

# **STATES OF JERSEY**



## **COMPOSTING FACILITIES (P.258/2005): COMMENTS**

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**Presented to the States on 9th March 2006  
by the Minister for Health and Social Services**

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**STATES GREFFE**

## COMMENTS

### RESPONSES TO PROPOSITION P.258/2005 – COMPOSTING FACILITIES

#### Introduction

The report supporting the proposition from the Deputy is critical of the Minister for Health and also the officers of the Health Protection Unit. However, complaints to the Health Protection Unit have been actively and quickly investigated and the source of the complaints identified. Discussions held between the Deputy and the Assistant Director, Health Protection and between the Residents and the Assistant Director have highlighted the complex mix of polluting emissions from diverse sources in the area. The Health Protection Unit still await further comment and clarification of identified events from the residents as a result of those discussions.

In his briefing paper Deputy Le Claire has drawn on the work of the Environment Agency in the U.K. quoting the “Agency position on Composting and Health Effects”. The Health and Social Services Department, through its Officers, concurs with the sentiments expressed by the Agency in this position statement. However, the Agency has also stated in their document: “Monitoring the Environmental Impact of Waste Composting Plants” – R&D Technical Report P428, dated 2001 –

‘Generally speaking, micro-organism concentrations in air reduce by 80-90% at a distance of 20-40 m away from the operation.’

Furthermore, the Agencies document “Health Effects of Composting – A Study of Three Compost Sites and Review of Past Data” – R&D Technical Report P1-315/TR, dated 2001, states that –

‘under most conditions the concentration of bio-aerosols reaches the reference levels ..... within 250 m of the composting plant,

and furthermore goes on to state –

‘These levels are often exceeded in natural outdoor situations where health effects are not generally noted and thus the levels may be conservative but, given the uncertainty in the literature, are in line with the precautionary principle.

#### Statement from Dr. Rosemary Geller – Medical Officer of Health

“While I can understand why anyone living near to a waste disposal/composting site would find this undesirable, it is important that the Island presses ahead with its new waste disposal strategy as soon as possible. The proposals for the new facility will, both for composting and wider waste disposal issues, takes account of contemporary research providing the Island with efficient facilities and processes which will minimise emissions and health implications. I have looked into the proposals for composting and I feel that there will be a negligible health risk as emissions fall away to background levels within a very short distance of the site. The current systems of waste disposal including the Bellozanne plant are outmoded and need replacing. The performance of the proposed new facility is very impressive.

The States through the work of the Waste Strategy Steering Group, consisting of Members and Officers, has committed to a full Health Impact Assessment of a new plant which will involve key stakeholders, resident’s representatives, States Members and those people and organisations with knowledge of best practice. It is incumbent upon the States to progress the introduction of the new facilities as soon as possible to ensure the best available protection of the health and well being of Islanders.

I am confident that the Minister for Health and the members of the Health Protection Unit have acted effectively and appropriately to promote the best interests of Islanders.”

## Response to propositions

- (a) to agree that the composting facility at La Collette operated by the Environment and Public Services Department should cease accepting new material with immediate effect.

The closure of the site at La Collette will result in the Island having no facility to deal with the arising of green waste. This would have an immediate impact on landscape businesses and the general public who would have no outlet for their green waste. The effect would as likely result in indiscriminate dumping of material or uncontrolled burning both of which are likely to give rise to greater levels of nuisance from odour and smoke which could not be effectively policed.

The current incinerator at Bellozanne is beyond its useful life, is prone to frequent breakdowns and is incapable of maintaining the regular and uninterrupted disposal of household and civic amenity waste arising that are currently supplied to it. Green waste would end up being stockpiled amongst other civic amenity waste with the potential for significant odour, fires and polluted run-off in an area much closer to residential developments than is currently occurring at La Collette.

- (b) To request the Health and Social Services Committee to investigate any health-related issues that have affected residents in the vicinity of the present composting facility and to report back to the States on the result of that investigation.

The former Public Services Department have undertaken monitoring around the existing site at La Collette and the previous site at Crabbé and levels of bio-material and bacteria have been found to be very low around the current site and close to background levels around the former Crabbé site. The considered opinion in the latter case by the Centre for Applied Microbiology and Research, Porton Down was that –

‘this should not pose any health hazard to the residents.’

Overall the levels from both sites concur with the comments made in the Environment Agency paper that the bio-material is confined to distances less than 250 metres from the site.

The two complainants known to the Health Protection Unit live at distances of 800 metres from the compost reception area, 1,100 metres from the main processing slab, and 865 metres from the compost reception area, 1,250 metres from the main processing slab respectively.

A study of health in the general public around composting sites (Herr et al – 2003) has found a connection between colony forming units of bio-aerosols and respiratory problems but that “odour annoyance” – the nuisance aspect, had no connection with respiratory complaints. The Health Protection Unit has taken up the instance of respiratory illness of a complainant with the complainant’s G.P., the response has been that the G.P. was not persuaded that the cause of the ill-health has been associated with exposure to environmental material associated with the composting site as alleged.

Whilst the current composting site has many benefits, there is the disbenefit of odour from the operation. Health Protection Officers have looked at the activity in some detail and held discussions with The Public Services Department about ensuring that the management of the process is appropriate. As a commercial facility the site operator is required to ensure best practice not entailing excessive cost under the Statutory Nuisances (Jersey) Law 1999 to ensure that the process is not prejudicial to health and/or a nuisance.

The mitigation of the emissions from composting plants can be categorised into the following areas –

- minimising the generation;
- containing the emission;
- enhancing the dispersion.

The Health Protection Unit are satisfied that the current management undertake best practice for the type of process undertaken for minimising emission and enhancing the dispersion, but clearly the type of process is far from best practice as there are better less noxious alternatives which involve containing the emission, as being offered in the States Solid Waste Strategy.

The Health Protection Unit is of the opinion, from its investigations of complaints of specific incidence of odour in the vicinity of Havre des Pas that the problem is in the main associated with decomposing seaweed. This is confirmed by the fact that wind conditions at the times of complaint were south-easterly, not from the direction of the site, and because checks at the time at the site have failed to reveal any odour at the site.

It is interesting to note that in 1998 the WWT Wetlands Advisory Service undertook an Intertidal Survey – La Collette to Le Dicq, South East Coast of Jersey, in which it is stated in its report at 3.1 Infauna communities surveyed on the Havre des Pas shore –

‘both transects also showed high density patches of individual species, in particular the opportunistic species such as *Pygospio elegans*, *Spio armata* and *Capitella capitata*. This phenomenon on the transects most probably relates to the presence of abundant food sources in the sediments, such as buried macroalgal detritus, which is in effect an example of mild organic pollution. This feature was observed on the survey and was also noted by Thomas and Culley (1988). A social drawback of this phenomenon is that where buried drift or seasonal algae occurs on the shore, then the resulting decomposition involves the release of hydrogen sulphide, producing a foul smell of ‘rotten eggs’. This inevitably causes a public concern, as was the case at the Havre des Pas (Green Street) slipway during the present survey’.

- (c) To instruct the Environment and Public Services Committee to contact the 12 Parishes in an attempt to identify parish sites for local treatment of material for composting until a permanent composting facility has been created.

The current site relies on the economy of scale to ensure that it operates as efficiently as possible; the provision of 12 such sites around the Island would dramatically increase the cost of this process to the point of being uneconomic.

It is highly unlikely that the 12 Parishes would be able to identify suitable sites within their districts with sufficient distance between site and receptor of 250 metres. Each site would require appropriate approvals from Planning following the application process and would need then to undertake the construction of a facility to ensure that there are minimal health or environmental issues with regard to the process. The cost and time involved would be better spent in bringing on line as soon as possible the new process for composting which will have enhanced controls on emissions from the process.

The risk of these sites becoming both an eyesore and a nuisance due to the odour of uncontrolled decomposition can not be over-emphasized. Moving the current open windrow facility is not an option as the current process will be an interference to neighbours wherever it is sited.

- (d) To agree that, as an interim solution, all composting material from the Parish of St. Helier, and from any other parish where a temporary site cannot be identified, should be sent for incineration at Bellozanne.

The burning of compostable material is a loss of a valuable re-useable product. The material has no intrinsic calorific value and would negatively impact on the efficiency of the combustion process therefore requiring the addition of added energy to ensure that there is complete combustion. The existing incineration plant is already incapable of maintaining the combustion rate of the existing waste stream and to add further non-combustible material would create further problems of storage with the inherent risk of nuisance and safety issues for operators from that stored material.