

Mr. David Naughton,
Group Environmental Manager,
PANDA Waste Services,
Cappagh Road,
Finglas,
Dublin 11.

13th January 2016.

Re: Environmental Liability Risk Assessment (ELRA), Cappagh (W0261-02)

Dear Mr Naughton,

I refer to the Environmental Protection Agency's (the Agency) requests for amendments to the revised ELRA costs submitted in December 2015 and the revised DMP costing sheet submitted on the 19th November. The Agency's comments are in italics, followed by our response. A revised Table 7.1 and amended DMP costing sheet, which address the issues raised by the Agency, are enclosed.

ELRAs (W0140, W0261, W0263 and W0396) – comments apply to all ELRAs unless otherwise specified.

1. *Confirm there are no hazardous building materials (e.g. asbestos) used in the buildings, as the disposal costs included refers to non-hazardous building debris only.*

There are no hazardous building materials used in the buildings.

2. *The Agency is aware of a known event whereby remediation of a stream as a result of the discharge of contaminated fire water from a waste fire cost approximately €300,000. As such the cost proposed in some of the ELRAs is too low. The cost should be revised where necessary. (W0263 already quotes a cost of €300,000 for this line item so this is fine).*

The cost for the remediation of the stream has been revised to €300,000 and Table 7.1 amended accordingly.

Cont'd

3. *The unit rate for the removal and off-site disposal of fire damaged materials varies in the ELRAs. In the event of a fire occurring it is considered that all fire damaged wastes would have to be removed off site as non-for disposal. Taking this into consideration the unit rates of €15.21 and €59.90 at W0039 and W0263 respectively are too low. These need to be revised.*

Although the Agency's comments do not apply to the Cappagh site we checked the unit rate for the removal and disposal of fire damaged materials and noted that it was slightly less than the rate for the Beuparc site. For the sake of consistency this rate has been revised upwards to €105/tonne and Table 7.1 amended accordingly.

4. *The tonnage proposed for the 'Removal and off-site disposal of fire damaged materials may have to be revised as per the comments below for the relevant DMPs (W0039 and W0261).*

The tonnage for the removal and off-site disposal of fire damaged materials has been revised upwards and Table 7.1 amended accordingly.

DMPs (W0039 and W0261) – again comments apply to both DMPs unless otherwise specified:

5. *There are no closure validation cost included.*

A closure validation cost of €5,000 has been included in the DMP cost sheet, a copy of which is enclosed.

6. *The cost of the Drain and Tank Jet Vac Cleaning is listed as €1,880 whereas it is €9,700 in the ELRAs. This needs to be corrected.*

The cost of Drain and Jet Vac Cleaning in the DMP is based on the routine cleaning of the drains i.e. normal working conditions and not following the release of contaminants into the drain. The worst case scenario in the ELRA is a fire that generates large volumes of firewater run-off that enters and is contained in the surface water drains and the attenuation tank. This means the cleaning will take significantly longer than normal and accounts for the discrepancy between the costs in the ELRA and the DMP.

7. *Confirm whether it is correct that there is no disposal cost included for the DMR in the proposal for W0261 (as a cost of € 21.5/tonne is quoted in W0039). Also justification is required of the nil disposal cost for batteries in both DMPs.*

A unit rate should have been provided for the disposal of DMR and the DMP cost sheet has been amended to include a disposal cost of €21.50/tonne. The batteries have a significant scrap value, currently ranging between €300 and €400/tonne; however in accordance with the approach required by the OEE this asset value has been discounted and a nil cost assigned to the removal from both sites.

8. *The guidance requires that the DMP outline the maximum storage capacity and maximum storage amounts of waste in practice at a facility. At W0039 it is noted from the 2014 AER that on average 2,508 tonnes of waste was removed from the site per week. However you propose a tonnage of 701 tonnes at the time of closure. This appears to be too low.*


Cont'd

For W00261, the AER reports an average of 1,350 tonnes of waste were removed per week and you propose a tonnage of 863 tonnes on site at the time of closure. Information in relation to the maximum storage capacity and maximum storage amounts of waste in practice at the facility and justification of the tonnages proposed on site at any one time is required for both DMPs.

The estimates of the amounts of waste on site in practice were based on a detailed review of the types and volumes of waste accepted and the processes carried out at each facility and the available storage capacity.

Wastes are received, processed and consigned on a daily basis, so the quantities consigned from the facility on a weekly basis are not representative of those present at any one time. However for the purpose of agreeing the DMP with the Agency the amount of waste on site at the time of unexpected closure will be 1,175 tonnes. The revised DMP cost sheet is enclosed.

Yours Sincerely


Jim O'Callaghan
For inspection purposes only.
Consent of copyright owner required for any other use.

Enclosed.

Table 7.1 Worst Case Scenario Costs

Task	Description	Quantity (No.)	Measurement Unit	Unit Rate (€)	Cost (€)	Source of unit rates
Response to Risk ID 07- Fire in Shed	Facility Management and Security.	6	Week	6,000	36,000	PANDA
	Fire Services Attendance on Site ¹ .	2	Day	60,000	120,000	PANDA
	Spill containment consumables (extinguishers, booms).	1	Incident	5,000	5,000	
	Testing of contaminated firewater ²	4	Sample	250	1,000	OCM
	Transport of contaminated firewater	794	Tonne	12	9,528	PANDA
	Off-site treatment of fire water. ³	794	Tonnes	23	18,262	PANDA
	Demolition of Building	Item			90,720	EPA Guidance
	Removal and off-site disposal of fire damaged materials ⁴	1,175	Tonnes	105	123,375	PANDA
	Plant and Equipment Hire (Crane, Powerhouse)	3	Day Rate	5,000	15,000	OCM
	Removal and disposal non-hazardous building debris ⁵	500	Tonne	102.76	51,380	
	Cleaning yards	2	Day Rate	500	1,000	PANDA
	Cleaning drains. ⁶	Item	Jet Vac	9,750	9,750	PANDA
	Drain integrity survey.	Item		3,500	3,500	OCM
	Air quality assessment.	1	Fees	3,000	3,000	OCM
	Surface water quality monitoring in storm sewer	12	Sample	250	3,000	OCM
	Ecological Assessment in River Tolka	1		2,500	2,500	OCM
Remediation of the stream <ul style="list-style-type: none"> • Sediment monitoring • Developing remedial programme • Implementing programme • Monitoring effectiveness of programme 	Item		300,000	300,000	OCM	

¹ The day rate of €60,000 is very significantly higher than that set in the EPA’s ELRA guidance on fires at landfills, which is approximately €18,000

² Includes for laboratory analysis, consultants fees itemised separately

³ Includes transport and treatment cost

⁴ Based on tonnage on site at any one time agreed by Agency in the DMP and assumes all is fire damaged

⁵ Based on the non-hazardous nature of the waste in the Shed, the debris will be classified as non-hazardous

⁶ Includes use of Jet Vac tankers and transport and off-site treatment costs.

Task	Description	Quantity (No.)	Measurement Unit	Unit Rate (€)	Cost (€)	Source of unit rates
Response to Risk ID 8 Soil and Groundwater Contamination	Soil borings.	20	Boring	100	2,000	OCM
	Soil monitoring.	40	Sample	200	8,000	OCM
	Soil excavation, transport and disposal ⁷ .	100	Tonnes	250	25,000	EPA Guidance
	Reinstatement of excavated area, including repaving.	100	Tonne	20	2,000	OCM
	Groundwater wells.	4	Borehole	2,500	10,000	OCM
	Groundwater samples ⁸ .	80	Sample	250	20,000	OCM
	Consultancy Services ⁹ .	80	Day	500	40,000	OCM
Total (€)					700,015	
Contingency (40%)					280,006	
Total Including Contingency (€)					980,021	

For inspection purposes only.
Consent of copyright owner required for any other use.

⁷ Based on impacted area of 1000m² to a depth of 0.1m

⁸ Includes for five years post incident monitoring at quarterly intervals

⁹ Includes for Structural Engineer and Environmental Consultant

	EWC Code	Waste Disposal Destination	Tonnage	Disposal Costs per ton	Processing/ton	Loading cost/ton	transport cost/ton	Admin cost/ton	Total cost	Potential Value/Tn	Revenue Value €
Mixed C & D	170904	Thorntons	200	50		3.74		3.19	12,587		
For Landfill (insulation)	200301	Drehid	50	111.5		3.74	8.5	3.19	6,347		
MMW	200301	Drehid	150	111.5		3.74	8.5	3.19	19,040		
Organics	200108	Thorntons	100	70		3.74		3.19	7,694		
Batteries	160601*	Wilton Waste	2	0		3.74	0	3.19	14		0
Metal	191202	Multimetals	40	0		3.74	0	3.19	277	-150	-6,000
Dry Waste	191212	Thorntons	100	82.5		3.74	7.5	3.19	9,694		0
Plasterboard	170802	Thorntons	25	76.5		3.74	0	3.19	2,086		0
WEEE	200136	KMK Metals	5	0		3.74	0	3.19	35		0
MDF	191207	Thorntons	20	50		3.74	7.5	3.19	1,289		0
Soil & Stones	170504	Behan Land Restoration	100	3.5		3.74	5	3.19	1,544		0
Hard Plastics	191212	IPR	20	70		3.74	6	3.19	1,659		0
Green Waste	200201	Bord Na Mona	20	15		3.74	15	3.19	739		0
Timber	191207	Thorntons	60	50		3.74	7.5	3.19	3,866		0
Non Ferrous Metals	191203	Multimetals	5	45		3.74	0	3.19	260	-200	-1,000
Tyres	160103	IPR	2	100		3.74	6	3.19	226		0
Cylinders	160505	Calor Gas/Flo Gas	1	0		3.74	0	3.19	7		0
DMR	200301	DCC MRF	100	21.5		3.74	6	3.19	3,444	-60	-6,000
Baled Cardboard (dunnes)	200101	IPR	90	0		3.74	6	3.19	1,164	-60	-5,400
2nd Grade News (dunnes)	200101	IPR	60	0		3.74	6	3.19	776	-60	-3,600
Baled Plastic (dunnes)	150102	IPR	10	0		3.74	6	3.19	129	-300	-3,000
Hangers (dunnes)	150102	IPR	15	0		3.74	6	3.19	194	-100	-1,500
Waste Water Holding Tank	161002	Navan WWTP	6	5			6.5		69		
Drain & Tanks Jet Vac Cleaning									1,880		
Oil Interceptor & Bunds	130503*	Rilta/Enva	2	90			6.5		193		
Plant/Building Clean down - 2 men/2 days and Equipment									2,250		
Insurance Cover - E/L P/L - 4 weeks									4,000		
Utility Costs - Electricity & Water - 4 weeks									1,000		
Fuel - Derv			12,000	0						-1	-12,000
Fuel - Add Blue			1,000							-0.3	-300
Fuel - Gas Oil			1,000	0						-0.7	-700
Surface water monitoring as per schedule c.2.2									592		
Security - Based on current rates - 4 Weeks									24,000		
Closure Validation Audit									5,000		
Tns ex Diesel Diesel & Liquid			1175						112,054		-39,500
Contingency (10%)									11,205		
Total									123,259		

Notes

Security
Based on current rates at per day cost
Fuel is maximum purchased litres
All clean down water retained in Holding Tank above
Utility based on estimated office power and amenities, and yard lighting
Liquid Waste loading costs included in transport costs
No TFS required, no export from this facility.

Revenue related product:

There is a real revenue value on these products totalling €22,600 that the EPA can achieve.
This has not been considered by the EPA in arriving at total cost.
Also there is potential revenue of approx €0.5m from sale of yard sheds and plant and equipment which has also not been considered in arriving at total cost

For inspection purposes only
Consent of copyright owner required for any other use

Weeks			1
Loading/Handling	Loader	1,400	1,400
	Track	800	800
	2 Men	1,600	1,600
	Diesel	600	600
			<u>4,400</u>
	Tns/Hr	1175	3.74

Admin	Weigh Op	750	750
	Manager	1000	1000
	Procurement	2,000	2,000
		1175	3750
	Tns/Hr		3.19

Drains/Waste	Weeks		0.4
Water Tank/Bunds	JetVac incl Man Hours	4250	1700
Disposal - Est Ltrs	6000	0.03	<u>180</u>
			1880

[Licences](#) [My Notifications](#) [Manage My Users](#) [Help](#)

Welcome **david.naughton@panda.ie**

[SIGN OUT](#)

Licensing Notice Details

[Home](#) >> [All Licences](#) >> [Nurendale \(W0261-02\)](#) >> [All Actions & Notices](#) >> LS Approval - Notice - ELRA/CRAMP Approval

Subject

LS Approval - Notice - ELRA/CRAMP Approval

Created Date

27/01/2016

Dear Mr Naughton,

I refer to your submission LR020382, "ELRA Fi Response".

On the basis of the information provided, the Environmental Protection Agency (EPA) approves your ELRA.

Agreement by the EPA of the ELRA does not constitute an acceptance on the part of the EPA that the ELRA constitutes a description of all potential risks or liabilities or costs that may arise or materialise in relation to the facility, but, rather, constitutes in the view of the EPA as of this time a general assessment of risk and general estimate of costs to inform the overall environmental management and understanding of the licensed site and the putting in place of financial provision. Where additional costs arise relating to prevention or remediation of environmental pollution, these remain the responsibility of the Licensee.

The EPA may at any time, if it considers necessary, revisit and/or revoke this approval.

This approval does not extend to financial provision for the RMP or ELRA costs. The licensee shall provide full proposals for financial provision in accordance with EPA *Guidance on Financial Provision for Environmental Liabilities* without delay. The proposals shall be submitted via EDEN as a financial provision licensee return.

Yours sincerely,

Linda Dalton O'Regan

Inspector

Environmental Protection Agency

Office of Environmental Enforcement, Cork

Tel: 021 487 5540

For inspection purposes only.
Consent of copyright owner required for any other use.

[Licence Details](#)