

APPENDIX B

Consultation

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engaging people



INTERIM ENGAGEMENT REPORT ON

Proposed Camellia Integrated Recycling Facility

DELIVERED TO

REMONDIS
P O Box 885
MASCOT NSW 1460

PREPARED BY

Twyfords
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1. Introduction

This Report outlines the engagement activities carried out to date for the proposed REMONDIS Recycling Plant at Camellia Industrial Area.

It also summarises the approach, the key stakeholders engaged, the issues identified so far, and the proposed future actions.

2. Background & Context

REMONDIS proposes to construct and operate an integrated waste recycling facility on a site at 1 Grand Avenue North, Camellia.

The facility is in a recognized industrial area, with a number of commercial neighbours.

The site is known to have been previously contaminated, and so this has been a key focus in the design.

Following meetings with the NSW Department of Planning, the Director General's requirements were specified, and REMONDIS has been undertaking a series of studies during 2010 to prepare an Environmental Assessment to address those requirements prior to the submission of a Development Application under Part 3A of the Environment & Assessment Act in 2011.

Twyfords were engaged to manage the community engagement in the assessment and approvals process.

3. Our Approach/Methodology

REMONDIS had recognised that waste management plants can generate a degree of concern with neighbouring stakeholders, and in the broader community, particularly with previous experiences in the Sydney region where a range of issues have emerged.

It was considered that an open and inclusive approach would be important to ensure that stakeholders understood what was intended, and felt comfortable to input into the approvals process.

REMONDIS was also very open to hearing from the stakeholders and using input from them to inform appropriate modifications to the plant design and operation to mitigate the impact of the plant on them.

It was noted that a major neighbouring tenant was a child care centre, who may have a range of concerns with such a development, particularly if the intended innovative technology was not understood or accepted as being able to deal with previously identified issues.

It was considered that an open, educative and inclusive engagement process during the assessment would assist to build that understanding and ensure that the neighbouring stakeholders would be able to input appropriately to the assessment and plant design/construction/operation requirements.

A study group process where representative stakeholders meet several times to understand, discuss and consider issues was considered as one of the key tools to engage effectively on this. This would be complemented by broader communication processes.

The focus was initially on those most likely to be directly affected, with the intention to broaden the engagement as necessary to include all interested stakeholders.

The intent of the engagement was to lay all the facts on the table as early as possible, to avoid surprises, and also to facilitate input to the planning and design processes so that appropriate modifications could be made to address the concerns of the surrounding stakeholders.

4. Activities

4.1. Stakeholder Identification

On ground research identified the most likely affected stakeholders as neighbouring businesses, including tenants in an adjacent office building (the Tilrox Building at 2 Grand Avenue) other businesses located along Grand Ave, and the Sydney Turf Club at Rosehill Racecourse.

Also identified as others potentially interested or affected were businesses along James Ruse Drive, and residents to the west of James Ruse Drive, and businesses and residents to the north across the Parramatta River.

The Camellia Business Group - a group representing the major businesses in Camellia industrial area - was also identified as potentially interested. This group has been active previously on major issues like traffic flow, but has not been active during 2010 and has not been able to be used as an information conduit.

The broader Parramatta community were also identified as likely to be interested in the project, but the level of likely interest was not known.

A summary of the stakeholders is in Appendix 1.

4.2. Information dissemination and input

A letter was initially hand delivered to all the neighbouring businesses along Grand Avenue (approx 500m radius, including all tenants in the adjacent Tilrox building), outlining the project, providing an opportunity for input and questions by meeting, email, phone or fax, as well as an invitation to participate in the study group process.

An initial meeting was held with the Director/Owner of the Child Care business (a major tenant in the Tilrox building that overlooks the proposed development site). There was a high degree of concern expressed by the business owner about a range of issues regarding the development that the owner considered might adversely impact the business. A summary is listed in Appendix 2. The owner was invited to attend the study group to provide input to the issues to be considered during the assessment process.

To date, there has been virtually no feedback from those contacted so far, apart from tenants in the Tilrox building - the direct neighbours of the proposed development. The general reaction has been that development was expected, and should not impact on them.

4.3. Study Group Process

4.3.1. Recruitment

A couple of the Tilrox building tenants, as well as the building owner, accepted the invitation to participate. There were no responses from any of the other neighbouring businesses.

To broaden the representation to include residents' views, invitations were sent to a group of residents representing the closest areas to the site. This tapped into Parramatta Council's community panel – i.e. residents who had expressed interest in assisting Council consider issues that might impact the area.

Two residents accepted the invitation and were able to contribute to the process (only one was able to attend, but the other contributed by email and phone).

4.3.2. Meetings

Two meetings of the group were held over a 2 month period (Aug/Sept). Prior to each meeting, the participants were sent an agenda and information on progress of the assessment studies being undertaken. Meeting minutes are included in Appendix 3.

At each meeting, the environmental studies were considered, and input sought as to what issues they needed to address. Updates were also provided on what the studies had identified, and how these findings were being addressed in the project design. The group also added to the key question list that they had about the project.

Meeting attendance was low, due to the difficulty in finding a time that suited all the participants. To mitigate that, participants were kept in the loop

regarding meeting discussions and outcomes by additional communication, with input added outside each face to face meeting.

Issue identification

The group identified and discussed a range of key issues, which they considered needed to be addressed as part of the assessment and approvals process. Although it was acknowledged that the studies underway would be likely to address these, the group has not yet been able to see the assessment outcomes in detail. These are expected to be finalised early in 2011.

The key issues raised and discussed by the group included:

- Traffic impact on the local roads, and access to the Tilrox building. This involved both traffic congestion and safety issues around truck access to the proposed site
- Reduction in air quality due to emissions from the plant – i.e. the likelihood of odour affecting local businesses and residents
- The use of the site which had been previously contaminated by asbestos. There was a good understanding about the contamination, and the concerns centred on how construction at the site could be managed to eliminate any health concerns
- The visual impact of the proposed facility as changing the current landscape
- The potential for plant breakdown or accident during operation impacting on the neighbours, and broader community
- The noise impact of plant operation and truck movements, especially on the tenants of the Tilrox building, particularly the children attending the Child Care.
- Health concerns associated with waste operations - e.g. vermin, birds, rubbish overspill, poor air quality, etc.

- Adverse impact on the commercial viability of the neighbouring businesses, as well as potential impact on residential land values
- The location of a waste recycling facility in close proximity to commercial premises and shops (there is an Aldi grocery store located in the Tilrox complex)

Frequently asked Questions

A range of likely questions that stakeholders have about the project were collected during all the meetings and contact with stakeholders. These have been collated into a list with responses and posted on the REMONDIS website, and made available as requested.

A copy is included in Appendix 4.

Information Sheet creation and distribution

To communicate more fully about the project, an information sheet or Newsletter was prepared and distributed to the same group of neighbouring businesses in December. A copy is included in Appendix 5.

To ensure that the information sheet would present the relevant information, the study group members provided input on the format and content they believed would best communicate effectively to the affected stakeholders.

The key elements suggested included a photo, emphasising the key issues identified, explaining the enclosed nature of the plant and how it was intended to operate, and how the assessment and approvals process would proceed, with a link to the frequently asked questions.

The information sheet was then drafted and comment sought from group members, before being finalised and distributed by hand to each business.

Note:

One of the intended target groups for the information sheet were the clients (i.e. parents) of the Child Care Centre (Explore and Develop). This was to provide them with early advice of the proposal due the potential impact and their likely questions and concerns.

The Centre owner who participated in two meetings earlier in 2010 has constantly indicated strong objection to the proposal, due to their concerns about the potential negative impact on their business.

In November, the Centre owner expressed a concern at continuing participation with the study group or in discussion with REMONDIS, and has withdrawn from any further contact.

This position was acknowledged in a letter to the owner, and a commitment made to continue to provide updates and information on the project. (Appendix 6)

The information sheet has been provided to the Centre owner, and we have no indication at this stage how widely that has been shared.

Council involvement

REMONDIS met with Council staff in July 2010, to identify their needs regarding engagement, in terms of interested and affected stakeholders and their expectations.

Council staff have been kept in the loop with regular informal updates, as well as utilising their resident panel to source some representative community members for the study process.

In December, Council staff and Councillors were provided with the information sheet, the frequently asked questions, and a letter outlining the engagement to date and the proposed next steps. (Appendix 5).

5. Summary

The engagement to date has been focused on involving the adjacent and neighbouring businesses during the creation of the environmental assessment, in identifying the issues they see associated with the proposed development, to provide an opportunity to input, and to build understanding of the proposal, and the proposed actions to mitigate any impact on the local businesses.

Key findings to date include:

- Based on the response from those contacted, the level of interest and concern from most local businesses regarding the proposal would appear to be low. There was almost universal agreement that the development could likely exacerbate the traffic congestion along Grand Avenue, particularly on the bridge over the railway to James Ruse Drive. There was also a general acceptance about that as being an unavoidable consequence of being located in a commercial and industrial precinct.
- The owner of the Child Care Centre in the adjoining Tilrox building has expressed strong opposition to the proposed development. The owner has withdrawn currently from any contact regarding the proposal. The owner did indicate that one of the reasons for withdrawal was that participation in the engagement activities was perceived by them as “agreement” or at least pressure to agree. This may have implications for the next steps in engagement to ensure that community stakeholders are able to participate and contribute appropriately while still able to hold their position on the development.
- Some feedback, both during the study group meetings and anecdotally in talking to local businesses indicate that most make assumptions on the likely impact of a waste facility based on their prior experience with other facilities in the Sydney region e.g. Eastern Creek (there is also a waste facility about 1 km further east along Grand Parade). These assumptions have implications for further engagement more broadly in explaining the technology and nature of operation of the proposed plant.

6. Next steps

This is an interim report as at December 2010.

The engagement will be reviewed in early January, and then further engagement activities will be undertaken prior to the submission of a development application.

It is likely these will include advertising the proposal more widely in the media and through stakeholder groups, and providing opportunities to build understanding of the project and the assessment studies, and to gather further feedback on any issues and mitigation activities and design changes that may be required.

We do thank you for the opportunity to submit this report. Please direct any queries to *John Dengate* on 02 4226 4040 or by email at john@twyfords.com.au.



John Dengate

Twyfords

20 December, 2010

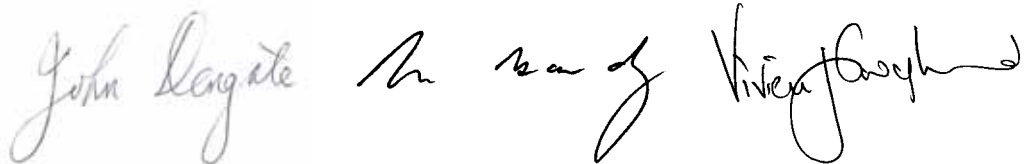
Quality Policy

Twyfords supplies consulting and learning and development services to industry, commerce and the public and community sectors. In particular our consultants are recognised as offering a full range of valuable and cost effective services in the areas of community engagement, capacity building, business performance improvement, change management, facilitation, and review and evaluation. Our services include the design and delivery of programs, as well as strategic advice.

As directors of the company we are committed to providing all clients with services and products that meet or exceed agreed requirements. This commitment involves ensuring that our consultants are suitably skilled and experienced in diagnosing client needs, providing strategic advice, designing and implementing appropriate capacity building programs, and monitoring their effectiveness.

This commitment requires the active participation of all members of this company (including those providing sub-contracted services) in the application of quality procedures. These procedures include, but are not limited to, a consistent focus on the needs of customers, the use of the plan-do-check-act cycle in project design and implementation, obtaining regular customer feedback on our performance, ensuring the traceability of all documents and other continuous improvement practices.

Within this company, quality includes the sparing consumption of all consumable resources and being environmentally responsible. It also includes following all legislation and ethical codes of practice.



John Dengate

Max Hardy

Vivien Twyford



Stuart Waters

Directors, Twyfords, 20 December, 2010

Appendix 1- Initial Stakeholder List

<i>Stakeholder</i>	<i>Location</i>
Tilrox Pty Ltd	Tilrox Building- 2 Grand Ave
Explore and Develop	Tilrox Building- 2 Grand Ave
Sabic	Tilrox Building- 2 Grand Ave
Transfield Housing & PSG	Tilrox Building- 2 Grand Ave
Plantweave	Tilrox Building- 2 Grand Ave
Capital Developments/ QPC & C Lorrion	Tilrox Building- 2 Grand Ave
Invoke Australia	Tilrox Building- 2 Grand Ave
UniverSEAL	Tilrox Building- 2 Grand Ave
Transfield IBC	Tilrox Building- 2 Grand Ave
Playgroup NSW	Tilrox Building- 2 Grand Ave
Café Grand	Tilrox Building- 2 Grand Ave
Lithotech	Tilrox Building- 2 Grand Ave
Azzurra	Tilrox Building- 2 Grand Ave
Grand Academy	Tilrox Building- 2 Grand Ave
Sydney Strata/ Guardian Strata	Tilrox Building- 2 Grand Ave
Aldi Supermarket	1 Grand Avenue
Parramatta Motor Group	3-5 Grand Ave
General Mills- Croissant King	7 Grand Ave
ComputerTrans	Grand Ave
API Pharmaceuticals	11 Grand Ave
Factory for lease	11A Grand Ave
Armaguard	11C Grand Ave
Afshar Metal Group	13 Grand Avenue
RA Campbell Transport Ltd	13 Grand Avenue
Kleenheat Gas	6 Grand Avenue

Sydney Turf Club (Rosehill Racecourse)	James Ruse Drive/ Grand Ave
ClownTown	South Street/James Ruse Dr
Camellia Business Group	Camellia Industrial area- c/o Shell Communications Manager
Parramatta Council	Parramatta
Parramatta Councillors	Parramatta
State Member	PO Box 1126
Federal Member	Level 3, 10 Bridge Street
Local residents- to west of James Ruse Dr, and nth over Parramatta River	
University of Sydney- Parramatta Campus	
Businesses along James Ruse Drive, further east along Grand Ave, and nth of Parramatta River	
Parramatta residents	

Appendix 2

Meeting Summary- with Owners of Childcare Business in Tilrox Building

In summary, the main issues raised by the business owners were:

- the duty of care for the children and their parents of the Child Care centre- health and safety impacts of the proposal
- the impact of such a development on the commercial viability of the Centre and other businesses in the building
- the impact on the local traffic of such a development, which are also linked to the previous two issues

Specific concerns included:

- Safety risk to parent's cars, and their children walking, from trucks moving between the site and Grand Avenue, adjacent to the building. The turn is sharp, making it difficult for trucks to manoeuvre in the area. The area can also be congested, particularly in the morning and afternoon when parents drop off and pick up their children
- Traffic congestion, particularly at peak morning and afternoon times (8-10 am & 3-6pm). There are often queues of trucks waiting on the railway bridge to access James Ruse Drive, which is increasingly busy. These queues can also impact the access to and from the Child Care. There have been cases of accidents and breakdowns causing blockages, to the extent that parent access has been restricted to the centre for periods of time. The area only has two access routes, and the bridge across the railway is increasingly loaded
- Offensive odours from the proposed plant. There was concern that a waste plant would produce odours, and impact on the children, staff and the attitude of parents. Issues include the short and long term impact on children's health, eg asthma, affect on staff, as well as the impact of offensive odours on the workplace generally (the childcare outdoor area directly overlooks the proposed site)
- Risk of vermin associated with the plant, and the subsequent health risks. These may include rats, flies, birds, mosquitos, etc. Birds like crows can scavenge and carry disease
- Using the contaminated site. The sites former history as a former James Hardie operation, with asbestos contamination, is well known. There would be concerns about how safe construction and operation could be undertaken without disturbing the ground.
- Media coverage. The owners have observed how the media can blow up an issue like safety or asbestos, particularly involving Child Care centres. They are concerned about how information is made available so as not to negatively impact on desire to use the centre.
- Perception and uncertainty about the proposal, and the fact that questions may not be answered and rumours could spread, and so impact the business

Specific questions asked included:

- What would the hours of operation of the proposed plant?
- Where will the waste come from?
- How can REMONDIS be confident that the waste delivered will be as specified for the facility to work well?
- How will REMONDIS handle contamination in the incoming waste?
- How can REMONDIS guarantee the plant will not smell?
- How will the odour be managed? (What happens if there is a smell?)
- What will the output of the plant be used for?
- Where will that output go?
- What is the term of the lease on the site?
- Will REMONDIS be using the whole site?
- Will REMONDIS be piecing the concrete on the site during construction? And can they provide a written guarantee to that effect?
- Will compaction of the site for construction affect the asbestos?
- Is it possible to site the buildings further from the Child Care?
- Is it possible to find alternative access to the site across the rail line from James Ruse Drive, avoiding the building?
- Can a plant be visited that would show what we can expect?
- Can one sample the smell?
- Why not go to another site further west away from residences and businesses with less impact on children?
- How will this plant be different to the one at Wetherill Park?
- How will the increasing traffic be addressed?
- Will there be an airlock for trucks entering and leaving the plant?

Appendix 3

Meeting 1

Minutes from Community Study Group meeting on Remondis Recycling facility 4th August, 2010- Tilrox Boardroom, Grand Ave, Camelia

Attendees

Irene Vidac (Explore and Develop), Joanne Isaac (Explore and Develop), Robert Sassen (Tilrox), Mohan Selvaraj (Remondis), John Dengate (Twyfords)

Apologies

Tony Elhage (Café Grand)

Introduction and Context

Each group member introduced themselves briefly.

Mohan provided an outline of the proposed development, and explained the process of recycling the waste material.

Assessment Studies

A document outlining the scope of the studies commissioned to date as part of the Environmental Assessment process was provided to attendees (attached).

Each of the studies was considered in turn, and the group provided input and questions as to what they believed needed to be considered in each.

The information below will be provided to NECS (who are co-ordinating the assessment process for Remondis) who will ensure the studies address the questions raised.

The group also raised concerns regarding the risk of vermin associated with such a plant (eg birds, rats, flies, mosquitos, wasps, bees, and the possible impact on children's allergies.

Remondis to check where this is being considered in the studies (Amenity- Flora/Fauna?)

There were a number of questions raised around the proposed recycling process and plant operation, and the group would like to have more understanding around questions like what the plant is and does, and how it works.

Comments on the specific studies included:

Site Contamination

- Why can't the services (ie sewer, water, electricity, etc) be put above ground?
- Where is the connection point for services?
- How much contamination does the site have?
- Are there any available service points?
- What measures will be taken to ensure contaminated material does not impact neighbours during any excavation?
- Is it possible to run the services without excavation?
- What notification would be provided regarding work on the site?
- Is it possible to do site works out of hours?

Air Quality

- What is the potential for any smells?
- What is the backup in event of plant failures?
- Are there any vents?
- What are the frequency of air quality checks?
- What is standard for air quality?
- How do we smell the standard?
- What is the impact on children's health – risk of triggering allergies?
- Opportunity for independent air quality testing?
- What happens when the tests are outside the specifications?

Noise

- How much noise will be generated during construction and operation?
- What type of noise generated?
- How much traffic noise?
- Likely impact on children sleeping

Landscape / Visual

- How high is the proposed building?
- What will be the impact on views?
- What type of roofing – reflection/glare?
- How much greenery/scope of landscaping?
- How is recycled water being used in Camelia industrial area– Sydney Water?

Flooding

- Impact of 1:100 flood
- Is it in a flood zone?

Greenhouse Gas Emissions

Traffic

- What are the size of trucks using the facility?
- How will it impact the current parking near station?
- Interaction of pedestrians (parents/children) and traffic (trucks)?
- Alternative access points (previous tunnel under railway line – 20-25 years ago)?
- Feasibility of hook-turn for trucks off Grand Avenue?
- Risk of bridge closure due to accident, etc ?
- Potential for increase in traffic if remainder of site developed
- Schedule of truck movements/potential for mitigation?
- Action if access blocked?

Heritage

Socio-Economic

- Effect on local businesses?
- Impact on well being, including long term health effects?
- Staff willingness to work in local businesses?
- Impact on reputation?
- Is this consistent with desire to diversity area from only heavy industry to a more hi-tech industry?

Questions

The group reviewed a list of previously identified questions, and listed other questions below that need responses.

Where possible, Mohan provided a short verbal response, and did commit to working on responses to each for discussion at the next meeting.

- What is the length of lease? (20 years, with extension option)
- Is there evidence that this process works in our environment i.e. climate, heat/humidity?
- What are the benefits/impacts
 - Overall
 - On this site (in suburbia)?
- Why not something more environmentally friendly on the site e.g. parkland?
- How long to build plant? (9-11 months)
- How long have comparable plants been operating?
- How many other plants are there – world wide?
- What problems have been experienced in comparable plants?
- In what way was the community impacted?
- Contact details/references on people associated with comparable plants
- How many jobs will be generated?
- Will plant be 24 hours - and how will that impact on the locals?
- Will smell vary with time?
- What is the approvals process?

- How long will the studies take?
- Will truck movements during operation affect buried asbestos? (No)
- How long would construction take? (Approx 12 months)
- Where does the waste come from? (Council pickups)
- Do the workers in the plant wear protective clothing? (Yes)
- How will the trucks access and enter the plant?
- Have Remondis done studies regarding the viability of the recycling? (Yes)
- What is the probability of a methane leak?
- How does the process work? Can we see diagrams and pictures?
- Is there an equivalent plant in Australia at present? (No)
- Where does the rubbish go now? (to Landfills)
- What happens in event of a breakdown and people not following procedures?
- How can we know that the process is being followed correctly when plant is operating?

Communication

The group then discussed how best to communicate, initially with parents at the childcare, and then more broadly.

There was some concern about increasing awareness of the proposal, while there was still a lot of uncertainty around it (as reflected in the group's questions and own reaction)

Mohan circulated several diagrams of the proposed building.

It was suggested that a simple newsletter may be the appropriate method to communicate, and could be first provided to parents at the childcare.

Suggestions for content included:

- Who is Remondis (experience and background)
- Why the facility required- reduce landfill, reduce carbon footprint
- Key questions and answers- asbestos management, traffic flow, odour mgt, etc
- Approvals process and how stakeholders are involved- study group, etc
- Couple of pictures and diagrams

It was agreed to consider a draft at next meeting.

Next Meeting

Tentative date- Monday 23rd August, 4 pm for 2 hours, Tilrox Board room

Draft Agenda:

- Sue Just from NECS to present summary of studies to date- key findings
- Check that studies are addressing issues raised
- Review questions and responses from Remondis
- Consider draft newsletter and process for distribution

It is likely the group will also include a couple of community representatives from the surrounding residential areas, and a representative from neighbouring businesses.

They will be briefed in advance with the work of the group to date.

John Dengate

Twyfords

5-8-10

Meeting 2

Minutes from Community Study Group Meeting Two - Remondis Recycling facility

Tuesday 7th September, 2010- Grand Academy, Grand Ave, Camelia

Attendees

Robert & George Sassen (Tilrox), Baldev Dhir (Resident), Sue Just & Warren Atkinson (NECS), Mohan Selvaraj (Remondis), John Dengate (Twyfords)

Apologies

Tony Elhage (Café Grand), Irene Vidaic (Explore and Develop)

Introduction and Context

Each group member introduced themselves briefly. Baldev lives in George St Parramatta and is representing his son Pankaj today who was unable to attend due to work commitments.

A number of resident's from the Parramatta Council community panel have been contacted regarding their interest in providing input on the resident's perspectives, and Pankaj has responded so far. The Camelia Business Group has also been advised and will let us know its interest.

Sue and Mohan provided an outline of the plans for the site, and briefly explained the process of recycling the waste material, and how that would happen in the facility.

Question- Will the access be over the railway line and then left into the site?- Yes. Comments made that this would be chaos, with bottlenecks on the bridge and difficulties with the sharp left turn.

Question- How will the plant be built? The plant will be constructed on a platform, to avoid piecing the cap on the site containing contaminated material

Comment- Baldev reflected on the risk that things can fail as people aren't perfect. He described the serious consequences of poisoned people and water as a result of the Bhopal Chemical Plant accident as an example. He commented that while the idea of recycling waste is laudable, it is not without risks.

Assessment Studies

Sue from NECS then provided an update on how the studies were progressing:

1. Site Contamination study

There will need to be excavation for the services to the site only, according to a specified process to ensure there is no risk of contaminated material being released.

Comment- Possible consequences of contamination are the impact on local businesses, and the possibility of losing tenants for the offices

2. Air Quality study

The consultant did modelling to show odour contours ie the distances from the plant that different levels of odour could be expected to be noticed.

The contour at which a two odour “unit” (the maximum allowed by the regulations) could be detected extended some distance beyond the plant boundary in the initial study. This prompted work on a redesign of the plant to reduce this.

Adding a short stack on the biofilter (the device that screens all air leaving the plant) the contour locations were all within the plant boundary. In real terms this means that negligible odour would be expected outside the plant boundary.

Question- What happens if things go wrong- eg something breaks down?

Mohan described that a list of options are available to be implemented in such cases eg- shut down operations, backup doors, increase airflow to composting tunnels, etc.

It is recognised that there must be backups in case of failure and that would be part of the operating procedures.

Question– Is it possible to get a real life sample of what the smell is like?

The smell is like damp woodchips as the air is filtered through a bed of woodchips prior to discharge. It is not the familiar “garbage” smell that might be noticed from an open landfill.

Question- Is there any potential for a gas explosion from the plant?

No. There is no methane generated from this plant. Methane is generated when material decomposes in the absence of air like in a compost heap (*anaerobic* process).

This facility treats the material in an *aerobic* process where air is forced through the material and only CO₂ and not methane is produced.

3. Traffic study

This study is underway, with traffic monitoring occurring to determine the bottleneck times, safety issues etc. The study will be looking how to accommodate the estimated 192 truck movements over a 24 hour period.

4. Noise study

This study is continuing, and will be addressing the issue of sleep disturbance, specifically in relation to impact on the childcare.

5. Landscaping study

This is underway. Sue asked if it would be possible for the landscapers to take photographs from the childcare as part of their planning. Irene has agreed to that occurring, and it will be organised through her.

The consultants are seeking innovative ways to landscape the area against the river without breaching the concrete cap for paintings.

6. Flood study

Study so far has indicated that the site complies with requirements regarding flooding

7. Heritage study

Indigenous groups have been advised and some are participating. Due to the disturbed nature of the site no issues are anticipated.

8. Socio- economic study

This study will be addressing the potential impact on businesses and residences in the area.

Action: Studies will continue and be reported at next meeting

Communication

The group then discussed what would be needed in Newsletter to inform others about the project, to answer people's questions, and not generate undue anxiety or concern.

It would be intended initially for distribution to the parents at the Child care, as well as tenants in the neighbouring businesses.

The group agreed that a picture that had been circulated showing the enclosed and landscaped building would be very useful.

The next emphasis should be on how the key safety issues were being considered and addressed. ie

- Traffic
- Odour
- Contamination
- Landscaping
- Contingencies if something goes wrong

It would also be important to explain simply what the plant did and how, with details like

- the enclosed nature of the plant
- no methane ie the aerobic composting process
- how the air is managed (negative pressure, bio filter, etc)

And also how the approvals and study process is happening and who is being involved

- timing
- assessment process
- study group

It was also suggested that some of the frequently asked questions be included.

Action: John asked if each member could advise him via email which key questions they would suggest for inclusion in the Newsletter. (Note that the whole list would also be available via a web link or if requested)

Action: Remondis will create a draft of the Newsletter for the group to review prior to distribution.

Next Meeting

Date to be advised, probably first week October.

Action: To provide flexibility around meeting times, could each please advise John via email what times and days would best suit (including evenings and weekends)

Action: It is proposed to invite the key study consultants to discuss their reports at future meetings- most likely on air quality, traffic and site contamination.

John Dengate

Twyfords

9-9-10

Appendix 4

FREQUENTLY ASKED QUESTIONS

REMONDIS Integrated Recycling Facility- Camellia

What is the term of the lease on the site?

20 years. Remondis will lease the site from Billbergia Pty Ltd the land owner.

What would the days and hours of operation of the proposed plant?

The facility will operate 24 hours per day, seven days per week to ensure waste can be delivered at any time.

Where will the waste come from?

The proposed facility would be capable of annually processing up to 100,000 tonnes of Commercial and Industrial waste and 50,000 tonnes of food and greenwaste.

Commercial & Industrial Resource Recovery Facility

The composition of Commercial and Industrial waste varies significantly depending on the collection area, type of business or industry and service. The source material would be collected from small business outlets throughout the CBD of Sydney and the Parramatta area. The waste will comprise food/vegetation waste, paper/cardboard, wood, plastic, textiles, metal, construction and demolition waste and other materials.

Source Separated Organic Resource Recovery Facility

Waste will include food waste and green waste. The source of waste for the facility will be source separated domestic kerbsides collection schemes of groups of councils within the metropolitan area.

How can Remondis be confident that the waste delivered will be as specified for the facility to work well?

The material received will have been segregated to varying extents at the source before being collected by the waste vehicles. Drivers will be asked at the weighbridge to confirm the source and type of waste. All loads will be checked in the receivals area. Screening mechanisms are in place throughout the process to remove contaminants. Ultimately any material that cannot be recycled or treated within the process will be disposed to landfill.

How will Remondis handle contamination in the incoming waste?

The material received will have been segregated to varying extents at the source before being collected by the waste vehicles. Drivers will be asked at the weighbridge to confirm the source and type of waste. All loads will be checked in the receivals area. Screening mechanisms are in place throughout the process to remove contaminants. Ultimately any material that cannot be recycled or treated within the process will be disposed to landfill.

The material received will have been segregated to varying extents at the source. All loads will be checked in the receivals area. Screening mechanisms are in place throughout the process to remove contaminants. Ultimately any rejected material will be disposed to landfill.

How can Remondis guarantee the plant will not smell?

The design of the plant is such that all operations including waste receipt, treatment and product storage is enclosed within buildings. Rapid action roller doors will operate in the receivals area which will only be open during vehicle entry/exit.

An extended ventilation system will be in place within the buildings. All exhaust air is finally discharged via a bio filter. The biofilter design is based on proven technology. Emissions are basically free of offensive odour, bio aerosols and dust.

Biofilter performance indicators are monitored via the central process control computer.

There will be 2 biofilters, one for each plant.

What happens if there is a smell?

Remondis would immediately review site operations to locate the source of the odour.

There will be no materials stored outside the buildings. The only potential emission points for odour are the Biofilters which are continually monitored. Air flows to the biofilter can be controlled if any odour emission is identified.

If there was an odour emission plant operations would also be controlled so that emission sources removed.

What will the output of the plant be used for?

Commercial and Industrial Resource Recovery Facility (CIRRF)

The facility will recover recyclable materials and convert the putrescible fraction into a biologically stable product. Only material without any use will be disposed of at an inert landfill.

Source Separated Organic Resource Recovery Facility (SSORRF).

This facility will produce stabilised compost in enclosed tunnel processes that will be sent for value adding to commercial compost outlets that will produce organic fertilisers and compost products and reduce the amount of material going to putrescible landfills in Sydney. There is strong demand in NSW for organic fertilisers and composts in the domestic and agricultural sectors.

Where will that output go?

This will be determined by contracts negotiated by Remondis with compost outlets that have their distribution networks

Will Remondis be using the whole site?

Remondis will be leasing approximately 4.7 ha of the Billbergia site. The western portion of the site would continue to be owned and managed by Billbergia.

Will Remondis be piercing the concrete on the site during construction?

Remondis proposes to construct and operate the Integrated Recycling Park. Billbergia proposes to provide the necessary utility services to the boundary of the facility comprising potable water, sewerage, electricity and telephone services and an extension of the stormwater system to connect to the facility. The provision of these services will require site works including excavation through the site capping, removal of excavated material, installation of drainage and service components and the replacement of site capping.

Will compaction of the site for construction affect the asbestos?

The objective of the facility design is to avoid the penetration of the capping for the construction of the main buildings and structures. A platform of between 1 to 1.5 metres would be constructed above the existing capping layer. The only excavation undertaken will be for the provision of services to the lease area boundary by the land owner.

The platform will be sealed through heavy-duty concrete pavement on a compacted sub-base. This applies for all structures such as the main buildings, tunnels, biofilters, aprons and other slabs. Quality will be to industry standards (ie strength 32-40 MPa, nominal 170-200mm slab thickness). This is to accommodate the operational requirements of the facility (ie live loads) associated with the geotechnical site conditions.

Is it possible to site the buildings further from the Child Care?

The layout of the site is impacted by the need to remain outside the Environment Protection Zone adjoining the Parramatta River.

The potential odour source (the biofilters) have been located as far as possible away from existing properties and businesses on Grand Avenue,

Is it possible to find alternative access to the site across the rail line from James Ruse Drive, avoiding the building?

The site is limited by the railway line.

Can we visit a plant that would show us what we can expect?

There are a number of plants around the world but it will be difficult to get a direct comparison .We have enclosed a picture of a plant in Frankfurt that operates around offices, shops, logistic centres than is not to dissimilar to Camellia

We may have access to a large plant in Sydney owned by our competitor to give an appreciation of what happens in a processing plant

Can we sample the smell?

The smell you would notice associated with the biofilter is similar to that of damp woodchips.

Why not go to another site further west away from residences and businesses with less impact on children?

Remondis undertook an extensive site selection process to identify potential sites within the Western Sydney Region for the facility. The proposed site is permissible under the existing zoning and is within an existing industrial area.

The design of the plant and its proposed operations is aimed at minimising any potential impacts on adjoining properties.

How will this plant be different to the one at Wetherill Park?

The Wetherill park facility is a basic plant operating with all doors of the warehouse open. The Camellia Plant has sophisticated air systems such as air curtains and airlocks available to be implemented if required .All air is evacuated through biofilters to meet odour and emission requirements. Air flows can be controlled to suit ambient air conditions over different times during the day to manage odour events

How will you address increasing traffic?

A Traffic Impact Assessment is being prepared. The study is assessing potential impacts on the local road network from the proposed development.

Will there be an airlock for trucks entering and leaving the plant?

As mentioned there are contingency provisions for this if required

Will there be any outdoor dumping of rubbish?

There will be no receivals, storage or temporary use of stockpiles outside the building.

Will the facility be open to the public?

No

Entry to the waste station?

The existing site entrance will be used.

Is there evidence that this process works in our environment i.e. climate, heat/humidity?

There are numerous plants working in different parts of the world. There are 15 plants working around Australia with different and similar processes for resource recovery. The process proposed by REMONDIS is independent of climate, heat and humidity as the process is controlled to vary operating conditions accordingly

What are the benefits/impacts?

The proposed Integrated Recycling Park at Camellia is in accordance with the intent of NSW Government Policy in that it will increase the recovery of materials from both the municipal and commercial/industrial sectors. As a result it will decrease the amount of waste going to landfill.

The Camellia site is central to the supply of Commercial and Industrial materials and will result in reduced transport distances and associated costs and improved environmental performance. The facility will recover recyclable materials and convert the putrescible fraction into a biologically stable product. Only material without any use will be disposed of at an inert landfill.

The proposed Source Separated Organic Material Facility will process separated organic materials which have been collected at the Kerbside from metropolitan LGAs. This will produce organic fertilisers and compost products and reduce the amount of material going to putrescible landfills in

Sydney. There is strong demand in NSW for organic fertilisers and composts in the domestic and agricultural sectors.

A socio-economic assessment is being undertaken for the Environmental Assessment Report. It will identify potential benefits/impacts of the proposed development.

Why not something more environmentally friendly on the site e.g. parkland?

The proposed use is in accordance with the site zoning.

How long to build plant?

Construction will take place over a 12 to 14 month period

How long have comparable plants been operating?

Technologies such as this have been operating for over 25 years globally

How many other plants are there – world wide?

There are over 400 plants around the world that recover materials from waste

What problems have been experienced in comparable plants?

There will be problems experienced from time to time in any plant. Over 25 years considerable knowledge has been learnt mainly around plant breakdowns, odour and noise.

Modern Plants have better air systems, odour and emission controls.

In what way was the community impacted?

Community gets affected if insufficient attention is accorded to odour, traffic and noise issues. However as technology has improved so has the regulatory environment standards kept ahead. The Camellia plant will apply best practices

Contact details/references on people associated with comparable plants

This will be provided

How many jobs will be generated?

Approximately 65 people will be employed on site when the plant is fully operational.

Will smell vary with time?

An air quality assessment is being undertaken to assess the potential impacts on air quality as a result of odour and dust. This assessment involves reviewing plant operations and local meteorological conditions.

What is the approvals process?

The project is being assessed as a Part 3A development under the NSW Environmental Planning and Assessment Act 1979. The Minister for Planning is the Consent Authority. The Department of Planning has issued Director General's Requirements for preparation of an Environmental Assessment report. The report once submitted to the Department would be placed on public exhibition for a minimum of 30 days.

How long will the studies take?

The majority of the studies will take between 3 to 4 months to complete.

Will truck movements during operation affect buried asbestos?

No. The site is currently used for container storage which involves delivers etc by large trucks. There has been no evidence of any disturbance to the cap as a result of these activities.

Do the workers in the plant wear protective clothing?

Yes.

How will the trucks access and enter the plant?

A weighbridge will be located to the east of the site entrance. All vehicles on site will move around the site in a clockwise direction.

Have Remondis done studies regarding the viability of the recycling?

Yes

What is the probability of a methane leak?

There is no methane generated in this process

How does the process work? Can we see diagrams and pictures?

Please see attachments

Is there an equivalent plant in Australia at present?

No

Where does the rubbish go now?

Landfills

What happens in event of a breakdown and people not following procedures?

Plant operations would be reviewed immediately. Operations would be reduced/ceased depending on the nature of the event.

How can we know that the process is being followed correctly when plant is operating?

Site operations will be in accordance with the conditions of the development consent and an Environment Protection Licence issued by the Department of Environment Climate Change and Water. Site operations will be continually monitored with a requirement to report regularly to DECCW.



REMONDIS

Proposed Integrated Recycling Plant Camellia Industrial Area

REMONDIS proposes to build and operate an integrated recycling plant on a site at 1 Grand Avenue, Camellia (see map)

The fully enclosed plant would take commercial, industrial and food waste from industries and local Councils, sort and process it using a proven composting process and resource recovery techniques.

The proposal is in early stages of development, and has yet to be assessed by the State Government for approval. This assessment process will occur over the next 6 months.

REMONDIS recognise that such a plant will impact on the local businesses and residents, and are currently undertaking an environmental assessment to identify and measure the impacts, and to then make appropriate design changes to address the issues. This is being done prior to submitting a development application as part of the approvals process with the State Government.

Key issues have been identified by a group of neighbouring business owners/tenants and residents. These include:

- **Traffic-** such a plant will increase truck movements in the area, particularly along Grand Avenue, and across the railway bridge to James Ruse Drive. A study is underway on how to maintain safe access

to the local businesses, and how best to manage the additional movements on the local roads.

- **Odour-** the plant design has already been modified as a result of initial assessment to ensure that any odour is contained to within the plant boundary. The odour after filtering at the plant smells like damp woodchips.
- **Contamination-** the site proposed was used by James Hardie previously and so the soil contains some asbestos contamination. The site is currently capped by concrete and the plant would be built on top of this cap to reduce the need for excavation. Some excavation will be required to provide services (electricity, water, etc) to the plant, and the environmental assessment will identify the specific processes the contractors must adhere to which will eliminate any risk of airborne contamination.
- **Visual impact-** the site would be suitably landscaped to blend the site into the surrounding area. As the facility is totally enclosed, the appearance is of a large factory.
- **Plant operation-** like any industrial operation, there is always a risk that things will not work exactly as planned. REMONDIS is considering the contingencies that would need to be in place in the event of equipment or operational failures, to minimise any impact on the local area, and to recover quickly from any unexpected events.



Plant Design and operation

The proposed plant sorts waste from Council and commercial sources into recyclable and treatable components. The recyclable component is then sent for further processing at other facilities. The treatable components (ie food/ vegetation waste) is then stabilised in an enclosed tunnel composting process which converts it to a biologically stable product that is despatched as base material for conversion into high quality compost and retail products at another facility. Organic materials that are not source separated will be stabilised for disposal into a landfill.

The enclosed composting process is done in the presence of a continual airflow, and so does not generate methane.

The plant is designed so that all the operations are fully enclosed, and the ventilation system maintains a lower internal pressure to hold any odour inside the building, with rapid action roller doors only opening for trucks to come and go.

The exhaust air is treated and discharged through a biofilter which should eliminate offensive odours, bio particles and dust.

Environmental Study and Assessment process

Prior to an application to the State Government for approval, REMONDIS is undertaking a comprehensive assessment process, with separate studies covering Air

Quality, Site Contamination, Traffic, Noise, Landscape and Visual, Flooding, Heritage and Socio-Economic issues.

Recognising the importance of involving the local stakeholders, a study group of neighbouring business owners/ tenants and residents has been meeting to provide input to the assessment process, by identifying issues that need to be addressed from their perspective. The group is being advised of the outcomes of the assessments and how REMONDIS is addressing the issues, and have also generated a list of frequently asked questions.

It is intended that the assessment studies will form part of an application for approval to the State Government in early 2011.

Stakeholder input

REMONDIS is keen to ensure that anyone who may be interested or potentially affected by the proposal has an opportunity to find out more, and input to, the assessment and approval process.

This information sheet and responses to questions about the proposal are available on the REMONDIS website- www.remondis.com.au

If you have any concerns or questions, or would like to discuss or provide some input, please contact the Project Manager- Mohan Selvaraj on 02 9032 7100, or by email on mohan.selvaraj@remondis.com.au

Our reference : DOC10/14773
Contact : Deanne Pitts (02) 9995 5739

Ms Felicity Greenway
Senior Planner
Mining and Industry Projects
Department of Planning
GPO Box 39
SYDNEY NSW 2001

EMAIL & STANDARD POST

Dear Ms Greenway

**Proposed Alternative Waste Treatment Facility – Remondis Pty Ltd – Camellia
Major Project - MP10_0028**

I refer to your letter dated and received on 19 March 2010 by the Department of Environment, Climate Change and Water NSW ("DECCW") requesting Director General's requirements for the preparation of an Environmental Assessment ("EA") for the proposed Alternative Waste Treatment ("AWT") facility at 1 Grand Ave, Camellia.

DECCW has considered the details of the proposal as provided by the proponent and the Department of Planning and has identified the following information it requires for the EA in Attachment A.

The proponent should ensure that the EA is sufficiently comprehensive and detailed to allow the DECCW to determine the extent of the impact(s) of the proposal.

In summary, DECCW's key information requirements for the proposal are:

- 1) Waste management;
- 2) Stormwater and wastewater management;
- 3) Odour management;
- 4) Dust management;
- 5) Noise;
- 6) AWT design (including leachate management, gas management and environmental monitoring);
- 7) Contaminated site requirements; and
- 8) Quality and use of final output products.

Based upon the information provided to DECCW, the proponent will need to make a separate application to DECCW to obtain an Environment Protection Licence for scheduled activities at the site in accordance with Schedule 1 of the *Protection of the Environment Operations Act 1997*, after development consent has been granted.

PO Box A290 Sydney South NSW 1232
59-61 Goulburn St Sydney NSW 2000
Tel: (02) 9995 5000 Fax: (02) 9995 5999
TTY (02) 9211 4723
ABN 30 841 387 271
www.environment.nsw.gov.au

Department of **Environment and Climate Change** NSW




The proponent should be aware that any commitments made in the EA may be formalised as approval conditions. Consequently, pollution control measures should not be proposed if they are impractical, unrealistic or beyond the financial viability of the development. It is important that all conclusions are supported by adequate data.

DECCW requests that the proponent provide four (4) hard copies and an electronic copy of the EA in order for DECCW to review the EA. These documents should be sent to the Manager Waste Operations, PO Box A290, Sydney South NSW 1232.

If you have any further queries regarding this matter, please contact Deanne Pitts on (02) 9995 5739.

Yours sincerely

 8/4/10

JULIE CURREY
Unit Head Waste Operations
Environment Protection and Regulation

Encl: Attachment A - Director General Requirements

ATTACHMENT A:
ENVIRONMENTAL ASSESSMENT REQUIREMENTS FOR
THE PROPOSED ALTERNATIVE WASTE TREATMENT FACILITY AT
1 GRAND AVENUE, CAMELLIA
April 2010

DECCW Director General Requirements

The DECCW Director General Requirements have been structured in the following way:

- A. Executive summary
- B. The proposal
- C. The location
- D. Identification and prioritisation of issues
- E. The environmental issues
- F. List of approvals and licences
- G. Compilation of mitigation measures
- H. Justification of the proposal
- I. Site specific requirements for the proposed Alternative Waste Treatment facility
- J. References

A. Executive Summary

The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

B. The proposal

1. Objectives of the proposal

The objectives of the proposal should be clearly stated and refer to:

- a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced
- b) a life cycle approach to the production, use or disposal of products
- c) the anticipated level of performance in meeting required environmental standards and cleaner production principles
- d) the staging and timing of the proposal and any plans for future expansion
- e) the proposal's relationship to any other industry or facility.

2. Description of the proposal

General

- Outline the production process including:
 - a) the environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc)
 - b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
 - a) measures to minimise waste (typically through addressing source reduction)
 - b) proposals for use or recycling of by-products
 - c) proposed disposal methods for solid and liquid waste
 - d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points
 - e) water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge
 - f) soil contamination treatment and prevention systems.

- Outline construction works including:
 - a) actions to address any existing soil contamination
 - b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site)
 - c) construction timetable and staging; hours of construction; proposed construction methods
 - d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

Air

- Identify all sources of air emissions from the development.

Note: emissions can be classed as either point (eg emissions from stack or vent) or fugitive (from wind erosion, leakages or spillages associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements and associated dust from roads, exhausts, loss from load, land clearing and construction works)

- Provide details of the project that are essential for predicting and assessing air impacts including:
 - a) the quantities and physio-chemical parameters (eg concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
 - b) an outline of procedures for handling, transport, production and storage
 - c) the management of solid, liquid and gaseous waste streams with potential for significant air impacts.

Noise and vibration

- Identify all noise sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters:
 - a) including the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including

the risks they pose to Water Quality Objectives in the ambient waters (as defined on www.environment.nsw.gov.au/ieo, using technical criteria derived from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, ANZECC 2000)

- b) the management of discharges with potential for water impacts
- c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts i.e. effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

- Provide details of the quantity and type of any waste that is generated, received, handled, processed or disposed of at the premises. Waste must be classified according to DECCW's *Waste Classification Guidelines* (2008).
- Provide details of the quantity, type and specifications for all output products proposed to be produced from the facility. The description should include the physical, chemical and biological characteristics (including contaminant concentrations) of those output products as well as relevant accredited standards against which the products would comply.
- Provide details of intended (or potential) end uses for output products from the facility and the relevant product standards which would be used to assess those products against.
- Provide details of the layout of the facility, the production process and the environmental controls proposed to be installed at the facility. This should include details of any staged development, with proposed timeframes for completion.
- Provide details of all waste management at the facility, including:
 - a) the transportation, assessment and handling of waste arriving at or generated at the site
 - b) any stockpiling of wastes or recovered materials at the site
 - c) any waste processing related to the facility, including reuse, recycling, reprocessing or treatment both on- and off-site
 - d) the method for disposing of all wastes or recovered materials at the facility
 - e) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
 - f) the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
 - a) the quantity of spoil material likely to be generated

- b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
- c) the need to maximise reuse of spoil material in the construction industry
- d) identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
- e) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- In documenting or describing the composition of output products and/or wastes generated from the proposed facility reference should be made to DECCW's *Waste Classification Guidelines* (2008).
- The EA should also provide details of any proposed leachate collection and management systems for contaminated run-off water from stored organic waste and product.

Ecologically Sustainable Development (ESD)

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
 - a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations
 - b) proper valuation and pricing of environmental resources
 - c) identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

4. Consideration of alternatives and justification for the proposal

- Consider the environmental consequences of adopting alternatives, including alternative:
 - a) sites and site layouts
 - b) access modes and routes
 - c) materials handling and production processes
 - d) waste and water management
 - e) impact mitigation measures
 - f) energy sources

- Selection of the preferred option should be justified in terms of:
 - a) ability to satisfy the objectives of the proposal
 - b) relative environmental and other costs of each alternative
 - c) acceptability of environmental impacts and contribution to identified environmental objectives
 - d) acceptability of any environmental risks or uncertainties
 - e) reliability of proposed environmental impact mitigation measures
 - f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

C. The location

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
 - a) meteorological data (eg rainfall, temperature and evaporation, wind speed and direction)
 - b) topography (landform element, slope type, gradient and length)
 - c) surrounding land uses (potential synergies and conflicts)
 - d) geomorphology (rates of landform change and current erosion and deposition processes)
 - e) soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
 - f) ecological information (water system habitat, vegetation, fauna)
 - g) availability of services and the accessibility of the site for passenger and freight transport.

2. Air

- Describe the topography and surrounding land uses. **Provide details of the exact locations of dwellings, schools, shopping centres, childcare centres and hospitals.** Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
 - a) temperature and humidity
 - b) rainfall, evaporation and cloud cover
 - c) wind speed and direction
 - d) atmospheric stability class

- e) mixing height (the height that emissions will be ultimately mixed in the atmosphere)
- f) katabatic air drainage
- g) air re-circulation.

3. Noise and vibration

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, shopping centres, childcare centres and hospitals. Typically, the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

4. Water

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: www.environment.nsw.gov.au/ieo should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

5. Soil Contamination Issues

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

6. Threatened Species, population, ecological communities and their habitat

- Identify any threatened species or endangered ecological communities likely to be affected by the development in accordance with DECCW's *Threatened Species Assessment Guidelines – Assessment of Significance* (2007).

D. Identification and prioritisation of issues/scoping of impact assessment

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
 - a) Relevant NSW government guidelines
 - b) Industry guidelines
 - c) Environmental Assessments/ Environmental Impact Statements for similar projects
 - d) Relevant research and reference material
 - e) Relevant preliminary studies or reports for the proposal
 - f) Consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
 - a) all issues identified including local, regional and global impacts (i.e. increased/ decreased greenhouse emissions)
 - b) key issues which will require a full analysis (including comprehensive baseline assessment)
 - c) issues not needing full analysis though they may be addressed in the mitigation strategy
 - d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

E. The environmental issues

1. General

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.

Describe baseline conditions

- Provide a description of existing environmental conditions for any potential impacts.

Assess impacts

- For any potential impacts relevant for the assessment of the proposal, provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts eg assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.
- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the Environmental Assessment will be implemented. Areas that should be described include:
 - a) operational procedures to manage environmental impacts
 - b) monitoring procedures
 - c) training programs
 - d) community consultation
 - e) complaint mechanisms including site contacts
 - f) strategies to use monitoring information to improve performance
 - g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

2. Air

Describe baseline conditions

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.

Assess impacts

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (e.g. potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with DECCW if needed.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions, provide the emission rates in terms of odour units (determined by techniques compatible with DECCW procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate. This analysis must consider the **cumulative** impacts of all odour emissions from the premises and other potentially odorous activities in the surrounding area.

Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.

- Reference should be made to relevant guidelines e.g. *Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2001); *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (EPA, 2001); *Assessment and Management of Odour from Stationary Sources in NSW* (EPA, 2001); *Technical Notes: Draft Policy: Assessment and Management of Odour from Stationary Sources in NSW* (EPA, 2001).

Describe management and mitigation measures

- Outline specifications of pollution control equipment to be used at the site (including manufacturer's performance guarantees where available).
- Describe management protocols and procedures for both point and fugitive emissions. Where possible, this should include cleaner production processes.
- Describe management protocols and procedures for preventing and/or minimising **point and fugitive odour** emissions from all potential odour sources and odour generating activities at the site.

3. Noise and vibration

Describe baseline conditions

- Determine the existing background (L_{A90}) and ambient (L_{Aeq}) noise levels in accordance with EPA's *NSW Industrial Noise Policy* (2000).
- Determine the existing road traffic noise levels in accordance with EPA's *NSW Environmental Criteria for Road Traffic Noise* (1999) where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
 - a) details of equipment used for the measurements
 - b) a brief description of where the equipment was positioned
 - c) a statement justifying the choice of monitoring site, including the procedure used to choose the site, having regards to the definition of 'noise sensitive locations(s)' and 'most affected locations(s)' described in Section 3.1.2 of EPA's *NSW Industrial Noise Policy* (2000)
 - d) details of the exact location of the monitoring site and a description of land uses in surrounding areas
 - e) a description of the dominant and background noise sources at the site
 - f) day, evening and night assessment background levels for each day of the monitoring period
 - g) the final Rating Background Level (RBL) value
 - h) graphs of the measured noise levels for each day should be provided
 - i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring under Step 1 in Section B1.3 of EPA's *NSW Industrial Noise Policy* (2000)
 - j) determination of L_{Aeq} noise levels from existing industry.

Assess impacts

- Determine the project specific noise levels for the site. For each identified potentially affected receiver, this should include:
 - a) determination of the intrusive criterion for each identified potentially affected receiver
 - b) selection and justification of the appropriate amenity category for each identified potentially affected receiver
 - c) determination of the amenity criterion for each receiver
 - d) determination of the appropriate sleep disturbance limit.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Where $L_{A1(1min)}$ noise levels from the site are less than 15 dB above the background L_{A90} noise level, sleep disturbance impacts are unlikely. Where this is not the case, further analysis is required. Additional guidance is provided in Appendix B of EPA's *NSW Environmental Criteria for Road Traffic Noise* (1999).
- Determine expected noise level and noise character (eg tonality, impulsiveness, vibration, etc) likely to be generated from noise sources during:

- a) site establishment
- b) construction
- c) operational phases
- d) transport including traffic noise generated by the proposal
- e) other services.

Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).

- Determine the noise levels likely to be received at the most sensitive locations (these may vary for different activities at each phase of the development). Potential impacts should be determined for any identified significant adverse meteorological conditions. Predicted noise levels under calm conditions may also aid in quantifying the extent of impact where this is not the most adverse condition.
- The noise impact assessment report should include:
 - a) a plan showing the assumed location of each noise source for each prediction scenario
 - b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
 - c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
 - d) methods used to predict noise impacts including identification of any noise models used. Where modelling approaches other than the use of the ENM or SoundPlan computer models are adopted, the approach should be appropriately justified and validated
 - e) an assessment of appropriate weather conditions for the noise predictions including reference to any weather data used to justify the assumed conditions
 - f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario under any identified significant adverse weather conditions as well as calm conditions where appropriate
 - g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
 - h) an assessment of the need to include modification factors as detailed in Section 4 of EPA's *NSW Industrial Noise Policy* (2000)
 - i) Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:

- a) locations where the noise level exceeds the criteria and extent of exceedence
 - b) numbers of people (or areas) affected
 - c) times when criteria will be exceeded
 - d) likely impact on activities (speech, sleep, relaxation, listening, etc)
 - e) change on ambient conditions
 - f) the result of any community consultation or negotiated agreement.
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the Environmental Assessment.

Describe management and mitigation measures

- Outline the hours of operation for the proposed facility and provide justification for same.
- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
 - a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
 - b) control of traffic (eg: limiting times of access or speed limitations)
 - c) resurfacing of the road using a quiet surface
 - d) use of (additional) noise barriers or bunds
 - e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
 - f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension
 - g) driver education
 - h) appropriate truck routes
 - i) limit usage of exhaust breaks
 - j) use of premium muffles on trucks
 - k) reducing speed limits for trucks
 - l) ongoing community liaison and monitoring of complaints
 - m) phasing in the increased road use.

4. Water

Describe baseline conditions

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).

Note: Methods of sampling and analysis need to conform to an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) or be approved and analyses undertaken by accredited laboratories).

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: www.environment.nsw.gov.au/ieo. The Environmental Assessment should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the Environmental Assessment should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (<http://www.deh.gov.au/water/quality/nwqms>) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANZECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries (<http://www.nrc.nsw.gov.au>) or the NSW Salinity Strategy (DLWC, 2000) (<http://www.naturalresources.nsw.gov.au/salinity/government/govt-docs.htm>).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from DECCW on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a

suitable level of impact assessment. Issues to include in the description of the receiving waters could include:

- a) lake or estuary flushing characteristics
- b) specific human uses (e.g. exact location of drinking water offtake)
- c) sensitive ecosystems or species conservation values
- d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc
- e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment
- f) historic river flow data where available for the catchment.

Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act 1997* (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with the technical guidelines section 'Bunding and Spill Management' of the *Authorised Officers Manual* (EPA, 1995) (<http://www.environment.nsw.gov.au/water/bundingspill.htm>) and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving

protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:

- a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and
 - b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.
- Consult with DECCW as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). DECC will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.

- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to relevant guidelines e.g. *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* (ANZECC 2000), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (eg preparation of contingency plans), appropriate disposal methods, and generation of leachate.

- Describe hydrological impact mitigation measures including:
 - a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)
 - b) minimising runoff
 - c) minimising reductions or modifications to flow regimes
 - d) avoiding modifications to groundwater.
- Describe groundwater impact mitigation measures including:
 - a) site selection
 - b) retention of native vegetation and revegetation
 - c) artificial recharge
 - d) providing surface storages with impervious linings
 - e) monitoring program.
- Describe geomorphological impact mitigation measures including:
 - a) site selection
 - b) erosion and sediment controls
 - c) minimising instream works
 - d) treating existing accelerated erosion and deposition
 - e) monitoring program.
- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

5. Soils and contamination

Describe baseline conditions

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

Assess impacts

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
 - a) disturbing any existing contaminated soil
 - b) contamination of soil by operation of the activity
 - c) subsidence or instability
 - d) soil erosion
 - e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to relevant guidelines e.g. *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (EPA, 1997); *Contaminated Sites – Guidelines on Significant Risk of Harm and Duty to Report* (EPA, 1999).

Describe management and mitigation measures

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
 - a) erosion and sediment control measures
 - b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998)

6. Waste and chemicals

Describe baseline conditions

- Describe any existing waste or chemicals operations related to the proposal.
- Describe current recycling activities at the site including the types and volumes of waste received, the types and volumes recycled, and the types and volumes transported off-site for recycling.

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise environmental impacts (eg. odours, noise, water pollution) from the handling, transporting, storage, recycling, processing and reprocessing of waste and/or chemicals.
- Reference should be made to relevant guidelines e.g. DECCW's *Waste Classification Guidelines* (2008) and DECCW's *Environmental Guidelines: Composting and Related Organics Processing Facilities* (2004).

Describe management and mitigation measures

- Outline measures to minimise the consumption of natural resources.
- Outline measures to minimise environmental impacts from the recycling activities, including any increase/decrease on the current types and volumes of waste recycled at the site.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

7. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions (including **odour emissions**) to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.

- Identify infrastructure requirements flowing from the proposal (eg water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (eg travel demand management strategies).

8. Impacts on threatened species, population, ecological communities and their habitat

DECCW acknowledges that the site is highly disturbed and therefore the presence of threatened species is unlikely. Nonetheless, the EA should, if applicable, include a brief field survey of the site. If any TS are identified then likely impacts on threatened species and their habitat need to be assessed, evaluated and reported on. The EA must describe the actions that will be taken to avoid or mitigate impacts or compensate for unavoidable impacts of the project on threatened species and their habitat. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

9. Impacts on Aboriginal cultural heritage values

DECCW acknowledges that the site is highly disturbed and therefore the presence of Aboriginal cultural heritage artefacts is unlikely. Nonetheless, the EA should if applicable:

- Address and document the information requirements set out in the draft *Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation* involving surveys and consultation with the Aboriginal community;
- Identify the nature and extent of impacts on Aboriginal cultural heritage values across the project area;
- Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented; and
- Demonstrate that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

F. List of approvals and licences

- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under DECCW licences or approvals (eg outline of a detailed environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

H. Justification of the proposal

- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

I. Specific requirements for proposed Alternative Waste Treatment facility

The proponent should address all requirements listed in Sections A-H above (where applicable) in respect of the proposal.

If not already addressed in Sections A-H, DECCW requires the following specific issues to be addressed in the Environmental Assessment:

General

The EA must provide details of:

- The correct Lot and DP of the site.
- The nature of any waste that is proposed to be **stored outside of a negatively pressured building** (including wastes such as pre-stabilised or stabilised garden waste, food waste, dry recyclables etc); the proposed locations for storage of that waste; the quantities of that waste; the period of time that waste will be stored outside; and any mitigation measures to be implemented to ensure that the waste does not generate odour or dust emissions.
- Details of any runoff (being leachate and stormwater) that will be collected and stored in a structure that is not a tank (i.e. a "stormwater pond" etc) and how odours from that runoff will be mitigated.
- Details of the leachate and waste water treatment systems for both the Source Separated Organics facility and the Commercial and Industrial facility giving specific consideration to managing, storing and re-using leachate from each facility separately and avoiding cross-contamination.
- Justification as to why the facility is proposed to operate 24 hours, 7 days per week.

Construction

- Detailed description of all stages of construction including timeframes for completion.
- If any waste is proposed to be brought onto the site during the construction period (i.e. for "fill" purposes), the proponent must provide details of the classification of the waste; the quantities of the waste; and the source location of that waste.

Note: the application of waste-derived material to land is an activity that may require a licence under the Protection of the Environment Operations Act 1997. However, a licence is not required by the occupier of land if the only material applied to land is virgin excavated natural material or waste-derived material that is subject of a resource recovery exemption under clause 51A of the POEO (Waste) Regulation 2005.

- If any waste is proposed to be transported off the site during the construction phase, the EA must provide details of:
 - The types of waste leaving the site;
 - The quantities of waste leaving the site;
 - The transporters of the waste; and
 - The final disposal or re-use location for the waste.

Note: Receipts or invoices demonstrating lawful disposal of the waste (particularly asbestos waste) must be retained by the proponent and be made available to DECCW when needed.

Contaminated site issues

Note: Section 29 requirements under the Contaminated Land Management Act 1997

The Former James Hardie site is subject to two Public Positive Covenants (Eastern Portion - AA746158PC and Western Portion - AA746178PC) registered on 6 July 2004 by the Environment Protection Authority ("EPA") under Section 88E(3) of the *Conveyancing Act 1919* and Section 29 of the *Contaminated Land Management Act 1997*.

The terms of covenant require the site owner(s) to maintain remediation of the properties in line with the terms of the Site Management Plan ("SMP"). The SMP outlines works, which aim to:

- Maintain an adequate seal over the areas of fill known to contain asbestos waste and to ensure physical isolation of the waste from human contact, restrict rainwater infiltration and prevent erosion or movement of waste.
- Address human health and environmental issues related to the presence of contaminated soils at the site.

Ongoing management of the existing soft and hard surface coverings and the Parramatta River boundary must be achieved by regular maintenance inspections which are to be reported by the owner(s) to the EPA on an annual basis.

Section 6 of the SMP requires that any new programmed works other than the repair or maintenance of existing underground services or the connection or reconnection to existing services, can only be carried out if the works have been approved by DECCW.

Therefore, if any party intends to disturb the existing surface of the land covered by the covenant, a written request supported by documentation outlining the proposed scope of works and OH&S procedures which will be used in handling the asbestos fill must be submitted to DECCW for approval prior to any works commencing.

Accordingly, the EA must:

- Demonstrate that the proponent will comply with and has considered the relevant requirements of the *Contaminated Land Management Act 1997*, the relevant Public Positive Covenant and the requirements of the Site Management Plan in relation to the proposed development.

Note: The requirements of the Public Positive Covenant must be considered as it will have a major effect on any proposed development of the site due to the restrictions associated with the disturbance of the existing surface.

- Provide a detailed description of where the existing surface will be disturbed, particularly during construction (i.e. footings, leachate collection system, process water tank). The proponent must clearly describe all areas that will be disturbed (even if it is minor disturbance); why it will be disturbed; the extent to which it will be disturbed; and how any works will comply with the requirements of the *Contaminated Land Management Act 1997*, the relevant Public Positive Covenant and the requirements of the Site Management Plan.
- The Site Work Plan and associated documents must clearly explain how asbestos waste will be excavated and stored onsite as well as how and where the asbestos material will be transported offsite. In addition, the documents will need to address sediment control, dust control and monitoring, and OH&S procedures including Safe Work Method Statement and Job Safety Analysis.

Commercial & Industrial Resource Recovery Facility

The EA must provide details of:

- Proposed sources of the commercial and industrial waste ("C&I waste").
- The likely composition of the C&I waste.
- The proposed length of time that the C&I waste will undergo "Biological Stabilisation" and justification for same.

Note: DECCW has already expressed concern that a 3-4 week stabilisation period may not be long enough to adequately stabilise the product and reduce the risk of odours. If the proponent proposes a 3-4 week stabilisation period, strong justification and evidence will need to be provided in the EA demonstrating it would meet DECCW's environmental requirements, particularly in terms of odour.

- The likely composition of the organic outputs (e.g. physical and chemical characteristics) from the C&I facility.
- Proposed use of organic output products (i.e. locations, type of product, application rates) from the C&I facility.
- If the organic output products are proposed to be transported from the site to secondary site for further stabilisation and/or composting, the proponent must provide details and addresses of the secondary site location(s).
- Details of how the proponent will ensure that all organic outputs from the C&I facility will meet the requirements of DECCW's Resource Recovery Exemptions, specifically the resource recovery exemption entitled, **"The organic outputs derived from mixed waste exemption 2010"**.

Source Separated Organic Resource Recovery Facility

The EA must provide details of:

- Proposed sources of the Source Separated Organics ("SSO").
- The likely composition of the SSO.
- The proposed length of time that the SSO waste will undergo "Composting" and justification for same.

Note: DECCW has already expressed concern that a 3-4 week composting period may not be long enough to adequately stabilise the product and reduce the risk of odours. If the proponent proposes a 3-4 week composting period, strong justification and evidence will need to be provided in the EA demonstrating it would meet DECCW's environmental requirements, particularly in terms of odour.

- The likely composition of organic outputs (e.g. physical and chemical characteristics) from the SSO facility.
- Proposed use of organic output products (i.e. locations, type of product, application rates) from the SSO facility.
- If the organic output products are proposed to be transported from the site to secondary site for further stabilisation and/or composting, the proponent must provide details and addresses of the secondary site location(s).
- Details of how the proponent will ensure that all organic outputs from the SSO facility will meet the requirements of DECCW's Resource Recovery Exemptions, specifically the resource recovery exemptions entitled, **"The Raw Mulch Exemption 2008"** and **"The Food Waste Compost Exemption 2008"**.

Tunnel Hallways

- The EA must provide details of how negative pressure will be maintained in the tunnel hallways (i.e. quick shut roller doors at the ends of the hallways etc). If the tunnel hallways will not be maintained under negative pressure, the proponent must provide strong justification for same and details of how odours and dust will be mitigated.

- The proponent must also provide details of contingency plans in place that ensure negative air is always maintained in the tunnels with consideration to unplanned events (i.e. the rapid shut roller doors breaking or not working properly etc).

J. References

The environmental assessment of the key issues listed above must take into account relevant guidelines, policies, and plans. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this project.

Guidelines, Policies and Plans

Aspect	Policy /Methodology
Risk	<u>AS/NZS 4360 Risk Management (Standards Australia)</u> <u>HB 203:2006 Environmental Risk Management – Principals and Process</u>
Contamination	<u>Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)</u> <u>National Environment Protection (Assessment of Site Contamination) Measure (NEPC)</u> <u>EnHealth – Environmental Health Risk Assessment – Guidelines for assessing human health risks from environmental hazards</u> <u>Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA)</u> <u>Contaminated Sites: Sampling Design Guidelines (NSW EPA)</u> <u>Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA)</u> <u>Contaminated Sites: Guidelines for the NSW Auditor Scheme (NSW EPA)</u> <u>Contaminated Sites: Guidelines on Significant Risk of Harm from Contaminated Land and Duty to Report (NSW EPA)</u> <u>Guidelines for the Assessment and Management of Groundwater Contamination (DECC)</u>
Traffic and Transport	<u>Guide to Traffic Generating Development (RTA)</u> <u>RTAs Road Design Guide (RTA)</u>
Air Quality	<u>Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)</u>

	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
	Protection of the Environment Operations (Clean Air) Regulation
Soil and Water	
Soil	Managing Urban Stormwater: Soils & Construction (Landcom)
Surface Water	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMCC & AHMC)
	National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ);
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ);
	Using the ANZECC Guidelines and Water Quality Objectives in NSW (DEC);
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Storing and Handling Liquids: Environmental Protection - Participants Manual (DECC)
	Environmental Compliance Report: Liquid Chemical Storage, Handling and Spill Management - Part B Review of Best Practice and Regulation (DEC)
Health	
	Environmental Health Risk Assessment Guidelines for Assessing Human Health Risks from Environmental Hazards (Department of Health and Ageing and enHealth Council)
Flora and Fauna	
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
	Primefacts. Mangroves (DPI)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities. Working Draft (DEC)
	Draft Guidelines for Threatened Species Assessment under Part 3A of the <i>Environmental Planning and Assessment Act 1979</i> (DEC)
Hazards	
	Multi-Level Risk Assessment (DUAP)
	Hazardous Industry Planning Advisory Paper No 6 - Guidelines for Hazard Analysis

Noise

Industrial Noise Policy (DEC)

Environmental Criteria for Road Traffic Noise (DEC)

Environmental Noise Control Manual (DEC)
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Waste

Waste Classification Guidelines 2008 (DECC)

Environmental guidelines: Solid Waste Landfills (NSW EPA)



Office of Water

Felicity Greenway
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Contact: Janne Grose
Phone: 02 4729 8262
Fax: 02 4729 8141
Email: Janne.Grose@water.nsw.gov.au

14 May 2010

Our ref: ER21009
Your ref: MP10_0028

Attention: Christine Chapman

Dear Ms ^{Felicity,} Greenway

MP10_0028 – Remondis Alternative Waste Treatment Facility, Camellia

I refer to your letter of 19 March 2010 requesting key issues and assessment requirements from the NSW Office of Water (NOW) for the project proposal. I apologise for the delay in responding.

The NOW's key issues and assessment are in relation to:

- the protection and rehabilitation of riparian land
- groundwater and groundwater dependent ecosystems

Specific comment is outlined in Attachment A.

Contact Details:

Should you have any queries in respect to this matter, please contact me on (02) 4729 8262.

Yours sincerely

Janne Grose
Planning and Assessment Coordinator
Major Projects and Assessments
Penrith



Office of Water

ATTACHMENT A

Specific Comments from the DECCW (Office of Water)

Major Project – Remondis alternative waste treatment facility, Camellia

Director-General's Environmental Assessment Requirements

Relevant Legislation

The NSW Office of Water (NOW) is responsible for administering the Water Act 1912 and the Water Management Act 2000 (WMA) which manage and regulate the use of surface water and groundwater resources. The Environmental Assessment (EA) is required to take into account the objectives and regulatory requirements of these Acts, as applicable.

Relevant Policies

The EA is required to take into account the following NSW Government policies, as applicable:

- NSW Groundwater Policy Framework Document - General
- NSW Groundwater Quantity Management Policy
- NSW Groundwater Quality Protection Policy
- NSW Groundwater Dependent Ecosystem Policy
- NSW State Rivers and Estuaries Policy
- NSW Wetlands Management Policy

Protection and enhancement of riparian land

Section 2.3.2 of the Preliminary Environmental Assessment (PEA) indicates the site is located adjacent to the Parramatta River. It is noted the area of the bank along the Parramatta River is zoned Environmental Protection (page 7 of PEA).

The Parramatta River is a key waterway linkage and it is recommended the proposal protects and enhances riparian land along the river. Riparian land in urban areas is an asset. Healthy viable waterways and riparian land have current and long term benefits to social/urban amenity, the community, waterway and catchment health, water quality, biodiversity, recreation, tourism, aesthetics etc.

The NOW's considerations for protecting and enhancing riparian land at the site are embodied in natural resource policy and planning documents including:

- The New South Wales State Rivers and Estuaries Policy. The objective of the policy are to manage the rivers and estuaries of NSW in ways which:
 - *Slow, halt or reverse the overall rate of degradation in their systems*

- *Ensure the long term sustainability of their essential biophysical functions, and*
- *Maintain the beneficial use of these resources.*

- The New South Wales Wetlands Management Policy
- The State Plan 2009 and the priorities and targets, particularly:
 - *protect our native vegetation, biodiversity, land, rivers and coastal waterways*
 - *Meet our State-wide targets for natural resource management to improve biodiversity and native vegetation sensitive riverine and coastal ecosystems, soil condition and socio-economic wellbeing*
 - *over the next 2 years we will increase the extent and improve the condition of native vegetation and habitats*
- State wide manual: Managing Urban Stormwater: Soils and Construction (NSW Government, Chapter 5 4th edition 2004) (the Blue Book).
- Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

Section 5.6 of the PEA makes reference to the significance of the foreshore area and its Environmental Protection Zone and notes ecological restoration and maintenance work may be required within this zone (page 21). The Parramatta River warrants recognition in operating as a riparian corridor. A Category 1 outcome would have been preferred along the river, however due to the urbanised nature of the catchment and existing impediments, the capacity to derive a footprint equating to a "corridor" function is not possible (ie a minimum 50 m wide riparian corridor along the river to achieve this function).

Figure 3.2 appears to show there will be a 30 m wide environmental protection zone at the site. The NOW recommends the EA provides details on the riparian land at the site and the rehabilitation of riparian vegetation (including scaled plans). While it is recognised the riparian land at the site is compromised and impeded by existing development along the local reach of this waterway there is a need for improved revegetation with plantings of local native riparian vegetation to enhance the local foreshore connectivity value.

The NOW recommends a Category 2 outcome be applied along the foreshore (ie a minimum 30 m wide riparian area along the river). If space is available, it is recommended that wider widths are provided to ensure there is no further loss and decrease of riparian land along the river to urban development.

Surface Water and Groundwater

The EA needs to provide adequate details to assess the impact of the proposal on surface water and groundwater resources. Sufficient detail needs to be provided in the EA for the NOW to assess any water licensing requirements under the Water Act 1912.

The EA needs to provide details on:

- any existing surface water and groundwater licences under the Water Act 1912 on the subject land
- the purpose of the existing licences.
- the source(s) of a sustainable water supply for the proposal
- any proposed surface water extraction for the proposal, including purpose, location of any existing and proposed pumps, dams,
- any proposed groundwater extraction related to the project,

- volumes of water to be used
- the function and location of all existing and proposed storages/ponds on the subject land
- the design, layout, pumping and storage capacities, all associated earthworks and infrastructure works must be clearly shown and explained.

Water Management Structures/Dams

If the proposal includes water management structures/dams, the EA needs to provide details on the following:

- any existing structure/s (date of construction, location, purpose, size and capacity, the legal status/approval for existing structure/s).
- any proposal to change the purpose of existing structure/s.
- if any remedial work is required to maintain the integrity of the existing structure/s.
- the purpose, location and design specifications for any proposed structure/s.
- size and storage capacity of the structure/s.
- calculation of the Maximum Harvestable Right Dam Capacity (MHRDC).
- if the structure/s is affected by flood flows.
- any proposal for shared use, rights and entitlement of the structure/s.
- if the proposed development has the potential to bisect the structure/s.

The NOW's Farm Dams Assessment Guide provides details on Harvestable Rights and the calculation of the Maximum Harvestable Right Dam capacity (MHRDC). Dams capturing up to the harvestable right capacity are not required to be licensed. Harvestable Right dams can be located on hillsides, gullies and minor watercourses that do not have permanently flowing waters and which are first and second order watercourses in accordance with the Strahler system of stream ordering. The Strahler system of stream ordering of watercourses is based on 1:25 000 scale topographic maps. Please refer to:

http://www.naturalresources.nsw.gov.au/water/farm_dams/index.shtml.

The Harvestable Right gives landholders the right to capture and use for any purpose 10 % of the average annual runoff from their property. The Harvestable Right has been defined in terms of an equivalent dam capacity called the Maximum Harvestable Right Dam Capacity (MHRDC). The MHRDC is determined by the area of the property (in hectares) and a site-specific run-off factor.

The MHRDC includes the capacity of all existing dams on the property that do not have a current surface water licence. The location and estimated capacity of every dam must be shown. Any capacity of the total of all the dams on the property greater than the MHRDC may require a licence.

There are exemptions for dams related to the Harvestable Right. These include:

- Dams to control or prevent soil erosion;
- Dams to contain effluent and sediment;
- Flood detention basins;
- Dams built for environmental reasons (eg aesthetics, nutrient control, wildlife etc); and
- Dams which don't harvest runoff (eg. turkeys nest dams, ring tanks).

These exemptions are only applicable to the end use of the dam, even if the initial use is one of the above.

Groundwater

The NOW is responsible for the management of the groundwater resources. The proposal needs to protect groundwater resources in accordance with NSW State groundwater policy, enhance groundwater quality and protect groundwater dependent ecosystems (GDEs).

The EA should identify groundwater issues and potential degradation to the groundwater source and provide the following details:

- the predicted highest groundwater table at the site.
- any works likely to intercept, connect with or infiltrate the groundwater sources.
- any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.
- a description of the flow directions and rates and physical and chemical characteristics of the groundwater source.
- the predicted impacts of any final landform on the groundwater regime.
- the existing groundwater users within the area (including the environment), any potential impacts on these users and safeguard measures to mitigate impacts.
- an assessment of the quality of the groundwater for the local groundwater catchment
- an assessment of groundwater contamination (considering both the impacts of the proposal on groundwater contamination and the impacts of contamination on the proposal).
- how the proposed development will not potentially diminish the current quality of groundwater, both in the short and long term.
- measures for preventing groundwater pollution so that remediation is not required.
- protective measures for any groundwater dependent ecosystems (GDEs).
- proposed methods of the disposal of waste water and approval from the relevant authority.
- the results of any models or predictive tools used.

Where potential impact/s are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- any proposed monitoring programs, including water levels and quality data
- reporting procedures for any monitoring program including mechanism for transfer of information.
- an assessment of any groundwater source/aquifer that may be sterilised from future use as a water supply as a consequence of the proposal.
- identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).

- description of the remedial measures or contingency plans proposed.
- any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

Licensing

If the proposal is likely to intercept or use groundwater, the need for a water license under Part 5 of the Water Act 1912 should be addressed in the EA.

All proposed groundwater works, including bores for the purpose of investigation, extraction, dewatering, testing or monitoring must be identified in the proposal and an approval obtained from NOW prior to their installation.

Groundwater Dependent Ecosystems

The EA should provide details on the presence and distribution Groundwater Dependent Ecosystems (GDEs) in the vicinity of the site and identify any potential impacts on GDEs as a result of the proposal.

GDEs are ecosystems which have their species composition and natural ecological processes wholly or partially determined by groundwater. GDEs represent a vital component of the natural environment and can vary in how they depend on groundwater, from having occasional or no apparent dependence through to being entirely dependent. GDEs occur across both the surface and subsurface landscapes ranging in area from a few metres to many kilometres. Surface and groundwaters are often interlinked and aquatic ecosystems may have a dependence on both.

Ecosystems that can depend on groundwater and that may support threatened or endangered species, communities and populations, include:

- Terrestrial vegetation that show seasonal or episodic reliance on groundwater.
- River base flow systems which are aquatic and riparian ecosystems in or adjacent to streams/rivers dependent on the input of groundwater to base flows.
- Aquifer and cave ecosystems.
- Wetlands
- Estuarine and near-shore marine discharge ecosystems.
- Fauna which directly depend on groundwater as a source of drinking water or live within water which provide a source.

Your Reference:MP10-10_0028
Our Reference: F2007/02152
Contact: Louise Kerr
Telephone: 9806 5780
Fax: 9806 5902

NSW Department of Planning
Mining & Industry Projects
GPO Box 39
SYDNEY NSW 2001
Attention: Felicity Greenway

19 April 2010

Dear Ms Greenway,

REMONDIS ALTERNATIVE WASTE TREATMENT FACILITY, CAMELLIA

I refer to your letter received on 24 March 2010 where you advise that the Department of Planning has received a Preliminary Environmental Assessment (PEA) from Remondis Pty Ltd for the construction and operation of an Alternative Waste Treatment Facility at 1 Grand Avenue, Camellia and that the Department is seeking input from relevant agencies into the 'Director General Requirements' for the preparation of an Environmental Assessment to accompany an application made by Remondis Pty Ltd for the development of the site.

The property located at 1 Grand Avenue, Camellia is of strategic importance to the Parramatta LGA in that it is a large site located on the Parramatta River, is located within close proximity to the intersection of James Ruse Drive and Grand Avenue and is heavily constrained due to significant contamination (being occupied by James Hardie for the manufacture of fibrous cement and related products and chemical manufacturing prior to 1996). As a result any application that is made to the Department of Planning under Part 3A of the Environmental Planning and Assessment Act is to properly consider the environmental, social and economic aspects of the project and the broader community impacts.

As outlined at the Planning Focus Meeting that was held on 18 March 2010 the following issues need to be specifically addressed in any future Environmental Assessment or response to Director General Requirements:

1. Community and Stakeholder Consultation

A comprehensive Community and Stakeholder Plan must be developed by the proponent following consultation with Parramatta City Council. The community and stakeholder consultation plan should include (but not be limited to):-

- A variety of engagement techniques that offer opportunities to participate across all relevant groups;
- Clearly identify key community and stakeholder groups who will be consulted during the development project;
- Clearly identify how issues raised during consultation stages are to be addressed and considered by the proponent.

The Community and Stakeholder Consultation must be carried out on a regular basis (no less than every 6 months) by the proponent during the development project (ie planning and design phase, construction phase and on-going occupation phase).

The residential areas located to the north of the site (northern shore of Parramatta River (East Parramatta and Rydalmere) and to the west of the site (Rosehill) are to one of the key community groups consulted.

2. Developer Contributions (Section 94A Contributions and Voluntary Planning Agreements)

The Environmental Assessment must address the payment of developer contributions in the form of section 94A contributions or any commitment to commence negotiations with Parramatta City Council for a Voluntary Planning Agreement.

Parramatta Council would welcome and encourage the proponent commencing discussions on negotiating a Voluntary Planning Agreement or the payment of section 94A contributions for the provision of facilities and infrastructure in the Camellia/Rosehill area. These discussions should commence prior to the Environmental Assessment and application being submitted to the Department of Planning.

3. Traffic

A comprehensive traffic report must be submitted with the Environmental Assessment Report that analyses the impacts that the proposed Waste Treatment Facility will have on the already compromised intersection of James Rise Drive and Grand Avenue. The report should specifically address how trucks will leave the site (ie turn right into Grand Avenue) without impacting on traffic flows and impacting on driver safety.

The report should also address the adequacy of the existing vehicular crossing over the railway line (on Grand Avenue) to cater for the additional traffic capacity in peak and non-peak periods.

4. Draft Parramatta LEP 2010

The Environmental Assessment must address the draft planning controls of draft Parramatta LEP 2010 and associated draft DCP currently on public exhibition and provide an assessment against the primary planning controls for the site.

The comments that have been provided are not the final views of Parramatta Council in relation to this project and we look forward to the opportunity to review the Environmental Assessment for the project once the application has been submitted to the Department of Planning and is placed on public exhibition. In the meantime representatives of the proponent are invited to discuss the issues raised in this letter with Parramatta City Council.

Yours sincerely

Louise Kerr
Manager Development Services

Remondis Alternative Waste Treatment Facility, Camellia

MP10_0028 - Parramatta LGA

Sydney West Regional Team's comments
9 April 2010

Current Controls

Parramatta Local Environmental Plan 2001

- The site is currently zoned *Employment – Zone 4* under Parramatta LEP 2001. The proposed development is allowed with consent.

Sydney Regional Environmental Plans (SREPs)

- Two SREPs are of relevance to the site and the application - SREP 28 – Parramatta and SREP (Sydney Harbour Catchment).
 1. SREP No 28 - The SREP applies to the site as it is located within the Regional Enterprise Zone in the Camellia Precinct under the Plan. The area of the site along the bank of the Parramatta River is zoned Environment Protection. The proposed development is permissible with development consent under the current zoning controls.
 2. SREP (Sydney Harbour Catchment) - The site is located on land within the Sydney Harbour Catchment Foreshores & Waterways Area.
- It is noted that the EP&A Regulation (Plan Making) Regulation 2009 came into force on 1 July 2009. Under the Regulation, REP planning instruments are deemed to be SEPPs as of that date. The Regulation includes saving provisions, so that a provision of the REP that becomes a deemed SEPP on 1 July 2009 does not have the same effect as a provision of a SEPP for the purposes of Part 3A of the Act, it would not have that affect before 1 July 2009.

Future Controls

- The draft Parramatta Principal LEP recently completed public exhibition. The proposed zoning of the site under the draft Principal LEP is *IN 3 – Heavy Industrial*.
- Consequently, at this stage it is not expected that the proposal will be inconsistent with the future zoning of the land under the draft Principal LEP.
- It is hoped that the Principal LEP will be finalised by the end of 2010.

Proposal for adjacent site

- The proposal is in close proximity to a site that has had both Major Project and LEP amendment requests (locality map is attached).
 - LEP amendment – In April 2009, Parramatta Council resolved to rezone the site B5 Business Development to allow for bulky good, large floor plate retailing and a supermarket (but not general retail nor residential). The Department indicated

that Council could proceed with preparation of this amendment, and as such it was included as part of the draft Principal LEP as exhibited.

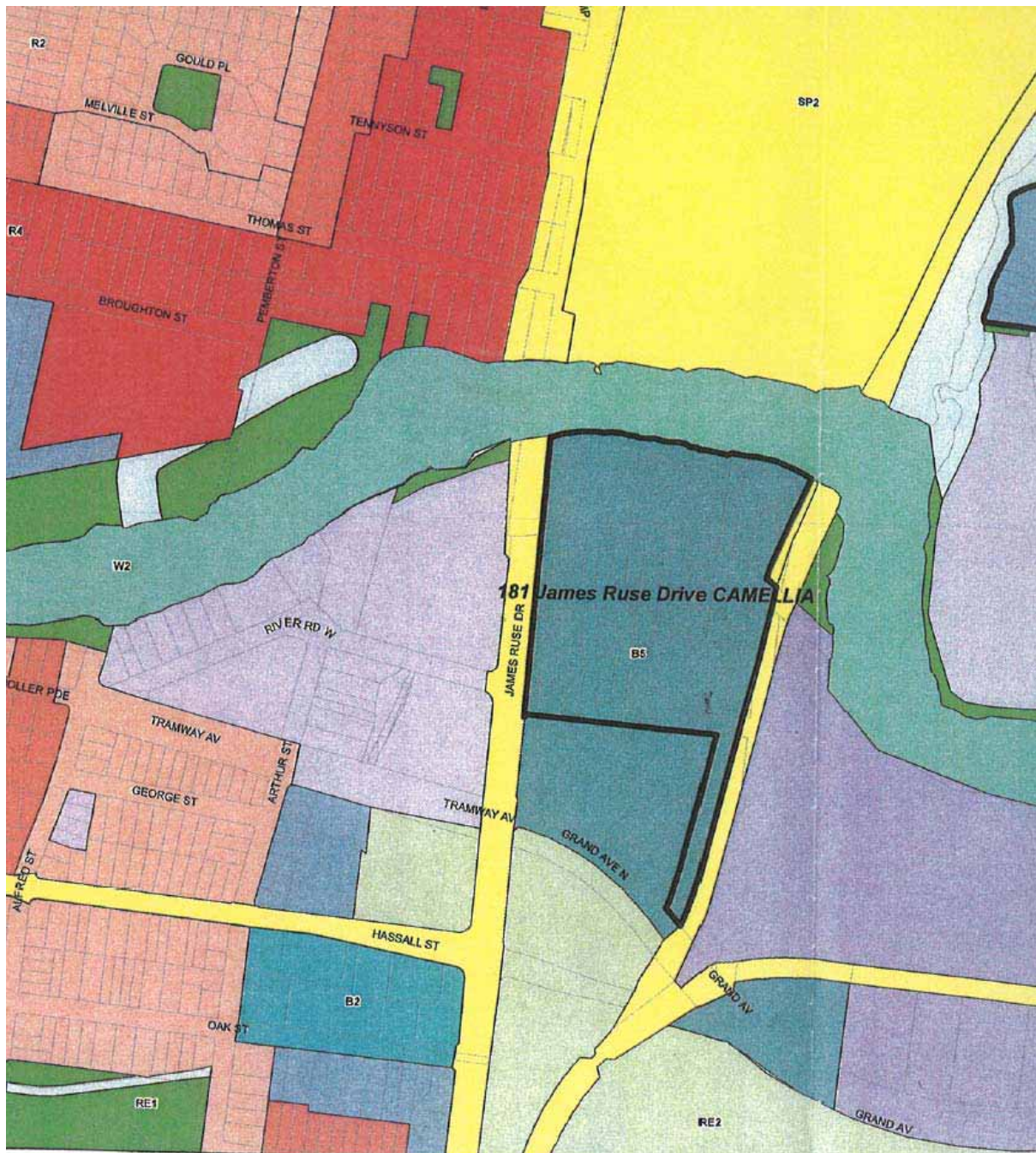
- Major Project 09_0185 – In October 2009, Department received a request seeking a concept plan approval for bulky goods retail, specialty retail, a supermarket, fast food outlets, service station, commercial and residential land uses. I understand that Metropolitan Projects Branch was recommending that the concept plan not be supported at this stage, however, I am unaware of its current status.

Metropolitan and draft West Central Subregional Strategies

- The draft West Central SRS identifies Camellia/Rosehill, the area in which the proposed development is located, as 'Category 1 - Land to be retained for industrial purposes'. The key function of the area is heavy manufacturing (heavy industry).
- The proposed development is generally consistent with the strategies outlined in the draft West Central SRS and the Metropolitan Strategy as it will create jobs, is close to other manufacturing and urban services and is close to major infrastructure such as the Cumberland Highway, the South West T-Way and Fairfield (a potential major centre).

Tim Archer
A/ Team Leader
Sydney West
Ph: 9873 8542

Attachment – Locality map for adjacent site



Our Reference:
Your Reference:
Contact:
Telephone

RDC 10M409 - SYD10/00153
MPI0_0028
Edmond Platon
8849 2906



The Director
Mining and Industry
Department of Planning
GPO Box 39
Sydney NSW 2001

Attention: Felicity Greenway

**MAJOR PROJECT APPLICATION AND PRELIMINARY ENVIRONMENTAL
ASSESSMENT FOR WASTE TREATMENT FACILITY AT 1 GRAND AVE,
CAMELLIA**

Dear Sir / Madam,

I refer to your email dated 24 February 2010 (Ref: MPI0_0028) requesting the Roads and Traffic Authority (RTA) to provide details of key issues and assessment requirements regarding the abovementioned development for inclusion in the Director General's Environmental Assessment (EA) requirements.

The RTA would like the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. It is noted that the Metropolitan Strategy has designated Parramatta as a Regional City and a major focal point for regional transport connections and jobs growth. It is important that the development of this Waste Treatment Facility takes into consideration, and contributes to the achievement of, transport objectives contained in this and other high-level NSW Government strategies.

These strategies include the NSW State Plan and draft West Central Subregional Strategy. These policies share the aims of increasing the use of walking, cycling and public transport; appropriately co-locating new urban development with existing and improved transport services; and improving the efficiency of the road network.

By addressing both the supply of transport services and measures to manage demand for car use, the EA report should demonstrate how users of the Waste Treatment Facility, will be able to make travel choices that support the achievement of relevant State Plan targets.

2. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need / associated funding for upgrading or road improvement works (if required).

The key intersections to be examined / modelled include:

- James Ruse Drive/Grand Avenue

Roads and Traffic Authority

3. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
4. Proposed number of car parking spaces and compliance with the appropriate parking codes.
5. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
6. The RTA will require in due course the provision of a traffic management plan for all demolition / construction activities, detailing vehicle routes, number of trucks, hours of operation, access arrangements and traffic control measures.

Further enquiries on this matter can be directed to the nominated Assistant Planner Edmond Platon on phone 8849 2906 or facsimile (02) 8849 2918.

Yours sincerely



for

Andrew Popoff
A/Senior Land Use Planner
Transport Planning, Sydney Region
4 March 2010