## **General**

Daily cover specification (condition 21) specification should be at least  $\underline{150500}$ mm of soil or other similar material. If membrane cover is to be used, it should be demonstrated to provide at least equivalent odour control to  $\underline{150500}$ mm soil cover.

A condition should be included that prohibits burning or composting of any material.

A condition detailing asbestos handling procedures (such as containment and burial on arrival) is required.

## <u>Odour</u>

In keeping with current accepted practice, condition 30 should be amended to specify no offensive or objectionable odour beyond the site boundary. Reference specifically to guidance documents or officers' opinion limits the scope of the condition. Rather, the enforcement authority should have access to the full range of tools and information in determining compliance with the condition.

Condition 31 should specify the maximum area (m2) of landfill working face open at any time (applicant to confirm).

In addition to procedures for management of odorous wastes being included in the Landfill Management Plan (LMP), minimum requirements should be included in a separate condition. These requirements include:

- moisture content of any waste not to exceed that of spadable sludge (15-20% solids).
- a trench being prepared prior to odorous waste acceptance, with cover material stored adjacent to the trench.
- waste to be place directly in that trench with at least 500mm soil cover applied immediately.
- provisions for rejection of any highly odorous waste material with potential to cause breach of the "no offensive or objectionable odour" condition.

A condition should require that any greenwaste stockpiled on site is managed to prevent decomposition or combustion prior to shredding or removal. Stockpiles should be kept in an aerated state and not contain significant quantities of dense materials such as grass clippings. The temperature and moisture content within such stockpiles should be regularly monitored in accordance with procedures described in the LMP.

A further condition should prevent stockpiling of shredded greenwaste on site due to potential for combustion. Shredded material is to be used as cover or removed from the site.

A condition should require that the leachate collection sump is emptied to the trade waste sewer at least daily to minimise odour generation. The sump should be inspected daily as part of site walk-over monitoring.

Commented [AC1]: 500m2 area

Commented [AC2]: This isn't required

#### Landfill Gas (LFG)

The Landfill Gas Abstraction Report required by condition 32 should be submitted to ORC for review and approval.

The recommendation report required by condition 33 should be completed every 3 years until such time that LFG collection and destruction occurs. The report should be submitted to ORC for review and approval.

In the event that an LFG collection and destruction system is ultimately installed, a LFG Management Plan (LFGMP) should be required by condition that addresses:

- Design and construction of the landfill gas management system, including flares and generators.
- Operation and maintenance of the landfill gas management system.
- Procedures for landfill gas surface emission monitoring and perimeter probe monitoring.
- Criteria to be followed to judge when flaring of gas will be commenced.
- Procedures for removing and disposing of condensate from condensate traps.
- Contingency plans to address the protection of public health and safety and the environment in the event of emergency situations such as landfill fires, or reference to a fire response plan, or in the situation of a mains power failure.

The LFGMP should be submitted to ORC for certification.

A condition should require that any future LFG flare or other combustion source be located at least 100m from any sensitive receptor beyond the property boundary.

A condition should detail basic minimum specifications for any LFG flares installed in future, including:

- Gas residence time
- Temperature
- Re-ignition and alarming.

## Dust

In regard to condition 34 (no offensive or objectionable dust), my observations made in respect of the "no offensive or objectionable odour" condition apply.

Condition 35 should require that dust mitigation measures be described in the LMP and should include, but not be limited to:

- Maintaining adequate water supply at the site to control dust at the working face, and to dampen down unsealed access roads.
- Use of water cart and sprinkler systems as necessary.
- Sealing the main vehicle access routes.
- Limiting vehicle speeds to 20 kilometres per hour on unsealed roadways and working areas.
- Applying gravel to unsealed roadways that are subject to regular vehicle traffic.
- Rejection of dusty loads or loads containing asbestos that is not sealed/contained.

**Commented [AC3]:** This isn't required and should be for the detailed design stage

**Commented [AC4]:** This is not allowed under the asbestos regulations

- Applying water to unsealed surfaces, as necessary.
- Regular sweeping and cleaning of sealed surfaces.

Condition 46 (Construction Erosion and Sediment Control Plan) should require that dust control measures be included.

## Monitoring

A condition should require daily inspections of the site (including the working face, transfer station area, leachate collection sump and site boundaries) for odour, dust and litter. A record should be kept of these inspections and provided to the ORC on request.

Monthly monitoring of methane and hydrogen sulphide at the landfill surface should be specified by condition.

A condition should require methane concentrations, as measured by Flame Ionisation Detector (FID), at the surface of landfill areas with intermediate or final cover to not exceed 100.5% by volume.

A further condition should require monthly visual landfill surface inspections (walk-over surveys) for cracks, areas of vegetation damage, state of cover, breakout of leachate or refuse through the cap.

Continuous PM monitoring should be required, with appropriate response trigger concentrations, when works occur within 200m of the dwelling curtilage area of the property to the east.

A condition should require a meteorological monitoring station (temperature, wind direction and velocity) to be established and maintained, to assist with response to any complaints and monitoring of air quality impacts.

# **Review of Conditions**

The review condition should specifically include a clause relating to LFG Management, given that LFG collection and combustion is not proposed from the outset.