ISSUE NINE: ADVERSE EFFECTS ON WATER QUALITY

The issue to be addressed is the maintenance of water quality in the coastal marine area, and enhancement of the quality of water that is degraded, including consideration of effects of point-source discharges of contaminants from coastal industries and communities; limitations on natural flushing of coastal waters by development in the coastal marine area; effects of diffuse-source discharges of contaminants associated with the operation and maintenance of facilities and ships and offshore installations in the coastal marine area; and effects of spills of oil or other contaminants in the coastal marine area.

Objective

OBJ 9 To maintain and enhance the quality of coastal water by avoiding, remedying or mitigating the adverse effects of contaminants discharged to the coastal marine area.

Policies

POL 9.1 *Waste reduction and treatment practices which avoid, remedy or mitigate the environmental effects of the direct discharge of contaminants into water will be required. In assessing proposals to discharge contaminants directly to water (either new discharges or renewals of existing discharges), matters to be considered will include:*

(a) the need to safeguard the life-supporting capacity of water and aquatic ecosystems of the receiving environment;

(b) the allowance for reasonable mixing zones;

(c) potential for cumulative or synergetic effects;

(d) the effect on areas where shellfish are gathered for human consumption;

(e) the degree to which the needs of other water users are, or may be, compromised;

(f) the actual or potential risks to human and animal health from the discharge;

(g) the actual or potential effects on amenity and heritage values including recreational values of the receiving environment;

(h) the effect of the discharge on the natural state of the receiving water;

(i) the cultural and spiritual values of tangata whenua;

(j) measures to avoid, remedy or mitigate the effects of contaminants to be discharged;

(k) the use of the best practicable option for the treatment and disposal of contaminants including, in the case of human sewage wastewater, the use of land disposal or wetland treatment.

This policy will also be given effect when coastal permits for discharges of contaminants are reviewed in accordance with Section 128 of the Act.

POL 9.2 *Improvements in the biological health and quality of coastal ecosystems will be promoted in those coastal waters in which the life-supporting capacity of water and marine ecosystems is under pressure, while taking account of:*

(a) the existing status of water quality;

(b) the existing habitat quality including the need to maintain ecologically viable marine ecosystems and ecologically viable populations of marine species;

(c) the degree to which cultural and spiritual values or customary uses of tangata whenua are affected by existing water quality;

(d) the scenic, aesthetic and recreational values including fishery values;

(e) the impact on commercial users of the coastal marine area.

POL 9.3 *Discharges of contaminants or water to water should:*

(a) be carried out in a way that avoids or mitigates significant adverse effects on marine biological community composition;

(b) maintain or enhance, after reasonable mixing, water quality of a standard that allows existing community use of that water for recreation, fishing or kaimoana gathering to continue;

(c) avoid, remedy or mitigate significant adverse ecological effects on estuaries or intertidal areas;

(d) be of a quality that ensures that the size or location of the zone required for reasonable mixing does not have a significant adverse effect on community use of the coastal marine area or the life-supporting capacity of water and aquatic ecosystems.

POL 9.4 *A discharge of human sewage direct into water, without passing through land, may only occur where:*

(a) it better meets the purpose of the Act than disposal onto land;

(b) there has been consultation with the tangata whenua in accordance with tikanga Maori and due weight has been given to sections 6, 7 and 8 of the Act;

(c) there has been consultation with the community generally.

POL 9.5 *After reasonable mixing, no discharge (either by itself or in combination with other discharges) may give rise to any significant adverse effects on habitats, feeding grounds or ecosystems.*

POL 9.6 *Adverse effects on water quality from the discharge of contaminated stormwater will be avoided, remedied or mitigated and management systems, structures or facilities adopted to:*

(a) separate drainage of areas which are at no risk of being contaminated from those which may be contaminated;

(b) treat contaminated stormwater at source or before disposal.

POL 9.7 *The potential for unauthorised discharges of contaminants to occur in respect of any activity in the coastal marine area will be considered. Spill contingency plans may be required in relation to any activity in the coastal marine area with the potential for significant adverse effects on water quality in the event of an unauthorised discharge.*

POL 9.8 *Adverse effects on water quality and sediment quality that arise from ship or offshore installation discharges and maintenance shall be avoided or mitigated to the fullest practicable extent.*

POL 9.9 *The introduction of exotic organisms to New Zealand coastal waters shall be avoided as far as is practicable and, in particular, risk minimisation methods will be used or required where there is a reasonable risk that an activity could result in the introduction of an exotic species which could:*

(a) endanger or cause the regional or national extinction of any indigenous species; or

(b) adversely affect human health, fisheries, shellfisheries, aquaculture or marine ecosystems.

POL 9.10 *When considering coastal permit applications for reclamations, activities involving structures, disturbances to the foreshore and seabed, or deposits of substances to the foreshore and seabed, the Taranaki Regional Council will consider adverse effects on water quality with respect to the need to safeguard the life-supporting capacity of water and aquatic ecosystems.*

POL 9.11 *Bulk storage of hazardous substances in the coastal marine area will be regulated and the non-essential bulk storage of hazardous substances in the coastal marine area discouraged to prevent adverse effects on water quality.*

Explanation

The ambient water quality in the Taranaki coastal marine area is influenced by the high-energy wave environment, and by the discharges of numerous rivers into the sea. The high-energy wave environment means visual clarity is low and causes suspension of sediments in inshore waters. The discharges of rivers carry with them the cumulative effects of activities in their catchments, including urban stormwater runoff, suspended sediments and agricultural and industrial wastes. Additionally, eastern hill country rivers drain siltstone and mudstone catchments, and as such discharge a high load of suspended solids. The effects of rivers on water quality in the coastal marine area will be addressed through a regional freshwater plan and through the Taranaki Regional Council's riparian management strategy.

There are a number of natural oil or hydrocarbon seeps around New Plymouth and within the Sugar Loaf Islands Marine Protected Area. These natural seepages are not able to be controlled.

The Taranaki Regional Council considers that the objective stated is a pragmatic objective which recognises:

- existing community uses of the coastal marine area;
- the relatively low number of artificial discharges to Taranaki coastal water; and

- existing ambient water quality in Taranaki as affected by the West Coast environment and river discharge.

The intent of the objective is that the coastal water quality is maintained and enhanced by management of effects of direct discharges to the sea. Contaminants should not prevent or restrict fishing, shellfish gathering for consumption, or contact recreation, in areas already used for those purposes.

Policy 9.1 allows for new discharges of contaminants or water to the coastal marine area. The policy states matters that will be considered when a proposal to discharge contaminants to the coastal marine area is made. Those matters include some which relate to other policies in this plan. Those policies will also be considered.

Policy 9.1 uses the hierarchy of action given in Policy 3.2.2 of the New Zealand Coastal Policy Statement. That hierarchy means to avoid any adverse effects, or, when those adverse effects are unavoidable they should be mitigated and provision should be made for remedying those effects.

Policy 9.2 states the matters that the Taranaki Regional Council will consider in determining the life-supporting capacity of coastal water. The policy is important both for proposed new discharges and for existing discharges into degraded receiving waters.

Policy 9.3 provides a statement of the Taranaki Regional Council's desired operational outcomes when considering applications to discharge contaminants to the coastal marine area. In effect, the policy provides assistance to those wishing to commence a new discharge of contaminants, by providing a guideline as to the effects the Council considers undesirable in the coastal marine area.

Policies 9.4 and 9.5 have been included to give effect to Policies 5.1.2 and 5.1.3 of the New Zealand Coastal Policy Statement.

Policy 9.6 states the Taranaki Regional Council's approach to stormwater discharges. Stormwater is often contaminated in the first flush after heavy rain (particularly following a long dry period) but is a "special case" discharge. Stormwater must be discharged in some way. The Council requires spill contingency plans and pre-treatment (usually settling ponds which are bypassed after a certain time) when stormwater is discharged from catchments with a discernible risk of contaminant spills or solids reaching stormwater (usually in industrial areas).

Policy 9.6 also uses the hierarchy of action given in Policy 3.2.2 of the New Zealand Coastal Policy Statement, as explained in relation to policy 9.1 above.

Policy 9.7 formalises an existing practice of the Taranaki Regional Council, that activities with the potential for a discharge with significant adverse effects may be required to provide a spill contingency plan as a requirement to obtain a coastal permit. In some instances, if the risk of a spill, considering its probability and likely adverse effects on the receiving environment, is too great, consent may be declined instead of a contingency plan being required. A cross-boundary issue exists here, as activities outside the coastal marine area may have the potential for a spill.

Policy 9.8 recognises that ships (including every description of boat or craft) and offshore installations may adversely affect water quality either through sewage or ballast water discharges, or through chemical contamination from paints during operation or maintenance periods. It is not possible to completely prevent the effects of ships and offshore installations on water quality. Some ships cannot physically change their ballast water in the open sea, nor can some contamination from paints be completely avoided. Hence the wording of the policy refers to mitigating these effects, rather than avoiding or remedying them.

Discharges from ship and offshore installations to the coastal marine area will be subject to section 15B of the Resource Management Amendment Act 1994 once that Act comes into effect. Under this Amendment Act the Government is preparing marine pollution regulations to address such discharges. In anticipation of these changes in legislation, the general rules concerning discharges from ships and offshore installations have been drafted to be as consistent as possible with the draft regulations. These rules may be overridden when section 15B and the associated marine pollution regulations come into force.

Policy 9.9 recognises the potential adverse effects on shellfisheries, fisheries and marine ecosystems, and on human health, of the introduction of foreign organisms such as toxic dinoflagellates. The prospects for controlling or eradicating new organisms that have been introduced to New Zealand have been historically identified as poor. The Biosecurity Act 1993 will be the primary means by which such introductions will be avoided. Ballast water discharges are likely to be permitted, in accordance with the marine pollution regulations noted above, subject to any control imposed under the Biosecurity Act by the Ministry of Agriculture.

Policy 9.10 provides guidance to the Taranaki Regional Council and community when considering coastal permit applications to carry out works in the coastal marine area. Activities other than discharges may affect water quality, primarily through temporary sediment disturbance. Such disturbance can have significant effects, even though the disturbance is temporary, if it occurs at spawning times.

Policy 9.11 has been put in place to provide for continued control of hazardous substance storage in the coastal marine area, as previously provided by the Transitional Regional Coastal Plan. Hazardous substance storage has potential adverse effects of low probability but high potential impact on the coastal marine area. The Taranaki Regional Council will therefore discourage the bulk storage of hazardous substances in the coastal marine area unless there is an operational need for such storage. The policy maintains the *status quo* and does not affect ships in port, or transportation of hazardous substances.

Methods of implementation

The Taranaki Regional Council will use the following methods to implement the policies above:

METH 1 **Application of the regional rules** listed in Section 4.0 of this plan to provide for the control of **discharges** of sewage, other contaminants and water to the coastal marine area, and for the control of the bulk storage of hazardous substances in Port Taranaki.

METH 2 **Advocacy** (or **requirement** when new mooring, berthing or launching facilities are constructed) for Westgate Transport Ltd and any future operators of other launching, mooring and berthing facilities (for example, at Waitara or Patea) to:

(a) provide facilities for the collection of litter and on-board wastes;

(b) provide areas on dry land for the maintenance and cleaning of ships (including every description of boat or craft), and in particular, facilities to collect and dispose of maintenance and cleaning wastes so that they do not escape into coastal water;

(c) encourage ship operators to follow Ministry of Agriculture border protection guidelines on the exchange of ballast water, to avoid release of exotic marine organisms into New Zealand waters.

METH 3 **Preparation**, under the Transport Law Reform Act 1994 and the New Zealand Marine Oil Spill Response Strategy, **of the Regional Marine Oil Spill Response Plan** to deal with oil spills in the coastal marine area.

METH 4 **Approval**, and subsequent **inspection** as appropriate, **of site marine oil spill response plans** under the Maritime Transport Act 1994.

METH 5 **Inspection**, as appropriate, **of shipboard marine oil spill response plans** held on New Zealand ships under the Maritime Transport Act 1994.

METH 6 **Application of conditions on coastal permits** to require the preparation of contaminant spill contingency plans. These plans will be required, when appropriate, for activities involving the use of contaminants in the coastal marine area or activities with discharges to the coastal marine area.

METH 7 **Provision of information** to territorial authorities and the Medical Officer of Health for Taranaki if regional water quality monitoring shows that coastal water is unfit for contact recreation or gathering of shellfish for human consumption.

Reasons

Method 1 has been adopted because, in respect of fixed point-source discharges of contaminants, regulation is a simple, efficient and effective method of controlling the adverse effects of those discharges. Sewage discharges (other than those from ships and offshore installations, or those that pass through soil or wetland first) are required to be regulated by Policy 5.3.1 of the New Zealand Coastal Policy Statement. Policies 5.2.1 to 5.2.5 of the New Zealand Coastal Policy Statement require that provision be made to avoid, remedy or mitigate adverse effects of sewage and other waste discharges from ships and offshore installations. However, setting rules that require coastal permits to be obtained is neither efficient nor effective for mobile sources, hence other methods will be used to give effect to water quality objectives and policies in respect of mobile sources. Bulk storage of hazardous substances has previously been a discretionary activity on Port Taranaki wharves. This provision is being continued.

Method 2 has been adopted because provision for collection facilities is required by the New Zealand Coastal Policy Statement, Policies 5.2.1 and 5.2.2.

Provision of facilities is a service delivery function of a type not practised by the Taranaki Regional Council due to limitations under the Local Government Act 1974. However, encouragement (or requirement) for sewage and waste disposal facilities to be provided by operators is considered likely to be an effective method of achieving Policy 9.9, as well as an efficient method of implementation.

Method 2 recognises that rules regarding discharges from foreign-flagged ships cannot be enforced under the Act[1]. Promotion of the Voluntary Agreement on Ballast Water Discharge is seen as the most efficient and effective way of achieving Policy 9.10. While such rules can be enforced against New Zealand registered ships, the Taranaki Regional Council would prefer to be able to deal with all ships and offshore installations in the same way, for reasons of equity.

Education and advocacy have been chosen recognising that, in the long term, behavioral change will be the most effective method of achieving water quality objectives. Discharges from ships and offshore installations are difficult to police outside harbour limits, and so other methods of implementation (with the exception of service provision) are unworkable.

Method 3 involves the preparation of a regional marine oil spill response plan. Such a plan is mandatory under the Maritime Transport Act 1994, and assists in achieving the purpose of the Resource Management Act. Section 32 of the Resource Management Act allows for the use of functions under other Acts to achieve the purpose of the Resource Management Act.

Method 4 has been adopted because the approval of site marine oil spill response plans is a mandatory function of a regional council under the Maritime Transport Act 1994. A regional council may also inspect such plans. This will assist in achieving the purpose of the Resource Management Act.

Method 5 has been adopted because New Zealand ships are required by the Maritime Transport Act 1994 to prepare shipboard marine oil spill response plans. Regional councils do not have an approval role in respect of such plans, but may inspect them under that Act. The Taranaki Regional Council considers that such inspections, carried out from time to time, will assist in achieving the purpose of the Resource Management Act.

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1 *Until such time as the Resource Management Amendment Act 1994 comes into effect.*

Method 6 will affect activities in, or involving discharges to, the coastal marine area, which have the potential for unauthorised discharges of contaminants to the coastal marine area. A workable contingency plan is an effective method of avoiding adverse effects from an accidental or negligent spillage of contaminants. To the advantage of consent holders, acceptable contingency plans assist in a defence given the strict liability provisions of the Act.

Method 7 has been adopted to give effect to Policy 5.1.7 of the New Zealand Coastal Policy Statement.

Environmental results anticipated

ER 1 Adverse effects of point-source discharges on water quality avoided, remedied or mitigated to:

(a) allow widespread contact recreation, shellfish gathering for human consumption and fishing;

(b) ensure the maintenance of viable marine ecosystems, particularly in estuarine and intertidal areas.

ER 2 Minimal occurrence of accidental spills of contaminants, and effective clean-up if spills occur.

ER 3 Minimisation of the risk of introduction of exotic organisms.