and rehabilitation measures to be undertaken in the forthcoming 12 months.
- Calculate the extent of rehabilitation remaining to be completed and the costs associated with such rehabilitation.

7.2 The monitoring period in each report shall be for the preceding 12 month period and shall, as a minimum, include the following matters:

- a) Detail all environmental monitoring undertaken.
- b) Summarise all the data collected as required under the conditions of these consents and management plans.
- c) Highlight and discuss any important environmental effects.
- d) Summarise any construction difficulties, changes or improvements undertaken.
- e) Summarise any difficulties in compliance with, and breaches of, the conditions of the consents and the measures adopted to remedy or mitigate adverse effects and avoid reoccurrence.
- f) Summarise any complaints received and any action taken by the Consent Holder to address each complaint.
- g) Summarise any actions or initiatives proposed by the Granity Community Liaison Group in response to complaints received or issues which have arisen.

7.3 The work plan shall include the following matters:

- a) A schedule of the operations, mitigation measures and rehabilitation carried out over the previous 12 months term.
- b) Any explanation of any departure in the last 12 months from the previous Annual Work Plan.
- c) A schedule of the operations, mitigation measures and rehabilitation intended to be undertaken within the next 12 months, including a general timetable of key construction and rehabilitation times.
- d) An evaluation of the extent of rehabilitation remaining to be completed and the cost associated with such rehabilitation in terms of the items listed in General(Bond) Condition 5.6.

8. Scheme Operation

- 8.1 The Consent Holder shall produce an Operation, Maintenance and Surveillance Manual specifying those procedures to be adopted by the Consent Holder, or parties under its control with respect to the operation of the Stockton Plateau Hydro Scheme. This Manual shall be consistent with the recommendations of the NZSOLD Dam Safety Guidelines November 2000 (and any subsequent amendments) and shall detail how the safety of the scheme will be operated and maintained at all times. As a minimum the manual shall address the following matters:
- a) Operational procedures for the Weka and Mt William spillways and the Granity Stream emergency spillway.
 - b) Procedures for operation of the weir gates on Mine and Mangatini Streams.
 - c) Procedures for controlling sediment build-up in the reservoir silt traps.
 - d) Operational procedures for the ocean outfall.
 - e) Comprehensive safety procedures and inspections.
 - f) Comprehensive safety review procedures.
- 8.2 This Manual shall be prepared by a suitably qualified person and provided to the Consents and Compliance Manager of the WCRC at least one month prior to the commissioning of the scheme. The scheme will be deemed to be commissioned on exercise of Coastal Permit RC08149/5 for the discharge into the marine environment.
- 8.3 Any emergency discharge into Granity Creek shall be reported in writing to the Consents and Compliance Manager of the West Coast Regional Council within five working days of the discharge occurring. Notification shall include an assessment of any impacts on the environment and any remedial measures required to be undertaken as a consequence of the exercise of these consents.
- 8.4 Where practicable, the Consent Holder shall notify downstream property owners, NZTA, Kiwi Rail and the Consent Authorities not less than 24 hours prior to using the emergency spillway into Granity Creek. Where it is not practicable to do so the Consent Holder shall notify the aforementioned parties immediately upon the use of such emergency discharge.
- 8.5 The Consent Holder shall be responsible for the structural integrity and maintenance of all works associated with the exercise of the consents and for any erosion control and energy dissipation works which become necessary as a consequence of these consents. Those works shall be maintained in proper working condition at all times.

9. Hazardous Substances

- 9.1 Hazardous substances and dangerous goods shall be stored and handled in accordance with the methods set out in the Hazardous Substances Management Plan, required by General (Construction Management Plan) Condition 3.3.
- 9.2 Refuelling, lubrication and mechanical repairs of equipment, and storage of hazardous substances or dangerous goods shall be undertaken in such a manner so as to ensure

that spillages of hazardous substances or dangerous goods on to the land surface or into a waterbody do not occur. Any accidental discharge of greater than 20 litres shall be reported immediately to the regional Consent Authority along with details of the steps taken to remedy and/or mitigate the adverse effects of the discharge.

- 9.3 Bunds shall be positioned around the perimeter of mobile fuel tankers to capture any potential spills. The bunding shall be designed to capture at least 110% of the stored volume. Tankers shall be located in areas with an impervious surface and clean-up equipment shall be maintained so that it is in proper working condition at each fuel store throughout the duration of the scheme.
- 9.4 The power station switch yards shall be designed to ensure that transformers are located in sealed and bunded areas to contain any potential leakage of hazardous substances. The bunding shall be designed to capture at least 110% of the stored volume. Clean-up equipment shall be maintained so that it is in proper working condition at each powerstation.
- 9.5 The Consent Holder and all contractors and/or operators shall adhere to the spill response contingency strategies outlined in the Hazardous Substances Management Plan.
- 9.6 All contractors and/or operators transporting or storing more than 20 litres of fuel shall carry spill kits to enable immediate action to remedy and/or mitigate the effects of hazardous substances discharges on-site.
- 9.7 A list of all hazardous substances and dangerous goods shall be maintained at all times, showing location of storage and use, in case of emergencies.

10. Aquatic Monitoring

- 10.1 Within one year of commissioning of the scheme, the Consent Holder shall engage a recognised aquatic ecology expert to undertake surveys of aquatic bryophytes at the following locations:
 - a) Darcy Stream tributary downstream of the intake structure,
 - b) Weka Stream downstream of the Weka dam. Percentage of bryophyte cover shall be estimated at a minimum of 3 transects placed across sections of each stream. Each stream transect shall include stream bank habitat.
- 10.2 The aquatic ecology expert shall prepare a report detailing the findings of the surveys undertaken in General Condition 10.1 above, with this report to include an assessment of the general health of bryophytes surveyed comparative to other survey work that has been undertaken in Stockton Plateau streams.
- 10.3 The Consent Holder shall gather hydrological data, commencing from the issue of these consents, to establish a hydrological recording network to enable this data to be utilized for the final design of the scheme.
- 10.4 Water flow data from all streams and creeks within the scheme footprint area shall be collected and collated during periods of prolonged dry periods to enable mitigation measures to be implemented should adverse effects develop within the waterways. This data shall be available on request from the Consent Authority.

11. Pests and Weeds

- 11.1 Prior to machinery being transported to the Stockton Plateau construction sites, the Consent Holder shall ensure all soil and vegetative material adhering to the machinery is removed by water blasting to minimise the likelihood of carrying weeds up to the Consent Holder's construction sites.
- 11.2 The Consent Holder shall undertake weed and predator control (in particular stoats and possums) around the reservoir areas until all rehabilitation requirements have been met. Weed and predator control shall be carried out in accordance with the Weed and Pest Management strategies outlined in the latest certified version of the Landscape and Rehabilitation Plan.
- 11.3 As part of the weed control programme required under General Condition 5.3 above, the Consent Holder shall undertake a programme of *Juncus squarrosus* control on all disturbed areas within the scheme footprint, to prevent establishment of this invasive weed, until such time as all rehabilitation is complete.
- 11.4 The Consent Holder shall monitor on an annual basis predator numbers to assess the effectiveness of the predator control programme. The Consent Holder shall report its findings to the Consent Authority on an annual basis until such time as rehabilitation is complete.

12. Granity Community Liaison Group

- 12.1 Prior to commencement of construction of scheme works at Granity, the Consent Holder shall consult with the Granity Museum curator, Northern Buller Community Society, Solid Energy New Zealand, the Department of Conservation, local residents and representatives from the Consent Authorities, and shall provide them with the opportunity to be involved in a Community Liaison Group. In the event that it is possible to establish such a group it shall be chaired by a person as agreed between the Consent Holder and the Consent Authorities.
- 12.2 In the event that it is not possible to establish such a group through no fault of the Consent Holder, then such failure to do so shall not be deemed a breach of these conditions.
- 12.3 The objectives of the Granity Community Liaison Group shall be to:
- a) Maintain an effective working relationship between the local community, the Consent Authorities and the Consent Holder (including its contractors) during construction.
 - b) Promote the free flow of information between the local community, the Consent Holder and the Consent Authorities in order to anticipate and resolve any potential issues before they arise.
 - c) Evaluate the results of monitoring activities on a periodic basis.
 - d) Recommend any changes to proposed mitigation measures that might be appropriate in light of the monitoring.
 - e) Evaluate the benefits of continuing liaison once the scheme is operational and if

deemed necessary, establishing an on-going working relationship.

12.4 The Granity Community Liaison Group shall be consulted in regard to the following:

- a) Surface blasting procedures.
- b) Evaluation of noise and vibration monitoring results and any potential issues in relation to noise and vibration.
- c) Landscape and Rehabilitation measures for disturbed areas at Granity.
- d) Construction traffic related matters including measures for ensuring public safety and management of construction traffic.
- e) Potential improvements to the Charming Creek walkway, in the vicinity of the Mangatini Falls to enhance visitor experience.
- f) Maintenance of potable water supplies within or immediately adjoining the scheme footprint at Granity.
- g) Effects on Millerton walking track both during construction and following commissioning of the scheme.