# Feedback Received on Earthworks Consultation Brochure

In total four comments were received in relation to the earthworks brochure:

Respondent	Summary of Feedback	Method
		of Contact
New Zealand Historic Places Trust	Section 4.10.2 It would be helpful to include in this section a note about the Historic Places Act so that applicants are aware that there may be another process to complete alongside any resource consent process. E.g. section 17.7 of the DCC District Plan contains the following text:  All earthworks must comply with section 10 of the Historic Places Act 1993, which protects recorded, suspected and unrecorded archaeological sites from destruction, damage and modification.  Assessment Matters	Email 24/08/12
	It is noted that the assessment matter for impacts of earthworks on sites of cultural heritage value in both the Rural and Residential (see 7.7.2(xxxi)(e)(ii)) zones reads as follows:	
	Impacts on sites of cultural heritage value:	
	(c) Whether the subject land contains a recorded archaeological site, and whether the NZ Historic Places Trust has been notified.	
	The wording of this assessment matter puts the onus for the management of effects on archaeological sites onto the NZHPT via the provisions of the HPA 1993. The Council does have a role to play in terms of section 6(f) of the RMA, as the definition of historic heritage includes archaeological sites. If this assessment matter is to be retained it should be amended as follows:	
	Whether the site contains a recorded or suspected archaeological site, and if so the extent to which the proposal would affect any such site and whether any necessary archaeological authority has been obtained from the NZ Historic Places Trust.	
	The above approach recognises the Council's responsibilities in terms of section 6(f), as well as that of the NZHPT under the HPA 1993. Furthermore, as the Plan does contain rules pertaining to earthworks affecting <i>scheduled</i> archaeological sites, Waahi Tapu and Waahi Taoka, an assessment matter along these lines would also ensure that applicants are aware that not all significant heritage sites are listed in the District Plan heritage schedule or on the NZHPT's register.	
	It would be helpful to include an explanation that a recorded archaeological site is a site recorded via the New Zealand Archaeological Association's Site Recording Scheme (called Archsite) and information is available at <a href="https://www.archsite.org.nz">www.archsite.org.nz</a> .	
Otago Regional Council	The key areas of ORC interest are as follows:  - Nuisance effects (including dust and noise)  - Effects on water quality resulting from silt and sediment runoff  - Effects on the overland flow of water  - Effects on land stability	Email 16/08/12

## Environmental protection measures

The District Plan earthwork rules contain environmental protection measures (as detailed on page 4 of the earthworks monitoring report). ORC considers that these measures are vital for the implementation of the triennial agreement (i.e. district plans, not regional plans, have land use controls). ORC supports the continued use of these environmental protection measures for all rules, in order to control the effects of earthwork activities.

In regard to the ski area sub zones exemptions, ORC considers this to be inconsistent. Large scale earthworks often take place in ski area sub zones, and can result in adverse effects. As a minimum, environmental protection measures should apply to all earthworks in the ski area sub zones.

Environmental protection measure (c) does not apply in the Rural General Zone. ORC considers this to be an inconsistent approach to mitigating the adverse effects of earthwork given the large amount of residential development occurring in the Rural General zone.

The implementation of these environmental protection measures assists to achieve good quality water in Otago.

#### Groundwater

The current earthworks provisions contain environmental protection measures relating to the protection of all groundwater. ORC supports the suggestion that further investigation be undertaken to consider further protecting aquifers identified in the Regional Plan: Water for Otago.

## Subdivision rules

There appears to be confusion regarding how the earthworks provisions apply in conjunction with subdivision provisions. When further considering this matter, ORC considers there needs to be assurance that earthworks are assessed as part of every relevant activity in order that the effects can be addressed.

#### Gravel extraction, mining, definition of earthworks

Whilst ORC understands the need for controls, there is concern that without a coordinated approach there's the potential for duplication of consent requirements from both the district council and ORC. Whatever approach is taken, in regard to provisions and definitions, there is the need to ensure that control over the effects of activities is not lost. ORC supports clarification and the same treatment of earthworks disturbance activities.

### <u>Hazards</u>

Earthworks have the potential to both positively and negatively affect natural hazards. In particular earthworks can adversely affect land stability and result in damming and diversion of stormwater and floodwater. ORC is particularly concerned about the effects of activities in close proximities to water bodies or in flood hazard areas, in regard to sediment runoff and damming and diversion.

# Patterson Pitts Partners

The thresholds for requiring resource consent (100m<sup>3</sup> in the majority of urban and rural living zones and 300m<sup>3</sup> in Rural General) are far too low.

Email 24/08/12

The definition of earthworks volumes (interpretive diagram 5) means that material cut during earthworks is counted twice if deposited on

site ie a balance cut to fill operation of 50m3 of cut replaced on site counts as 100m3.

For instance a standard small house of  $150m^2$  on a flat site will require 0.3m of topsoil to be stripped and footings to be dug and so requires  $150m2 \times 0.3m = 50m3$  of earthworks. Spreading this topsoil on the site is another 50m3. This means even very small earthworks associated with permitted activities require resource consent. These figures don't include any levelling, driveway formation or additional landscaping. The consequence of this is that almost every land development project will require resource consent. This is not considered efficient, when the majority of minor earthworks do not create adverse environmental effects.

The very low threshold before requiring resource consent, the fact that the majority of applications are approved and almost every consent has the same environmental protections conditions would suggest that it would be more efficient to raise the threshold for resource consent, and provide additional matters for earthworks to be a permitted activity based on the existing standard conditions for earthworks eg

- prevent deposition of debris on roads and damage to road, footpath and berm surface
- building consent CCC and Engineer PS for any walls which exceed 1.5m
- not breach site boundaries
- install measures to avoid run off, silt, dust and erosion
- provide for the stability of neighbouring property at all times
- at completion of works all exposed earthworks shall be topsoiled and grassed... etc

Z Energy Ltd, BP Oil NZ Ltd, Mobil Oil NZ Ltd The most common earthworks undertaken by the Oil Companies are those associated with the replacement and/or removal of underground fuel storage tanks (underground petroleum storage systems (or UPSS)). There are no specific provisions in the Operative District Plan that recognise or provide for earthworks that are necessary to remove and/or replace an UPSS.

Letter 31/03/13

Removal and/or replacement of an UPSS will generally be undertaken for a number of reasons such as the underground tank is getting old and needs replacing, the site is being upgraded, a leak is suspected or the site is being closed. In each case an environmental assessment/investigation is undertaken as part of the removal/replacement process.

The total volume of earthworks required for an UPSS removal will depend on the number of tanks being removed, the size of the tanks and the area in which the tanks are located, but in any case is controlled through the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NES).

UPPS replacement and/or removal generally involves:

- Removal of above ground equipment and concrete cutting and breaking;
- Excavations to a depth of some 4.5m to expose the UPSS elements (tanks, fuel & pipe lines, fill points);

- Removal of UPSS elements for off-site disposal/destruction;
- Removal of earth from the site, including the excavation of any impacted soils adjacent to the UPSS, and its disposal at an appropriate facility and validation sampling of excavations;
- Backfilling and restoration of the ground level to its existing level.

While these activities are now controlled by and subject to the NES, they are still also subject to any relevant earthworks standards in the District Plan. Because of this, the earthworks associated with retanking and replacement works are often inefficiently and inappropriately required to obtain resource consents pursuant to provisions controlling such matters as proximity of earthworks to boundaries and the depth of excavation. For example the Operative Queenstown Lakes District Plan requires resource consent for excavations deeper than 2.4m in most urban zones (which would capture excavations for tank removal / installation where excavation to a depth of some 4.5m is generally required), and for cut and fill that is greater in height or depth than the distance to the boundary. Such matters are not generally relevant to tank removal and/or replacement activities undertaken by the Oil Companies as the tank pits are sheet piled to a depth of some 6m (addressing stability and safety) and the earthworks occur over a short period of time, with the ground being reinstated to the equivalent standard of the surrounding ground (generally hardstand, and addressing amenity effects).

The Operative District Plan also includes consent requirements relating to volumes of earthworks, with up to 100m3 permitted in most 'urban' zones and up to 300m3 permitted in the Rural General zone. Earthworks associated with UPSS removals usually involve less than 100m3 of soil disturbance (excluding the bedding material that is placed around tanks, which could be a further 30-60m3). However, larger volumes sometimes require removal where there has been some form of product loss at the site.

Any disturbed suspect material is removed at the time the tank pit is open, in preference to closing it and returning later to extract such material. Once the back fill, suspect material and tank are removed, the tank pit walls and floor are visually inspected and samples taken and tested for hydrocarbons. Any backfill/soil that is removed is disposed of to an appropriate off-site licensed waste management facility. In addition to replacing any contaminated soil or backfill that is removed, imported fill will be used to fill the voids left by removal of the tanks. Typical replacement volumes will vary depending upon whether the tank is replaced or permanently removed.

The volume of soil disturbance associated with tank replacement works is controlled by the NES, which sets a permitted activity threshold of 30m3 of soil disturbance per tank in the system. Irrespective of whether a consent is required under the NES, the works must be undertaken in accordance with the MfE 'Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand' and a suite of notification and reporting requirements (to territorial authorities) must be met. As such, a further consent for earthworks volume under the District Plan is considered unnecessary, as it would not result in the Council

receiving any more information about the works or achieve any environmental benefit that is not already achieved by compliance with the NES.

Further, it is noted that there is a potential conflict between the District Plan and the NES, whereby a tank replacement activity that was otherwise permitted under the NES may be required to obtain a consent under the District Plan due to an exceedance of the permitted earthworks volumes. The potential for this arises because:

The NES excludes the bedding material that is placed around tanks from the permitted activity threshold of 'soil disturbance'. No such distinction is made in the District Plan meaning that the volume of earthworks assessed under the District Plan will include both soil and bedding material resulting in an apparently larger volume of earthworks that may exceed the permitted District Plan standard; and

The current District Plan definition of earthworks could be interpreted to cover both the removal and replacement of soil, therefore double counting the quantity of material subject to the works. In the context of replacing an UPSS, the same (or similar) quantity of backfill will be required to reinstate a tankpit and ground level once a new tank is in place. If interpreted in this way, the definition could effectively result in a lower permitted activity threshold of some 50m3 of excavations in the urban zones (with the remaining 50m3 of the 100m3 allowance required to accommodate the backfill).

The existing volume, cut and fill and distance from boundary thresholds in the Operative District Plan, and particularly in the 'urban' zones, have potential to unnecessarily constrain the permitted activities of the NES (e.g. in relation to retanking activities). As such, the Oil Companies request that an exemption from the earthworks provisions is provided for UPSS removals. This could be achieved either by way of exclusion from the definition of earthworks or with a specific rule. The inclusion of such an exemption is about ensuring that UPSS tanks can be removed without needing to unnecessarily obtain resource consents. This is considered appropriate as with timely, efficient procedures in place, the period in which the earthworks are undertaken is brief and any effects are temporary. There are no changes to ground level and the surface of the area affected is reinstated. In the context of an existing service station activity, the earthworks will not change the general topography of the site nor will they adversely affect the appearance of the site. As earthworks will already have occurred in order to put the tanks in place, their removal and/or replacement will not disturb any sites of particular historical or cultural significance. The site will therefore retain its generic character, with no impact on the wider landscape character. Standard procedures employed on site include the adoption of a Construction Management Plan, describing the site management regime to be adopted on site, including full erosion and sediment control measures to be employed on the site and measures to mitigate against and, if necessary, address potential nuisance effects, including details of specific measures to control noise and dust. It is also noted the NES requires detailed notification and reporting of the works to the territorial authority when removing or replacing a fuel storage system irrespective of whether or not a NES consent is required. As such, the relevant information is required to be made available to the Council without the need for a further District Plan consent requirement.

Furthermore, additional regulation is neither effective nor efficient, given that the replacement and removal of UPSS are already adequately controlled through HSNO (including the requirement to comply with HSNOCOP44 and 45) and the NES (including (Module 7 of) the MfE Guidelines: Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand). There is no need for a third layer of regulation to be added.

In summary, the Oil Companies request that an exemption from the earthworks provisions is provided for UPSS removals to avoid conflict with the NES and the need to unnecessarily obtain resource consents for an activity that is already well regulated.

Further to the issue of UPSS replacement, it is noted that the Council has a broader obligation to ensure consistency and avoid conflict between the District Plan and the NES. The status of some activities, including earthworks, undertaken on contaminated land will be determined by the requirements of the NES. However, there is no discussion or acknowledgement in the earthworks review material around the need to ensure an appropriate interface between the NES and the District Plan provisions. The plan should, as a minimum, include a cross reference to the NES to draw the attention of plan users to the need for compliance with its requirements.

**RELIEF SOUGHT – EARTHWORKS** (additions underlined, deletions in strikethrough):

**Exempt** Underground Petroleum Storage Systems (UPSS) removals and/or replacements from the general earthworks provisions in the Plan. This could be achieved either by way of exclusion from the definition of earthworks or by the inclusion of a specific rule for example by including text along the following lines, or to achieve the same effect:

Amend the definition of earthworks as follows:

Earthworks – Means the disturbance of land surfaces by the removal or depositing of material, excavation, filling or the formation of roads, banks, and tracks. Excludes the cultivation of land and the digging of holes for offal pits and the erection of posts or poles or the planting of trees.

Earthworks do not include the replacement and/or removal of a fuel storage system as defined and controlled in the Resource

Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health)

Regulations 2011;

OR

Include a new Earthworks Rule in each zone chapter of the Plan as follows:

Earthworks associated with the replacement and/or removal of a fuel storage system as defined and controlled in the Resource

Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health)

Regulations 2011 are permitted, and are not subject to any other earthworks standards in the District Plan.

Include a cross—reference to the Resource Management (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations along the following lines, or to achieve the same effect:

The status of some activites will be determined by the requirements of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011. Reference should be made to the Ministry of Environment website for a copy of these regulations, a users guide, documents incorporated by reference in these regulations. Reference must be made to this Ministry of Environment website for the latest version of the documents incorporated by reference.

#### Conclusion

The Oil Companies seek that the matters identified in the above comments are taken into account when drafting any new District Plan provisions relating to hazardous substances and earthworks. The Oil Companies are willing to discuss these comments further with the Council, at any stage, as required and would be pleased to review any draft provisions.