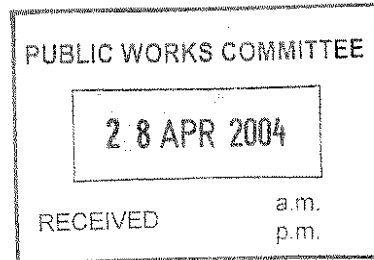




Department of
Environment and Conservation (NSW)



Our reference: 13/04
 Your Reference: [Click here and type reference]
 Contact: [Click here and type name]
 Gerry Gillespie

28 April 2004

Margaret Swieringa
 Committee Secretary
 Parliamentary Standing Committee on Public Works

Dear Margaret,

**RE: PROVISION OF FACILITIES FOR HEADQUARTERS JOINT OPERATIONS
 COMMAND, NSW**

Please note that Resource NSW had had a name change to the Department of Environment and Conservation, Sustainability Programs Division.

As explained in the attached correspondence, my Department's interest in this project has a number of aspects, namely;

- ***Direct effect on local landfill facilities both during construction and in day-to-day operation***
- ***Impact on water use and reuse and the relationship of water to other materials outputs from the site***
- ***Building design, materials use, end-of-life deconstruction, energy use and back-up***
- ***Incorporation of procurement and materials management to bring the site to worlds 'best practice' standard***

My staff and myself had attended several meetings in relation to this matter and have provided considerable input in relation to all of the above with the stated desire of assisting the Department of Defence in building a facility which would be an icon of environmental construction and a credit to the Defence community.

I note, with considerable disappointment, that none of our advice has been considered in the Statement of Evidence of the Department of Defence to your Committee.

I will elaborate on the dot points above relative to the Statement of Evidence of the Department of Defence (DoD).

Direct effect on local landfill facilities both during construction and in day-to-day operation

The DoD states that the facility will house 1185 personnel. As a population this is the equivalent of establishing a township overnight the size of Braidwood in a region undergoing extreme difficulties with the handling of waste and recycling programs under current circumstances. In addition, no consideration is given in the DoD submission to the management of excavated soils and/or rock, off-cuts of building materials and on-site waste and recycling during construction. The environmental impact of the waste outputs from this site both during construction and operation will be extensive unless consideration is given to the matter before the first sod is turned.

Impact on water use and reuse and its relationship to other materials outputs from the site

The total covered building area on this site will be one three story building with a roof coverage of 7333 square metres and a covered parking area of 900 square metres. Including shed roofing this would amount to an area equivalent to two full football fields of water catchment capacity. This massive quantity of water can be stored in such a way so as to provide thermal mass and temperature stability to the entire construction. In addition to obtaining its own rainwater supply, the DoD was also advised of sewage technology, evaluated and praised by their own consultant engineers to the project, which could provide not only fertiliser outputs but sufficient grey water to run gardens, waste composting operations and toilet flushing facilities. Why would such a facility, with such an enormous supply of fresh rain-water and applying such state-of-the-art water handling facilities want to pump water from an underground aquifer and potentially jeopardise the supply for the surrounding population and environment?

Building design, materials use, end-of-life deconstruction, energy use and back-up

The design incorporations listed on page 12 of the DoD submission are all high embodied energy items, with little or poor insulative qualities, poor recycling potential and short life expectancy. The DoD submission has given no consideration to the long-term cost savings of a building design conserving energy and resources. Why would a facility which has concerns for security of basic services wish to be connected to an external electricity supply? Wind power, solar energy and geo-thermal services could supply all needs of the building without exposure to external damage. In addition they can be modified to suit evolving technology and constructed in kit-form to suit the varying applications of the facility. A structured, alternate, low-tech electricity supply has the added advantage of being exceedingly difficult to shut down in its entirety regardless of the crisis. Back-up, if required can be supplied by a generator using biodiesel fuel.

Incorporation of procurement and materials management to bring the site to worlds 'best practice' standard

It is difficult to imagine why an organisation with a need to maintain the highest security levels would want to see any materials leave the site unless absolutely necessary. It is possible to design procurement practice procedures for this facility, which would see little if any materials ever leave the site as waste. All paper and cardboard can be internally processed using shredding and/or pulping technology and this material in turn used as an input into organic waste processing in combination with food and sewage solids. These soil conditioning and fertiliser products can be used on site for gardens and lawns and any excess used in the

remainder of the 200-hectare site. Restaurant and café outputs can go directly into biosolids waste processing facilities.

In closing I would emphasise that the implementation of the above systems, processes and methods would provide considerable long-term savings both in terms of cost and the environment as compared to those outlined in the DoD document.

To enable the establishment of a world-class facility, with minimal environmental impact requires little more than the simple skill to think a little differently about the outcome desired and the ability to let go of emotional attachments to designs, which belong in the 1960s.

If there is an interest in the Parliamentary Standing Committee on Public Works to pursuing a range of positive alternatives for this project, I can provide the necessary contacts and input at any time both through my Department or through the facilities of the Canberra and South East Region Environment Centre of which I am President.

Gerry Gillespie
Manager,
South East Office
Department of Environment and Conservation, Sustainability Programs Division

RESOURCE^{NSW}

Our reference: DEF HQ
Your Reference: [Click **here** and type reference]
Contact: Gerry Gillespie

10 March 2003

Mary Diab
Senior Environmental and Social Planner
HQAST EIS
URS Australia Ltd.
Level 3, 116 Miller St.,
North Sydney 2060

Submission No. 2: Appendix A

Dear Mary

**RE: CONSULTATION FOR ENVIRONMENTAL IMPACT STATEMENT – HEADQUARTERS
AUSTRALIA THEATRE, DEPARTMENT OF DEFENCE**

Thank you for your letter of 4 March in regard to the above matter. As you would be aware, Resource NSW is now the principal State Government Department responsible for waste avoidance and minimisation programs across the state of New South Wales.

A principal focus of the Department's newly released "Waste Avoidance and Resource Recovery Strategy" is the avoidance and prevention of waste. Given the potential to control both inputs and outputs in the new Defence Headquarters, I feel it would provide an excellent model of prevention and avoidance of waste through the inclusion of appropriate technologies in the design phase of the project.

The environmental impacts of the waste outputs of such a facility in Yarrowlumla Shire, without comprehensive planning to avoid and minimise waste, would place considerable strain on existing waste disposal options within the Shire.

Resource NSW would be pleased to assist in the design and implementation of a waste avoidance and prevention strategy for the new Defence Headquarters so as to ensure the best possible outcome for both the facility and the Shire.

Yours sincerely

Gerry Gillespie
Manager, South East Office

gerry.gillespie@resource.nsw.gov.au

RESOURCE^{NSW}

Our reference: 16/03
Your Reference: Gerry Gillespie
Contact:

20 March 2003

Andrew Kosciusko
Principal, Waste Management
URS Australia Ltd.
Level 3, 116 Miller St.,
North Sydney 2060

Submission No. 2: Appendix B

Dear Andrew

**RE: PARTICIPATION OF RESOURCE NSW IN WASTE AVOIDANCE DESIGN –
HEADQUARTERS AUSTRALIA THEATRE, DEPARTMENT OF DEFENCE**

Further to our recent telephone conversation in regard to the above, I would like to express our interest in becoming involved in the design of procurement policies, material handling systems, processing and distribution or marketing of recycled materials for the new Defence Headquarters in Yarrowlumla Shire. The new Headquarters provides an excellent opportunity for us to demonstrate waste avoidance and prevention through design in addition to providing a good example of waste reduction, materials separation and marketing during the construction phase.

I have also taken the liberty in earlier correspondence of informing GHD, the firm engaged to evaluate the initial engineering phase of the project, that one of their Managers in Queensland had recently evaluated an Australian designed black and grey water technology which would be perfectly suited for application to this project.

In addition to my professional interest as Manager of the South East Office of Resource NSW, I am also President of the Canberra and South East Region Environment Centre and as such, have access through our member groups, to some of the finest expertise in Australia on a range of alternate technologies, including architectural design, electricity, water collection and management. Response from the Head Office of Resource NSW to involvement in this project has been very positive and we would like to offer our assistance at every level and at all stages of the development to ensure that this project becomes an icon of best practice waste minimisation internationally.

Yours sincerely

Gerry Gillespie
Manager, South East Office

gerry.gillespie@resource.nsw.gov.au