# **CONSULTANTS ADVICE NOTICE**

Proje	ct: The Next Generation	n Ref No.:	Sr13032
From	: Renton Parker	Date:	9 <sup>th</sup> June, 2017
		Issue:	1
	Attention	Company	Email/Fax
To:	Holly Patrick	Urbis	hpatrick@ubis.com.au
CC:	Sandro Razzi	CORE Engineering	Sandro@coreengineering.com.au
RE: DPE Request to Review The Next Generation PHA			

## 1. INTRODUCTION

In November 2016, Urbis lodged an amended Environmental Impact Statement (EIS) for the Energy from Waste on behalf of The Next Generation to remove from consideration previous assessment reports relating to the technology, air quality and human health risk combined with clarifying the scale of the operation. Following submission of the updated EIS, The Department of Planning and Environment (DPE) has requested:

"The Preliminary Hazard Analysis (PHA) should be critically reviewed in the context of the amended EIS to establish if the results and findings recommendation of the PHA are still valid. Particular attention should be paid to the conclusion that the risks associated with the flue gas treatment are as low as reasonably practicable."

### 2. PHA REVIEW

The PHA developed by RawRisk (dated 20<sup>th</sup> of March, 2015) was reviewed considering the DPE's comments in conjunction with the current Design Brief (dated July, 2017). In terms of assessment against the applicable Hazardous Industry Planning Advisory Papers (HIPAPs), the design of the process did not significantly change in terms of commodities used nor stored; hence, there would be no impact on the consequences estimated for the site and the original findings of the report remain valid.

The report identified no consequences that could result in an offsite impact extended over the site boundary; hence, the fatality risk from the facility was identified to be 0 chances per million per year (pmpy) which is less than the threshold defined in HIPAP No. 4 of 50 chances pmpy. Therefore, the facility would only be classified as 'potentially hazardous' and would be permissible for development.

Based on a further review of the process and how toxic products of combustion are extracted from the process prior to atmospheric discharge, it is still considered that the facility falls within the As Low As Reasonably Practicable (ALARP) range. This is further supported by the safe operation of such facilities using the same design currently operating throughout Europe.

In addition, the PHA occurs in the preliminary stages of development and based on the current design information befitting a preliminary screening, the design appears to be ALARP. Further assessment of the design will occur in detailed design phases such as Hazard and Operability (HAZOP), Construction Hazard Assessment Implication Review (CHAIR) and Fire Safety Studies which will be required as part of development Conditions of Consent. These detailed assessment may identify hazards which require further addressing and would be amended and corrected as part of this process.

# 3. FLUE GAS TREATMENT

The purpose of drawing an ALARP assessment in the PHA was part of the qualitative assessment to determine whether the incidents relating to flue gas discharge would require further consequence analysis on an injury or fatality basis. This assessment reviewed the individual stages for cleaning the exhaust gases and determined that the proposed methods would be effective for extracting the toxic products of combustion. Considering the safe operation of other facilities using the same process, an ALARP assessment could be determined and no additional assessment within the PHA would be required on an injury and fatality risk basis.

## 4. CONCLUSIONS

The PHA (dated the 20<sup>th</sup> of March, 2015) prepared for the Energy from Waste facility as part of the EIS was reviewed per the DPE's request. Based on this review, it is concluded that the original findings of the report remain valid and that the facility does not exceed the acceptable risk criteria defined in HIPAP No. 4. Therefore, the facility would only be classified as 'potentially hazardous' and would be permissible for development on an injury and fatality risk basis.

### For and on behalf of CORE Engineering

Renton Parker Risk Engineer BEng (Chem. Hons) MIEAust CPEng NER, VPAIDGC