BEFORE THE PROPOSED MARLBOROUGH ENVIRONMENT PLAN HEARINGS PANEL AT BLENHEIM

UNDER the Resource Management Act 1991

(the Act)

IN THE MATTER of a change to Marlborough's policy

statement and plans under the First

Schedule to the Act

MEMORANDUM OF COUNSEL FOR DOMINION SALT LIMITED IN RESPONSE TO MINUTE 18 OF THE HEARING PANEL Dated this 24th day of May 2018

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MAY IT PLEASE THE PANEL:

- Appendix 1 of this memorandum contains an accurate map reflecting the zoning amendments Dominion Salt seeks. This map ought to assist in clarifying matters.
- 2. **Appendix 2** contains an updated track change version of Volume 2, Chapter 22. Additional changes made to the version attached to our supplementary legal submissions are highlighted in yellow. Rules applying to the proposed Salt Works Outlet Area and the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor are now listed under separate headings. We consider this to be a better approach from a planning perspective.
- 3. Dominion Salt had been operating under the assumption that the zoning maps in Volume 4 were mapped accurately in accordance with the measurements in Appendix 21, and therefore encompassed its operations in respect of both its current and old intake pipelines. Dominion Salt has now carried out its own mapping exercise, resulting in the map at Appendix 1. This map demonstrates that some small zoning changes need to be made.
- 4. Questions asked in Minute 18 of the Panel are addressed below.

Whether DSL, after considering the accuracy of mapping of the Pipeline Corridor and addressing the length and width of the Pipeline Corridor, now seeks confirmation of Appendix 21 as notified:

- 5. No.
- As a result of its mapping exercise, Dominion Salt has discovered that Appendix 21 does not entirely encompass its operations in the intake area. Specifically, the old intake pipeline (indicated in green on the map in Appendix 1) is approximately only 4m from the boundary of the Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor.
- 7. Consequently, Dominion Salt seeks for the Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor to be extended 25 metres north-east and north-west, as shown in **Appendix 1**. This additional area is required to ensure that Dominion Salt can carry out maintenance on the old intake pipeline. Prior to the 2016 earthquake, Dominion Salt used the old intake from time-to-time. They propose to repair it in the future.

- 8. The old intake pipe extends seaward approximately the same distance as the current intake pipeline.
- 9. As an aside, were the Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor accurately mapped in Volume 4, there would be no need for **Appendix 21**. The coordinates that underline the mapping are available from Draughting Plus Limited.

That the proposal at paragraph 9 of the Supplementary Submissions of Counsel for Dominion Salt Limited, dated 24th of April 2018, seeks to further add a "Salt Works Outlet Area" to Appendix 21:

- 10. No. The proposal at paragraph 9 of the Supplementary Submissions of Counsel to further add a "Salt Works Outlet Area" relates only to the zoning maps in Volume 4, and not to Appendix 21.
- 11. Dominion Salt's submission (355.017) sought an extension of the Lake Grassmere Salt Works Zone in the relevant Volume 4 maps. The concern from the s 42A Reporting Officer was that this change would enable all of the activities permitted in the Salt Works Zone to occur in this enlarged area. The response to this was to create a "Salt Works Outlet Area" in which a reduced set of activities were permitted. That is detailed in the attached track change version of Volume 2, Chapter 22 and is addressed in more detail below.
- 12. In the notified plan the underlying zoning of the Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor is Coastal Marine Zone. However, the rules which apply to the Pipeline Corridor are in the Lake Grassmere Salt Works Zone, not Coastal Marine Zone. Changing the underlying zoning of the Pipeline Corridor to Lake Grassmere Salt Works Zone aligns the rules and zoning.
- 13. The same logic applies to the proposed new Salt Works Outlet Area. That area should also be Lake Grassmere Salt Works Zone, rather than Open Space 3.
- 14. There are valid reasons to keep the proposed new "Salt Works Outlet Area" separate from the "Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor":

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¹ Based on the electronic maps.

- (a) The landward extent of the Lake Grassmere Salt Works Zone Intake and Pipeline Extension Corridor is mean high water springs (MHWS). Consequently, that Corridor is within the coastal marine area.
- (b) By contrast, the "Salt Works Outlet Area" is landward of MHWS.
- 15. The distinction means that different rules can apply above and below MHWS. The updates to tracked change Chapter 22 in **Appendix 2** separate rules applying to each zone and reflect this.

A detailed written description of the activities that would be provided for in any "Salt Works Outlet Area":

- 16. Refer to rules 22.1.20 to 22.1.25. in the **attached** track change version of Volume 2, Chapter 22.
- 17. Within the Salt Works Outlet Area the following activities would be permitted: (commentary in italics)
 - 22.1.20. Building bunds, roads and other developments existing at 9 June 2016.
 - 22.1.21. Take and use of coastal water from within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor.
 - 22.1.22. Maintenance of existing seawater intake pipelines and associated structures.

Maintenance anticipated includes:

- (a) removing silting up and blockages of sand, sea weed, shell fish and silt (Awatere River discharge silt); and
- (b) repairing broken pipes and gates.
- 22.1.23. Discharge of stormwater from Lake Grassmere and surrounding catchments or diluted brine to the coastal marine area.

During normal operations, discharge will occur via the pipeline. In abnormal conditions after a significant flood event, a cut will be created in accordance with the rule below.

22.1.24. Construction and use of a temporary stormwater flood outlet channel from Lake Grassmere to the coastal marine area, including any disturbance of the foreshore and seabed.

The most likely location for a cut will be at the location indicated with the pink line on the attached map. Heavy machinery will be used to construct the cut. There has not been a need to undertake those sorts of earthworks for some years.

22.1.25. Activities permitted in the Open Space 3 Zone.

The GIS mapping of the PMEP, as notified, shows an area marked as Indicative River Bed Polygon at the northern end of the intake structure. The Hearings Panel is unclear from the evidence at the hearing whether that is the line which DSL seek to have zoned as Lake Grassmere Salt Works zone or whether the area is larger. The area approximately depicted in Euan McLeish's evidence seemed to be identifying an area encompassing land to the south, west and north of the intake structure.

- 18. The map in **Appendix 1** shows the accurate location of the Pipeline Corridor, and the accurate location of the proposed Salt Works Outlet Area which Dominion Salt seeks to have zoned as Lake Grassmere Salt Works Zone.
- 19. This area marked is not a riverbed: it is the settling pond for the old intake pipe.
- 20. The old intake pipe was most recently used as a lake water exit channel during the winter months. It was damaged in the November 2016 earthquake, is yet to be repaired, and has not been used since. Dominion Salt has instead been channelling water through the main A and B settling ponds and back out the main intake pipe, but would like to repair and use it again in the future. This original intake pipe extends underground, under the beach, with the pipe only visible on a very low tide.
- 21. The photographs below were taken at low tide on 15 May 2018 by Mr McLeish:



Photograph 1: Part of the old intake pipe is visible (left). The old intake pipe extends seaward approximately the same distance as the current intake pipeline (right).



Photograph 2: The old intake pipeline.



Photograph 3: The settling pond in the area marked as Indicative River Bed Polygon.

Quentin A M Davies / Savannah D Carter

Solicitors for Dominion Salt Limited



22. Lake Grassmere Salt Works Zone

22.1. Permitted Activities

Unless the activity is within the Salt Works Outlet Area, the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor or expressly limited elsewhere by a rule in the Marlborough Environment Plan (the Plan), the following activities shall be permitted without resource consent where they comply with the applicable standards in 22.2 and 22.3:

[R, D]

22.1.1. Solar production, refining, handling, packaging, storage and sale of salt and associated by-products and the full range of processes required.

[R, D]

22.1.2. Building bBunds, and roads and other developments. existing at 9 June 2016.

[C]

22.1.3. Take and use of coastal water and the maintenance of existing seawater intake pipelines within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor shown in Appendix 21.

22.1.3A. Maintenance of existing seawater intake pipelines and associated structures within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor shown in Appendix 21.

[C, R, D]

22.1.4. Discharge of stormwater from Lake Grassmere and surrounding catchments or diluted brine to the coastal marine area.

[D]

22.1.5. Construction and use of a temporary stormwater flood outlet channel from Lake Grassmere to the coastal marine area, including any disturbance of the foreshore and seabed.

[R, D]

22.1.6. Living accommodation facility for staff.

[R, D]

22.1.7. Excavation.

[R, D]

22.1.8. Filling of land with clean fill.

[R, D]

22.1.9. Indigenous vegetation clearance.

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Volume Two

[R]

22.1.10. Non-indigenous vegetation clearance.

[R

22.1.11. Discharge of human effluent and greywater into or onto land.

[F

22.1.12. Discharge of contaminants to air arising from burning in the open.

[R]

- 22.1.13. Discharge of contaminants to air that is not specifically provided for by any other rule, arising from:
 - (a) Discharges of heat to air;
 - (b) Discharges of energy to air, including release of energy from sources of electromagnetic radiation, including radio transmitter, television, or cell phones; or release of x-rays from a radioactive source;
 - (c) Discharges for the purposes of ventilation or vapour displacements.

[R]

22.1.14. Discharge of contaminants to air from the combustion of fuels (i.e. external combustion).

[R]

22.1.15. Discharge of contaminants to air from combustion within a stationary internal combustion engine (i.e. internal combustion).

[R]

22.1.16. Discharge of contaminants to air from the spray application of paint or adhesive coating materials of surfaces not within a spray booth, other than a road.

[R]

22.1.17. Discharge of contaminants to air from the application of coating materials (including paints and powders) through spray application undertaken within an enclosed booth.

[R]

22.1.18. Discharge of contaminants to air from water blasting and from dry abrasive blasting, other than from the use of a moveable source.

[R]

22.1.19. Discharge of heat and water vapour from cooling towers.

Within the Salt Works Outlet Area the following are permitted activities subject to their relevant standards:

- 22.1.20. Building bBunds, and roads and other developments existing at 9 June 2016.
- 22.1.21. Take and use of coastal water from within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor_shown in Appendix 21.

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- 22.1.22. Discharge of stormwater from Lake Grassmere and surrounding catchments or diluted brine to the coastal marine area.
- 22.1.23. Maintenance of existing seawater intake pipelines and associated structures.
- 22.1.24. Construction and use of a temporary stormwater flood outlet channel from Lake Grassmere to the coastal marine area, including any disturbance of the foreshore and seabed.
- 22.1.25. Activities permitted in the Open Space 3 Zone.

Within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor the following are permitted activities subject to their relevant standards:

- 22.1.26. Take and use of coastal water.
- 22.1.27. Maintenance of existing seawater intake pipelines and associated structures.
- 22.1.28. Discharge of stormwater from Lake Grassmere and surrounding catchments or diluted brine to the coastal marine area.
- 22.1.29. Construction and use of a temporary stormwater flood outlet channel from Lake Grassmere to the coastal marine area, including any disturbance of the foreshore and seabed.
- 22.1.30. Activities permitted in the Coastal Marine Zone.

22.2. Standards that apply to all permitted activities

- 22.2.1. Construction and siting of a building or structure.
 - 22.2.1.1. A building or structure constructed or sited within 500m of mean high water springs must not exceed 8m in height.
 - 22.2.1.2. A building or structure constructed or sited within the Lake Grassmere Salt Works Administration, Workshops, Salt Refining and Processing Area must not exceed 15m in height.
 - 22.2.1.3. Netwithstanding Any building or structure to which rule 22.2.1.1 and grant 22.2.1.2 does not apply, a building or structure must not exceed 10m in height.

22.2.2. Noise.

22.2.2.1. An activity, apart from salt harvest operations, must not cause noise that exceeds the following limits at the zone boundary:

7.00 am to 10.00 pm Monday to Sunday 55 dBA LAeq

At all other times 45 dBA L_{Aeq} 75dB L_{AFmax}

22.2.2.2. Noise from salt harvest operations, when measured at or beyond the Lake Grassmere Salt Works Noise Control Boundary, which is a distance of 500 metres from the 'outside' edges of the salt crystallising ponds, must not exceed the following standards:

7.00 am to 10.00 pm Monday to Sunday 55 dBA LAeq

At all other times 45 dBA L_{Aeq} 75dB L_{AFmax}

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- 22.2.2.3. Noise must be measured in accordance with the provisions of NZS 6801:2008
 Acoustics Measurement of Environmental Sound, and assessed in accordance with NZS 6802:2008 Acoustics Environmental Noise.
- 22.2.2.4. Construction noise must not exceed the recommended limits in, and must be measured and assessed in accordance with, NZS 6803:1999 Acoustics – Construction Noise.

22.2.3. Odour.

22.2.3.1. The odour must not be objectionable or offensive, as detected at or beyond the legal boundary of the area of land on which the permitted activity is occurring.

22.2.4. Smoke.

22.2.4.1. The smoke must not be objectionable or offensive, as detected at or beyond the legal boundary of the area of land on which the permitted activity is occurring.

22.2.5. Dust.

22.2.5.1. The best practicable method must be adopted to avoid dust beyond the legal boundary of the area of land on which the activity is occurring.

22.2.6. Dust from any process vent or stack.

- 22.2.6.1. The dust must not contain hazardous substances.
- 22.2.6.2. The particulate discharge rate from any air pollution control equipment and dust collection system must not exceed 250mg/m³ at any time, corrected to 0°C, 1 atmosphere pressure, dry gas basis.
- 22.2.6.3. Dust particles must not exceed 0.05mm size in any direction.

22.3. Standards that apply to specific permitted activities

- 22.3.1. Solar production, refining, handling, packaging, storage and sale of salt and associated by-products.
 - 22.3.1.1. The best practicable method must be adopted to contain the spread of brine into soil beyond the boundaries of the zone.
 - 22.3.1.2. The best practicable method must be adopted to minimise the generation of salt foam within the zone and to contain the spread of wind-borne salt foam beyond the boundaries of the zone.
- 22.3.2. Take and use of coastal water and the maintenance of existing seawater intake pipelines within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor shown in Appendix 21.
 - 22.3.2.1. The taking of water must not exceed 1.4m³ per second and 121,000m³ per day.
 - 22.3.2.2. The activity must not change natural water quality.
- 22.3.3. Discharge of stormwater from Lake Grassmere and surrounding catchments or diluted brine to the coastal marine area.
 - 22.3.3.1. Outside a mixing zone of 200m radius measured from the point of discharge the following must be met:

22. Lake Grassmere Salt Works Zone

- the discharge must not inhibit the gathering of shellfish for human consumption;
- (b) the natural temperature of the receiving water must not be changed by more than 3°C;
- (c) the concentration of dissolved oxygen in the discharge must exceed 80% of the saturation concentration;
- (d) there must be no undesirable biological growths as a result of any discharge of a contaminant into the water.

22.3.4. Construction and use of a temporary stormwater flood outlet channel from Lake Grassmere to the coastal marine area, including any disturbance of the foreshore and seabed.

- 22.3.4.1. The temporary channel must only be constructed and used when a storm event is forecast or immediately following a storm event.
- 22.3.4.2. The construction must be confined to the position and dimension within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor shown in Appendix 21.
- 22.3.4.3. The Council and the Department of Conservation must be advised as soon as a decision has been taken to construct the temporary flood stormwater outlet.
- 22.3.4.4. All excavated material must be stockpiled beside the temporary outlet cut for reinstatement following release of the stormwater.
- 22.3.4.5. The breach in the fore dunes and beach gravels must be reinstated to as close as practicable the condition of the land immediately prior to the work commencing. The reinstatement must be completed as soon as practicable following the passing of the storm event which created the need for the temporary outlet, but no later than 7 days after the event.

22.3.5. Living accommodation facility for staff.

- 22.3.5.1. The accommodation must be on-site and ancillary to the operations of the salt works
- 22.3.5.2. The accommodation must only be provided to employees of the operator of the salt works.

22.3.6. Excavation.

- 22.3.6.1. Excavation in excess of 1000m³ must not occur on land with a slope greater than 20° within any 24 month period.
- 22.3.6.2. Excavation must not be in, or within 8m of a river (except an ephemeral river when not flowing), lake (except during salt harvest operations) or the coastal marine area.
- 22.3.6.3. Wheeled or tracked machinery must not be operated in or within 8m of a river (except an ephemeral river or intermittently flowing river, when not flowing), lake (except during salt harvest operations) or the coastal marine area.
- 22.3.6.4. Batters must be designed and constructed to ensure they are stable and remain effective after completion of the excavation.
- 22.3.6.5. Water control measures and sediment control measures must be designed, constructed and maintained in an area disturbed by any excavation, such that the area is stable and the measures remain effective after completion of the

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- excavation. The diameter of a culvert used to drain excavation must not be less than 300mm.
- 22.3.6.6. After reasonable mixing, excavation must not cause any conspicuous change in the colour or visual clarity of any flowing river, measured as follows:
 - (a) hue must not be changed by more than 10 points on the Munsell scale;
 - the natural clarity must not be conspicuously changed due to sediment or sediment laden discharge originating from the excavation site;
 - (c) the change in reflectance must be <50%.

22.3.7. Filling of land with clean fill.

- 22.3.7.1. The filling must not use commercial clean fill.
- 22.3.7.2. Filling in excess of 1000m³ must not occur within any 24 month period.
- 22.3.7.3. Fill must not be placed over woody vegetation on land with a slope greater than 10°.
- 22.3.7.4. A filled area must be designed, constructed and maintained to ensure it is stable and remains effective after completion of filling.
- 22.3.7.5. Water control measures and sediment control measures must be designed, constructed and maintained in a fill area, such that the area is stable and the measures remain effective after completion of the filling. The diameter of a culvert used to drain a fill area must not be less than 300mm.
- 22.3.7.6. When the filling has been completed the filled area must be covered with at least 200mm of soil, and sown down with a suitable vegetative cover other means to achieve a rapid vegetative cover must be used.
- 22.3.7.7. Filling must not be in, or within:
 - 8m of a river (except an ephemeral river when not flowing), lake or the coastal marine area;
 - (b) 8m of the landward toe of a stopbank.
- 22.3.7.8. After reasonable mixing, filling must not cause any conspicuous change in the colour or visual clarity of any flowing river, measured as follows:
 - (a) hue must not be changed by more than 10 points on the Munsell scale;
 - the natural clarity must not be conspicuously changed due to sediment or sediment laden discharge originating from the filling site;
 - (c) the change in reflectance must be <50%.

22.3.8. Indigenous vegetation clearance.

- 22.3.8.1. Indigenous vegetation clearance must comply with Standards 22.3.9.1 to 22.3.9.8 (inclusive).
- 22.3.8.2. The clearance of indigenous vegetation in the following circumstances is exempt from Standards 22.3.8.3 to 22.3.8.6 (inclusive):
 - indigenous vegetation dominated by manuka, kanuka, tauhinu, bracken fern and silver tussock, and which has grown naturally from previously cleared land (i.e. regrowth) and where the regrowth is less than 20 years in age;

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- (b) indigenous vegetation dominated by matagouri, and which has grown naturally from previously cleared land (i.e. regrowth) and where the regrowth is less than 50 years in age;
- (c) where the clearance is associated with the maintenance of an existing road, forestry road, harvesting track or farm track.
- 22.3.8.3. Clearance of indigenous vegetation must not occur:
 - (a) on land identified as a Threatened Environments Indigenous Vegetation Site;
 - (b) on land above mean high water springs that is within 20m of an Ecologically Significant Marine Site.
- 22.3.8.4. Clearance of indigenous vegetation within the coastal environment must not include the following habitats/species:
 - (a) duneland vegetation;
 - (b) coastal grassland;
 - (c) coastal flaxlands;
 - (d) coastal vegetation dominated by (making up >50% of the canopy cover) wharariki/coastal flax (*Phormium cookianum*);
 - (e) coastal broadleaved shrubland;
 - (f) coastal small-leaved shrubland;
 - (g) coastal salt turf;
 - (h) coastal speargrass herbfield.
- 22.3.8.5. Clearance of indigenous forest must not exceed 1000m² per Computer Register in any 5 year period.
- 22.3.8.6. Clearance of indigenous vegetation, per Computer Register, must not exceed:
 - (a) 2000m² in any 5 year period where the average canopy height is between 3m and 6m;
 - (b) 10000m² in any 5 year period where the average canopy height is below 3m, except for the following species where clearance in any 5 year period must not exceed:
 - (i) 500m² of indigenous sub-alpine vegetation;
 - (ii) 100m2 of tall tussock of the genus Chinochloa.

22.3.9. Non-indigenous vegetation clearance.

- 22.3.9.1. Where clearance is by mechanical means, blading or root-raking by bulldozer must not be used on slopes greater than 20°.
- 22.3.9.2. Vegetation must not be removed by fire or mechanical means within 8m of a river (except an ephemeral river, or intermittently flowing river when not flowing), lake or the coastal marine area.
- 22.3.9.3. No tree or log must be dragged through the bed of a river (except an ephemeral river or intermittently flowing river, when not flowing), lake or through the coastal marine area.

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- 22.3.9.4. Wheeled or tracked machinery must not be operated in or within 8m of a river (except an ephemeral river or intermittently flowing river, when not flowing), lake or the coastal marine area.
- 22.3.9.5. On completion of a vegetation clearance, a suitable vegetative cover that will mitigate soil loss, must to be restored on the site so that, within 24 months the amount of bare ground is to be no more than 20% greater than prior to the vegetation clearance taking place.
- 22.3.9.6. The depth of topsoil removed must not exceed more than 20mm over more than 15% of any vegetation clearance site.
- 22.3.9.7. Woody material greater than 100mm in diameter and soil debris must:
 - (a) not be left within 8m of, or deposited in, a river (except an ephemeral river or intermittently flowing river, when not flowing), lake or the coastal marine area:
 - (b) not be left in a position where it can enter, or be carried into, a river (except an ephemeral river), lake or the coastal marine area;
 - (c) be stored on stable ground;
 - (d) be managed to avoid accumulation to levels that could cause erosion or instability of the land.
- 22.3.9.8. After reasonable mixing, vegetation clearance must not cause any conspicuous change in the colour or visual clarity of a flowing river, measured as follows:
 - (a) hue must not be changed by more than 10 points on the Munsell scale;
 - (b) the natural clarity must not be conspicuously changed due to sediment or sediment laden discharge originating from the vegetation clearance site;
 - (c) the change in reflectance must be <50%.

22.3.10. Discharge of human effluent into or onto land through an on-site wastewater management system.

- 22.3.10.1. The human effluent must be treated via an on-site wastewater management system must be maintained in an efficient operating condition at all times.
- 22.3.10.2. There must be no increase in the rate of discharge due to an increased occupancy of the building(s).
- 22.3.10.3. There must be:
 - (a) no ponding of effluent;
 - (b) no run-off or infiltration of effluent beyond the property boundary or into a river, lake, groundwater or coastal water.
- 22.3.10.4. The discharge rate must not exceed 2000 litres per day, averaged over any 7 day period.
- 22.3.10.5. Effluent must be able to:
 - (a) infiltrate through at least 600mm of unsaturated soil following primary treatment: or
 - infiltrate through at least 300mm of unsaturated soil following secondary treatment.

- 22.3.11. Discharge of contaminants to air arising from burning in the open.
 - 22.3.11.1. Only material generated on the same property or a property under the same ownership can be burned.
- 22.3.12. Discharge of contaminants to air from the combustion of fuels (i.e. external combustion).
 - 22.3.12.1. The discharge must not contain more than the following maximum heat output limits:
 - (a) 10MW for natural or liquefied petroleum gas;
 - (b) 40kW for untreated wood;
 - (c) 200kW for coal;
 - (d) 40kW for light fuel oil;
 - (e) 1.0MW for pellet fuel when burnt in a custom designed pellet boiler;
 - 400kW for pellet fuel when burnt in a standard boiler converted for pellet fuel use;
 - (g) 10MW for diesel (external combustion);
 - (h) 2 MW for kerosene.
 - 22.3.12.2. The limits in 22.3.12.1 apply to the total heat output from the site. Where more than one fuel type is used on the site, the combined heat output must not exceed the lowest MW or kW threshold of any of the fuel types used.
 - 22.3.12.3. The fuel must be burned using fuel burning equipment, and the discharge must be from a chimney or exhaust structure designed so that the emission is effectively dispersed upwards.
 - 22.3.12.4. The opacity of the discharge when measured at the point of entry to the atmosphere must not exceed 20%, except that a discharge in excess of this is allowed for a period of not more than 2 minutes continuously, or for an aggregate of 4 minutes, in any 60 minute period.
 - 22.3.12.5. The fuel burning equipment must be maintained in accordance with the manufacturer's specifications at least once every year by a person competent in the maintenance of that equipment. A log recording all maintenance must be made available to the Council on request.
 - 22.3.12.6. For external combustion sources the stack must comply with requirements in Appendix 8 Schedule 5.
 - 22.3.12.7. Coal must not be burned as a fuel if there are buildings higher than 6m within a 25m radius of the discharge. Fuels other than coal must not be burned future are buildings higher than 5m within a 25m radius of the discharge.
 - 22.3.12.8. The sulphur content of any coal burnt must be less than 2%.
- 22.3.13. Discharge of contaminants to air from combustion within a stationary internal combustion engine (i.e. internal combustion).
 - 22.3.13.1. The fuel used in the engine must be gas, LPG, petrol, diesel, vegetable oils or alcohol.
 - 22.3.13.2. Fuel containing sulphur at levels greater than 0.05% by weight must not be

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- 22.3.13.3. The power output of the engine must not exceed 400kW, this limit applies to the total heat output from a site.
- 22.3.13.4. If the power output of the engine is between 30kW and 400kW -
 - (a) the engine must not be operated for a total of greater than 5 hours in any 24-hour period:
 - (b) if the engine is in a fixed location, the stack must comply with the requirements of Appendix 8 – Schedule 5.
- 22.3.13.5. Where more than one fuel type is used on the property, the combined heat output must not exceed the lowest MW or kW threshold of any of the fuel types used

22.3.14. Discharge of contaminants to air from the spray application of paint or adhesive coating materials of surfaces not within a spray booth, other than a road.

- 22.3.14.1. There must not be more than 5 litres of coating material applied per hour and not more than 20 litres of coating material applied per month.
- 22.3.14.2. Where there is a sensitive receptor on another property within 100m of where the spray coating is to occur, there must not be more than 0.5 litre of coating material applied per hour and not more than 5 litres of coating material applied per month.
- 22.3.14.3. Spray coating must not occur on surfaces of fixed structures that can be dismantled and transported to a spray booth.
- 22.3.14.4. The coating material must not contain di-isocyanates or organic plasticisers.
- 22.3.14.5. The discharge must occur at least 10m from any sensitive receptor beyond the boundary of the property where spray coating is undertaken.
- 22.3.14.6. There must be no dispersal or deposition of contaminants beyond the boundary of the property where the discharge originates.

22.3.15. Discharge of contaminants to air from the application of coating materials (including paints and powders) through spray application undertaken within an enclosed booth.

- 22.3.15.1. The coating material must not that contain any di-isocyanates.
- 22.3.15.2. The total amount of coating material sprayed on the property must not exceed 10 litres per hour.
- 22.3.15.3. The spray booth must be fitted with an air extraction system which vertically discharges all contaminants and exhaust air through an emission stack.
- 22.3.15.4. The emission stack must be a height of at least 2m above the ridgeline of the roof of any building, land or other substantial structure within a radius, from the stack, of 35m.
- 22.3.15.5. The discharge must be directed vertically into the air and must not be impeded by any obstruction above the stack which decreases the vertical efflux velocity, below that which would occur in the absence of such obstruction.
- 22.3.15.6. The discharge must be through a filtration system that removes at least 95% of particulate matter from the discharge.

- 22.3.16. Discharge of contaminants to air from water blasting and from dry abrasive blasting, other than from the use of a moveable source.
 - 22.3.16.1. There must be no discharge of water spray, dust or other contaminant beyond the boundary of the property.
 - 22.3.16.2. Where the discharge occurs from public land there must be no discharge of water spray, dust or other contaminant beyond 50m from the discharge point or beyond the boundary of the public land, whichever is the lesser.
 - 22.3.16.3. There must be no discharge of water spray, dust or other contaminant into the coastal marine area.
 - 22.3.16.4. The surface to be blasted must not contain any hazardous substances, including lead, zinc, arsenic, chromium, copper, mercury, asbestos, tributyl tin, thorium-based compounds, and other heavy metals including anti foul paint containing these substances.
 - 22.3.16.5. For dry abrasive blasting all items must be blasted within an abrasive blasting enclosure and the discharge must be via a filtered extraction system that removes at least 95% of particulate matter from the discharge.
 - 22.3.16.6. For dry abrasive blasting the free silica content of a representative sample of the blast material must be less than 5% by weight.
- 22.3.17. Discharge of heat and water vapour from cooling towers.
 - 22.3.17.1. No more than 5MW of heat per hour must be discharged.

22.4. Controlled Activities

Application must be made for a Controlled Activity for the following:

[R]

- 22.4.1. Discharge of contaminants to air, of the products of combustion from fuel burning equipment used for generating heat or electric power using:
 - untreated wood, coal or oil, except waste oil, for the purposes of generating heat or electric power at a rate not exceeding 10MW;
 - (b) methane or natural or liquefied petroleum gas for the purposes of generating heat or electric power at a rate not exceeding 50MW;

where the limits specified in (a) or (b) above apply to the cumulative generated heal or electric power produced by the specified fuel within the same premises.

Standards and terms:

- 22.4.1.1. The discharge must be from a chimney.
- 22.4.1.2. The chimney must be designed so that the minimum efflux velocity is 20m/s at the chimney exit at full load for sources less than 10MW capacity, and 15m/s for sources equal to or greater than 10MW capacity.
- 22.4.1.3. The chimney must be designed so that the discharge is vertically upward and unimpeded by cowls or any other fixtures on the top of the stack conin may be used to increase the velocity discharge.

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22.4.1.4. The chimney height must comply with the requirements of Appendix 8 — Schedule 5.

Matters over which the Council has reserved control:

22.4.1.5. The location of the point of discharge.

22.4.1.6. The carrying out of measurements, samples, analyses, surveys, investigations or inspections.

22.4.1.7. The provision of information to the Council at specified times.

22.4.1.8. Compliance with monitoring, sampling and analysis conditions at the consent holder's expense.

[R, D]

22.4.2. Excavation of land exceeding 500mm in depth.

Standards and terms.

22.4.2.1. The excavation must not exceed a depth of 1.5m.

22.4.2.2. The excavation must not occur further than 100 metres from the zone boundary.

Matters over which the Council has reserved control:

22.4.2.3. The excavation of test pits;

22.4.2.4. The protection of adjoining land from contamination by brine/saline water;

22.4.2.5. Transmissiveness of the soils media between the site of excavation and the zone boundary;

22.4.2.6. The relationship of Maori and their culture and traditions with their ancestral lands, water, sites, washi tapu and other taonga.

[R, D]

22.4.3. Water Control Activities in Lake Grassmere and Cattle Creek as follows:

- (a) maintenance of a structure between 10m and 100m below the Cattle Creek rail bridge (No 174) or from 10 metres above the Cattle Creek rail bridge (No 174), to prevent or limit the extent of salt water intrusion into the channels and streams above the rail bridge;
- (b) maintenance dredging of the bed of Cattle Creek above and below the rail bridge No. 174;
- (c) works necessary to control and impound stormwater outside storm events, to provide maximum protection for Lake Grassmere from fresh water during storm events.

Standards and terms:

- 22.4.3.1. Maintenance dredging of the bed of Cattle Creek must not cause the bed of Cattle Creek to be either raised or deepened above or below its natural depth.
- 22.4.3.2. The works necessary to control and impound stormwater must be contained within a distance from 10m immediately above Cattle Creek rail bridge (No 174).
- 22.4.3.3. Works must not cause impounded water (either saltwater or freshwater) to flood beyond the banks of any creek or drain above its entrance into Lake Grassmere or beyond the banks of Lake Grassmere.

Commented [A11]: Submission point 355.015. This submission point will be dealt with in Topic 13.

Commented [A12]: Submission point 355.016 seeks this rule to be moved to Permitted Activities. This submission point will be dealt with in Topic 19.

Matters over which the Council has reserved control:

- 22.4.3.4. The structural integrity of the rail bridge.
- 22.4.3.5. Use of freshwater for stock drinking purposes upstream of the upper physical barrier.
- 22.4.3.6. Preventing flooding of neighbouring land.
- 22.4.3.7. Extent of maintenance dredging of the bed of Cattle Creek.

22.5. Discretionary Activities

Application must be made for a Discretionary Activity for the following:

[C, R, D]

22.5.1. Any activity provided for as a Permitted Activity or Controlled Activity that does not meet the applicable standards.

[D]

22.5.2. Land based aquaculture.

[D]

22.5.3. Seawater intake and discharge pipes pipelines and associated structures within the Lake Grassmere Salt Works Intake and Pipeline Extension Corridor.

[R, D]

22.5.4. Any use of land not provided for as a Permitted Activity or Controlled Activity, or limited as a Prohibited Activity.

[C]

22.5.5. Any use of the coastal marine area not provided for as a Permitted Activity or limited as a Prohibited Activity.

[C

22.5.6. Any taking, use, damming or diversion of open coastal water not provided for as a Permitted Activity or limited as a Prohibited Activity.

[C]

22.5.7. Any discharge of water or contaminants into coastal water not provided for as a Permitted Activity or limited as a Prohibited Activity.

[R]

22.5.8. Any discharge of contaminants into or onto land, or to air not provided for as a Permitted Activity or Controlled Activity, or limited as a Prohibited Activity.

22.6. Prohibited Activities

The following are Prohibited Activities for which no application can be made:

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[R]

- 22.6.1. Discharge of contaminants to air arising from the burning of any of the following materials from any industrial or trade premise:
 - (a) wood having a moisture content of more than 25% dry weight;
 - (b) wood which is painted, stained, oiled or coated;
 - (c) wood treated with preservatives or impregnated with chemicals, including but not limited to, wood treated with Copper-Chrome-Arsenic (CCA);
 - (d) pellets containing greater than 10mg/kg (dry) of copper and 0.02w-% (dry) of chlorine;
 - (e) composite wood boards containing formaldehyde or similar adhesives, including but not limited to, chip board, fibreboard, particle board and laminated boards;
 - (f) metals and materials containing metals, including but not limited to cables;
 - (g) materials containing asbestos;
 - (h) material containing tar or bitumen;
 - (i) all rubber, including but not limited to, rubber tyres;
 - synthetic material, including, but not limited to, motor vehicle parts, foams, fibreglass, batteries, chemicals, paint and other surface-coating materials, or type of plastics;
 - (k) waste oil;
 - (I) peat;
 - (m) sludge from industrial processes;
 - (n) animal waste (except animal waste generated on production land), medical waste, pacemakers, biomechanical devices or chemical waste.

[R, D]

22.6.2. Disposal of hazardous waste into or onto land other than discharges from salt production processes.

[R, D]

22.6.3. Discharge of human effluent into or onto land through a soak pit established after 9 June 2016.