



NSW Department of Planning and Infrastructure and Infrastructure

COMMERCIAL IN CONFIDENCE

WOODLAWN EXPANSION PROJECT

**ASSESSMENT ON SEPP (INFRASTRUCTURE) CRITERIA
AND
PROJECT NEED REVIEW**

**Wright Corporate Strategy Pty Limited
June 2011**





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Executive Summary and Recommendations

Purpose

Veolia Environmental Services (Australia) Pty Limited (Veolia) has lodged a Development Application for expansion of operations at its Woodlawn Bioreactor Landfill facility located in the Goulburn Mulwaree LGA, south of Sydney. The former Woodlawn mine now receives putrescible waste from the Sydney region transported by rail from Veolia's Clyde Waste Transfer Station to a local intermodal rail/road facility at Crisps Creek.

Both the Woodlawn Bioreactor Landfill and the Clyde Transfer Station were originally assessed at a waste input of 500,000 tonnes/year and this amount was specified as a maximum in the Minister's approval of the project in November 2000. However, the current maximum waste input rate to the bioreactor landfill is capped at 360,000 tonnes/year from Sydney and 50,000 tonnes/year from LGAs in the region surrounding the landfill.

The Environmental Assessment (EA) for the proposed *Woodlawn Expansion Project* describes a proposal to increase the maximum waste input rate to the bioreactor landfill to 1.13 million tonnes/year.

This brief report sets out the results of a review of the Veolia proposal in the context of the *EP&A Act 1979* and *SEPP (Infrastructure) 2007*. This assessment provides input to the Department of Planning and Infrastructure and Infrastructure's overall assessment of the Development Application.

Assessment

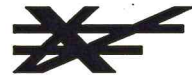
The EA and the Submissions Report make a reasonable case for increased residual waste flow to the Woodlawn Bioreactor Landfill. This Assessment report examines the case and the issues at stake in either approving or rejecting the proposal.

The case for approval is strongly positive for the following reasons.

(a) Prudent Provision of Infrastructure



The Government has a fundamental obligation to ensure that infrastructure investment is made to secure waste disposal capacity. Recognition now that greater use of Woodlawn will be necessary (at least until further alternative waste processing technologies – of considerable scale – can be fully commissioned and operate successfully) is a critical first step. Prudent infrastructure planning then demands that Government takes action to remove barriers to investment by Veolia in logistics



infrastructure in order to transport increased waste to Woodlawn after closure of Eastern Creek. Veolia will need to acquire a suitable site on which to develop an intermodal transfer station, gain the necessary approvals and construct the facility.

It is emphasised that there are no obvious alternatives to Woodlawn for disposal of residual waste. And large quantities of residual waste are inevitable for some years, even if future mixed waste AWTs prove successful or food/garden waste AWTs become favoured. It is now well recognised that AWT processing of mixed putrescible waste has not lived up to expectations and, at present, no Sydney MSW AWT is actually producing compost fit for sale.

In any case, mixed waste AWTs leave process residuals amounting to some 40% to 50% of feedstock which must (at this time) be disposed of to landfill. And, of course, AWTs which receive only food/garden waste feedstock result in a low value, organic depleted waste stream that it is patently uneconomic to subject to AWT processing. The recently released *Reducing Waste: Implementation Strategy 2011-15* together with the progressively increasing NSW *Waste and Environment Levy* will assist in bringing AWT solutions into a more viable framework.

However, there is clearly no prospect that sufficient AWT capacity could be constructed and commissioned by 2015 to process the 500,000 to 600,000 tonnes each year currently disposed of at Eastern Creek Landfill – and of course, some 200,000 to 300,000 tonnes each year of AWT process residuals would still be need to be accommodated. The ultimate beneficial resolution of AWT process residuals in lieu of landfill disposal is in waste-to-energy thermal technologies. But there is little likelihood that waste-to-energy facilities or arrangements could be put in place and operate at the scale needed before the latter half of the decade (along with successful AWT facilities).

The Woodlawn Bioreactor Landfill has ample capacity to accommodate Sydney's putrescible waste disposal demands, which are expected to continue declining at a trend rate of just 1% to 2% each year until the latter half of this decade. From this time, new waste processing systems (possibly including waste-to-energy facilities) will progressively reach commissioning stage. By 2020, the declining trend in demand for landfill capacity should become more profound.

(b) Competition Implications of Current Waste Input Caps

This Assessment demonstrates the commercial reality that the current aggregate annual waste input caps are set at too low a level to avoid one or both of Veolia and SITA/WMAC breaching their annual waste input cap(s) and thus failing to comply with Planning Consent and Licence conditions. This serious situation was noted in the *Public Review - Landfill Capacity and Demand*, where it was recommended that the waste input caps should be removed without delay.

Veolia has raised, in discussions about the current assessment, a further serious issue in relation to its Woodlawn waste input cap. The proponent points out that the current annual waste input cap prevents Veolia from submitting a valid tender for



any municipal waste disposal contract other than for the contracts it currently holds as they mature. This is because no company can knowingly contract to provide services that would result in a compliance breach. The complementary situation applies to SITA (as it formerly applied with WSN).

The outcome of course is an unintended return to a monopoly market situation that prevailed prior to 2004. Veolia will be the only bidder on maturing waste disposal contracts it currently holds and SITA will be the only bidder on maturing waste disposal contracts it holds. Veolia cites as evidence of this situation its absence from tendering for municipal residual waste disposal contracts including for Penrith City Council.

The current level of the annual waste input cap prevents open market competition for maturing waste contracts. At this current level, the caps may be considered by the ACCC to be an anti-competitive.

(c) Future resource recovery

The Office of Environment and Heritage (OEH), in its submission on the EA to the Department, "...notes that the volume of waste able to be received at Woodlawn would make up a significant proportion of the mixed municipal waste generated in the Sydney Region". OEH rightly wonders whether this might have an adverse effect on the scope for future resource recovery. A fundamental question that might be asked by those charged with implementing the *WARR Strategy* is: if the Veolia development application is approved in its entirety, might some 500,000 tonnes/year of municipal waste be blocked from future AWT processing for resource recovery?

The fact is that an approval of the Woodlawn Expansion Project would certainly provide Veolia with an increased annual waste input approval— and this would enable Veolia to compete in the market for future waste disposal. However, the proponent would be far from assured that any increase in annual waste input cap would result in any additional Sydney waste actually flowing to the Woodlawn Bioreactor Landfill. So an increased waste input approval is nothing more than a *notional* increase in actual waste input. The following analysis explains why.

- The actual waste that Veolia would hope to include in the additional 500,000 tonnes/year of Sydney waste increase being sought is currently being disposed of under contracts at former WSN landfills in Sydney (read SITA and WAMC for the future).
- Most of the waste would be sourced from local councils. Contracts to dispose of this waste could not be contested until the existing contracts (held by WSN/SITA) progressively mature over a five year period. Some 15 to 20 local councils would be involved. Note that Veolia could not contest any maturing contracts, other than those it already holds, until it developed a new transfer station – possibly around 2015.
- As waste disposal contracts mature, many local councils are likely to choose to tender for AWT processing of mixed waste or AWT processing of food/garden



waste (and, probably, disposal of organic depleted mixed residual waste). Once the persistent AWT concerns are settled, few local councils are likely to stick with tendering for continuing disposal of all municipal waste – given the increasing *Waste and Environment Levy* and the array of new measures set out in the *WARR Strategy Implementation Plan 2011-2015* to promote food/garden waste processing and support AWT development.

- Veolia would have to actually *win* any new contracts to dispose of any additional waste in competitive tendering – in which Veolia has a distinct cost disadvantage to SITA due to the following factors:
 - o Veolia has a relatively high waste transport cost (road/rail/road covering some 200km).
 - o Veolia has a relatively high landfill operating cost as a result of its use of the bioreactor technology.
 - o Veolia could not expand the waste throughput at the Clyde Transfer Station by more than 100,000 tonnes/year. This avenue has been cut off by two previous Court actions in relation to development of the Clyde site. Veolia would therefore need to establish a new intermodal transfer station in Sydney to facilitate loading the waste from road to rail for the bulk haul to Crisps Creek. This would require identification and acquisition of a suitable site, gaining of planning approval, and development of a substantial new transfer station. The all-up capital and property acquisition cost could be in the order of \$30-\$40 million.
 - o Veolia would need to amplify the Crisps Creek intermodal transfer station to provide capacity for additional waste throughput.



- Veolia would have to retain, in competitive tendering, contracts it already holds for disposal of Sydney waste as these contracts mature. This again relies on council decisions to persist with waste disposal contracting rather than contract for AWT processing and, in respect of those that make such a decision, for Veolia to actually win competitive waste disposal tenders. In this regard it is important to remember that Veolia is a service provider and operates in a rational marketplace – ultimately, the choice of whether to procure waste processing services or landfill disposal services rests with Veolia's clients rather than with waste contractor.

For all the reasons outlined above, there is no reason to suppose that a decision to increase (or remove) the annual waste input cap would act to block waste from AWT processing. Nor would it provide a basis for Veolia to successfully prosecute a landfill gate-price price war with SITA. If any such price-war was to prevail, then Veolia would be the inevitable loser.



(d) Resource Recovery Level

Veolia is a respected international waste management corporation clearly involved in significant resource recovery activities as well as operating its Woodlawn Bioreactor Landfill. The EA and the Veolia *Submissions Report* demonstrate that the company's activities in resource recovery at source (rather than at the *end-of-pipe* landfill site) are consistent with the NSW *WARR Strategy* and with the intent of Clause 123 of *SEPP (Infrastructure) 2007*. The EA and the Veolia *Submissions Report* also clearly demonstrate the company's commitment to building the (already approved) 280,000 tonne/year AWT at Woodlawn to assist in rectifying the degraded mine site areas. This is in accordance with Clause 123 of *SEPP (Infrastructure) 2007*.

Veolia quite reasonably wants to reserve its commercial decision on when to build the AWT to be contingent on (a) winning waste processing contracts to provide contractual certainty of waste flow; and/or (b) clarity that the composted material produced from mixed waste feedstock will be permitted to apply to the degraded lands surrounding the former minesite. The Government should avoid becoming involved in the commercial decisions that Veolia must make. This can best be achieved by resisting any temptation to make any approval of increased landfill capacity contingent on construction of the proposed AWT.

Moreover, the analysis at para (c) above demonstrates that any increase in waste input cap would not necessarily result in any additional waste flowing to the Woodlawn Bioreactor Landfill. There are multiple competition issues, as well as infrastructure procurement issues, to be navigated by Veolia. And further, the choice between landfill and AWT is in the hands of councils rather than Veolia – as a waste management and resource recovery firm, Veolia is a service provider and responds to the market. In short, the level of the waste input cap has no impact on the waste management decisions of waste generators.

Although Clause 123 of *SEPP (Infrastructure) 2007* is silent on energy production from waste, both production of renewable energy and avoidance of greenhouse gas emissions are central parts of the State Plan. The Veolia *Submissions Report* shows that the level of energy recovery from the Woodlawn Bioreactor Landfill is accelerating and that gas production is expected to increase from the current 2,000 m³/hour to more than 12,000 m³/hour. Thus, the Woodlawn Bioreactor Landfill can strongly contribute to the State Plan and some recognition of this contribution is appropriate.

(e) Conservation of Landfill Capacity

Veolia propose a further allocation of 80,000 tonnes/year of waste input to the Woodlawn Bioreactor Landfill from regional areas including the ACT, which is within the broad regional area. There would be merit in this proposal if it resulted in closure of small country town landfills or tips.

Given the likely continuing demand for a measure of Sydney waste disposal, the inevitable completion of Sydney landfills, and the uncertainty about the success of future AWT facilities, it would be prudent to reserve capacity for Sydney putrescible



waste disposal at the Woodlawn Bioreactor Landfill. In the circumstances disposal of further regional waste to the Woodlawn Bioreactor Landfill (above that amount already approved) might best be reserved only for proximate local councils willing to take the opportunity to permanently close poorly performing landfills.

(f) Environment Protection Issues

Issues raised by OEH in response to the EA have been addressed in the Veolia *Submissions Report* dated March 2011. The revised air quality assessment confirms that odour control is within the required performance goal. OEH views on this will be important.

(g) Land Use

The proposal would make more rapid the long term rehabilitation of the degraded mine site through the application of waste materials to the quarry void and direct rehabilitation of the former tailings dams and the mineral ore processing area. It is unlikely that rehabilitation could be completed without using waste materials as fill.

Main Findings and Recommendations

The Environmental *Assessment Report* for the Woodlawn Expansion Project (August 2010), and the *Proponent's Response to Submissions Report* (March 2011) demonstrates that the proposed expansion project could be accomplished without harm to the environment.

This Review and Assessment of the proposal clearly demonstrates the need for the project and the fact that by 2015 the significant landfill capacity available at Woodlawn Bioreactor Landfill will be required. This Review and Assessment also demonstrates that transfer facilities will be required to complete the logistics infrastructure chain required to move waste by rail from Sydney to Woodlawn.

The Review and Assessment finds that the proposed Woodlawn Expansion Project is consistent with the resource recovery provisions outlined in Clause 123 of *SEPP (Infrastructure) 2007*. The EA and the *Veolia Submissions Report* also demonstrate the company's intention to build a 280,000 tonne/year AWT at Woodlawn to produce product from putrescible waste to assist in rectifying the degraded mine site areas.

Moreover, this Review and Assessment confirms the futility of the annual waste input cap policy.

Recommendations

1. The annual waste input cap should be removed without delay because:
 - (a) the input cap serves no purpose in reducing the generation of waste by third parties over which landfill operators have no control;



- (b) the aggregate annual waste input cap is set at less than the continuing level of demand for waste disposal; and
 - (c) the input cap policy prevents open market competition for maturing waste contracts.
2. Approval of the proposal to increase waste input to the Woodlawn Bioreactor Landfill should be granted on the following basis:
- (a) Immediate approval of an additional 0.09 million tonnes taking approved input rate to 0.5 million tonnes/year.
 - (b) Approval of an additional 0.45 million tonnes/year contingent upon the granting of planning approval for transfer facilities which would enable the waste to be loaded to rail wagons in Sydney and transported to Woodlawn.
 - (c) Approval of an additional 0.1 million tonnes/year to allow for disposal of AWT process residuals contingent upon commencement of construction of the approved AWT at Woodlawn.
3. Approval of an additional 0.08 million tonnes/year proposed to accommodate regional residual waste should be withheld. Disposal of further regional waste to the Woodlawn Bioreactor Landfill (above that amount already approved) should be reserved only for proximate local councils willing to take the opportunity to permanently close poorly performing landfills.

