

## **STAFF REPORT**

**TO:** Chairman and Members, Engineering Services Committee

**FROM:** Utilities Asset Engineer, David Stephenson

**REFERENCE:**

**DATE:** 23 August 2006

**SUBJECT: MURCHISON LANDFILL – OPTIONS UPDATE**

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### **1 PURPOSE**

The purpose of this report is to inform Council of the ongoing review of options for the Murchison Landfill.

### **2 BACKGROUND**

As reported previously, Council staff and consultants are currently reviewing possible options for the development of the landfill at Murchison. Since this date, two options for immediate works have been investigated:

- Development of a further landfill cell at the site and continued long (or medium) term operation of the site as a landfill and application for necessary resource consents.
- Development of a simple two bay transfer station at the site and transport and disposal of this waste to the Eves Valley landfill and application for necessary resource consents.

### **3 SITE DEVELOPMENT COSTS**

Further work on site development options has indicated similar capital costs in the next two year period (in the order of \$100,000) for development of either a landfill cell (and necessary flood protection) or a transfer station site.

In the case of a transfer station option, capital savings in the order of \$18,000 per annum would be realised beyond year two.

In addition to the above works, further site improvements have been scheduled at the site. It is expected that these works would be constructed regardless of whether the site continued as a landfill or transfer station. The attached figures indicate a schematic layout of the transfer station option and of further site improvements as above.

## **4 OPERATIONAL COSTS**

Budget prices from contractors have been sought for the transport of waste from Murchison to Eves Valley and indicate costs in the order of \$400 per round trip, or \$20,800 per annum, based on weekly clearance from the site.

This transport cost, when combined with (reduced) site costs, nets an increased operational cost increase in the order of \$14,000 per annum for a transfer station operation.

Transport costs from the site could be reduced by the less collection of refuse, particularly in winter months.

## **5 CONSENTING ISSUES**

Advice to Council indicates that the existing designation of “sanitary landfill refuse disposal” is sufficiently broad to allow either landfill or transfer station operations, in terms of land use activities.

Discharge consents would be required for each option:

- For landfill operation: discharge of contaminants to land, air, groundwater and surface water, and
- For transfer station operation: discharges to air, and potentially surface water.

The cost of consent applications are estimated to be between \$40,000 to \$50,000 for a landfill and \$20,000 to \$30,000 for transfer station operation, a net saving in the order of \$20,000 for a transfer station.

The costs noted above assume a non-notified hearing, and do not allow for potential consent hearing and expert witness costs (and subsequent appeal), which in similar applications have often added \$100,000. It is considered that a consent application for landfill activities has a higher risk of incurring these costs.

At this stage the costs of consent monitoring requirements is unknown, but estimated to be in the order of \$2000 per annum for the transfer station option (operating as a closed landfill) and \$5000 per annum for the site as a landfill.

## **6 SUMMARY**

Consideration of a transfer station operation at Murchison Landfill has indicated:

- Similar capital costs in the short term, and on-going savings in the order of \$17,500 per annum,
- Increased on-going operational costs in the order of \$14,000 per annum,
- Reduced consent application costs in the order of \$20,000, with a lower risk of a consent hearing and/or appeal.

It is considered at this stage that the combined long term capital and operational costs of operating either landfill or transfer station at the Murchison site are similar. Because the cost difference between either option is small, it is considered that a tender prices would be required for both options in order to confirm capital and operational costs. These tenders would include additional site improvements also.

Should tender prices indicate long term cost savings for a transfer station operation, it is considered that this combined with the lower consent risk (and subsequent potential costs) would indicate transfer station operations would be a preferred option.

## **7 RECOMMENDATION**

**THAT Council prepare documents and call tenders for:**

- a) construction of a new landfill cell, and relocation of the existing leachate pump station,**
- b) construction of a two bay transfer station, and**
- c) general site improvements.**

**THAT Council prepare documents and call tenders for transport operations between Murchison and the Eves Valley landfill.**

**THAT Council negotiate with the existing contractor to determine a rate to operate the site as a transfer station only.**

**THAT Council staff report back to this committee with a recommended option.**

David Stephenson  
**Utility Asset Engineer**