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APPROPRIATE ASSESSMENT

STAGE 1 SCREENING

PROPOSED INCREASE IN WASTE ACCEPTANCE

KILLARNEY WASTE DISPOSAL

AUGHACURREEN

COUNTY KERRY

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Prepared For: -

Killarney Waste Disposal,
Aughacurreen,
County Kerry.

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1. INTRODUCTION

Killarney Waste Disposal, trading as KWD Recycling, has applied to the Environmental Protection Agency (EPA) for a review of its waste licence (Reg No. W0217-01) to increase the amount of waste accepted at its facility at Aughacurreen from 40,000 tonnes to 59,000 tonnes annually.

The EPA has requested KWD Recycling to provide a screening for Appropriate Assessment in accordance with the document *'Appropriate Assessment of Plans and Projects in Ireland — Guidance for Planning Authorities'*, issued in 2009 by the Department of the Environment, Heritage and Local Government, and revised in 2010.

1.1 Appropriate Assessment

The European Union (EU) Habitats Directive (92/43/EC) and the EU Birds Directive (2009/147/EC) identify designated areas (Special Areas of Conservation (SAC) and Special Protection Areas (SPA) respectively) that are collectively known as Natura 2000 Sites. The Habitats Directive, which is implemented under the European Communities Birds and Natural Habitats) Regulations 2011 (S.I. No 477 of 2011), requires an “appropriate assessment” of the potential impacts any proposed development that may have an impact on the conservation objectives of any Natura 2000 site.

Article 6(3) of the Directive stipulates that *any plan or project not directly connected with or necessary to the management of a Natura 2000 site, but likely to have a significant effect thereon...shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.*

Guidance documents issued by Department of Environment, Heritage and Local Government and the National Parks and Wildlife Services recommend that the assessment be completed in a series of Stages, which comprise:

Stage 1: Screening

The purpose of this Stage is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a Natura 2000 site in respect of the site's conservation objectives.

Stage 2: Appropriate Assessment

This Stage is required if the Stage 1 Screening exercise identifies that the project is likely to have a significant impacts on a Natura 2000 site.

Stage 3: Assessment of Alternative Solutions.

If Stage 2 determines that the project will have an adverse impact upon the integrity of a Natura 2000 site, despite the implementation of mitigation measures, it must be objectively concluded that no alternative solutions exist before the plan can proceed.

Stage 4: Compensatory Measures:

Where no alternative solutions are feasible and where adverse impacts remain but imperative reasons of overriding public interest require the implementation of a project an assessment of compensatory measures that will effectively offset the damage to the Natura site 2000 is required.

KWD Recycling commissioned O'Callaghan Moran & Associates (OCM) to complete a Stage 1 Screening to determine the effects of the proposed increase in the amount of waste accepted on the nearby Natura 2000 sites.

1.2 Methodology

The Stage 1 Screening was based on a site inspection and the scope of the proposed development. It was conducted in accordance with the guidance presented in the "Assessment of Plans and Projects significantly affecting Natura 2000 sites, Methodological Guidance on the provisions of Articles 6(3) and 6(4) of the Habitats Directive 92/43/EEC" (2001); The Department of Environment, Heritage and Local Government (2009, revised February 2010) Appropriate Assessment of Plans and Projects in Ireland and the National Parks and Wildlife Services (2010) Circular NPW 1/10 & PSSP 2/10 Appropriate Assessment under Article 6 of the Habitats Directive: Guidance for Planning Authorities.

2. PROJECT DESCRIPTION

KWD Recycling currently accepts, processes and stores non-hazardous residual household and commercial wastes pending transfer to other waste recovery/disposal facilities. The current licence limits the amount waste that can be accepted annually to 40,000 tonnes. The waste operational hours are 7.00am to 8.00pm Monday to Saturday.

The mixed municipal waste (black bin) is processed inside the main process building to remove the organic and metal wastes. The remaining materials are then stored inside the building before being sent to other waste management facilities for further processing. The organic matter is loaded into a trailer parked inside the building and when this is full it is sent to an off-site treatment plant.

The dry recyclables are sorted and bulked and stored inside the main processing buildings and a separate bulk plastics shed before being sent off-site for further processing.

The food waste (brown bin) is accepted but is not handled at the site, apart from bulking up. The incoming waste is off-loaded directly into a trailer that is parked in a fully enclosed structure. When the trailer is full it is sent to an off-site biological treatment facility.

The construction and demolition wastes are handled inside the main processing building, where they are sorted into the different parts, concrete rubble, metal, timber, plastics etc. The metals are then brought to the metal baling area where they are stored before being baled and cut for transport and then sent to metal recycling plants. The timber is brought to a timber storage yard, where it used to be shredded and stored before being sent off-site. The shredding stopped in 2016.

Water is obtained from the mains supply and electricity from a utility company. Sanitary wastewater is treated in an on-site treatment plant and the treated effluent discharged to ground. Diesel for the waste collection trucks and the plant used to handle the waste is stored in above ground tanks located at the southern boundary. Diesel for the on-site electricity generator is stored in an internal tank. With the exception of the timber and metals all wastes are stored inside buildings or fully enclosed structures.

Rain water run-off from the roof of the main processing building goes to a drain that runs through the site. Run-off from areas where there is the potential for serious contamination to occur is collected in holding tanks and then sent off-site for treatment in the Irish Water treatment plant. Run-off from the remaining yards is collected and passed through settlement tanks and an oil interceptor before being treated in an on-site reed bed, with the treated water going to a percolation area.

The EPA licence specifies emission limit values for the rain water run-off, dust and noise and requires regular surface water, groundwater, dust and noise monitoring to confirm

compliance with the emission limit values and, if they are exceeded to ensure corrective actions are carried out.

The proposed increase in the annual waste throughput will not require the expansion of the site, the construction/provision of any new buildings/structures, or any alteration to the existing site layout and operations. There will be no change to the waste acceptance hours but the operational hours will expand to 6.00am to 12.00pm and operational hours. It will not give rise to any new emissions to surface water or sewer, nor will it contribute to increased noise, dust and odour emissions.

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3. NATURA 2000 SITES

The facility is not in or adjacent to any Natura 2000 Site. The nearest sites are the Killarney National Park, McGillicuddy Reeks and Caragh River Catchment SAC (Code 000363) which is 2km to the south-east and the Castlemaine Harbour SAC (Code 000343, which is 2.5km to the north (Figure 3.1).

SACs are selected for the conservation and protection of habitats listed on Annex I and species (other than birds) listed on Annex II of the Habitats Directive, and their habitats. The habitats on Annex I require special conservation measures. SPAs are selected for the conservation and protection of bird species listed on Annex I of the Birds Directive and regularly occurring migratory species, and their habitats, particularly wetlands.

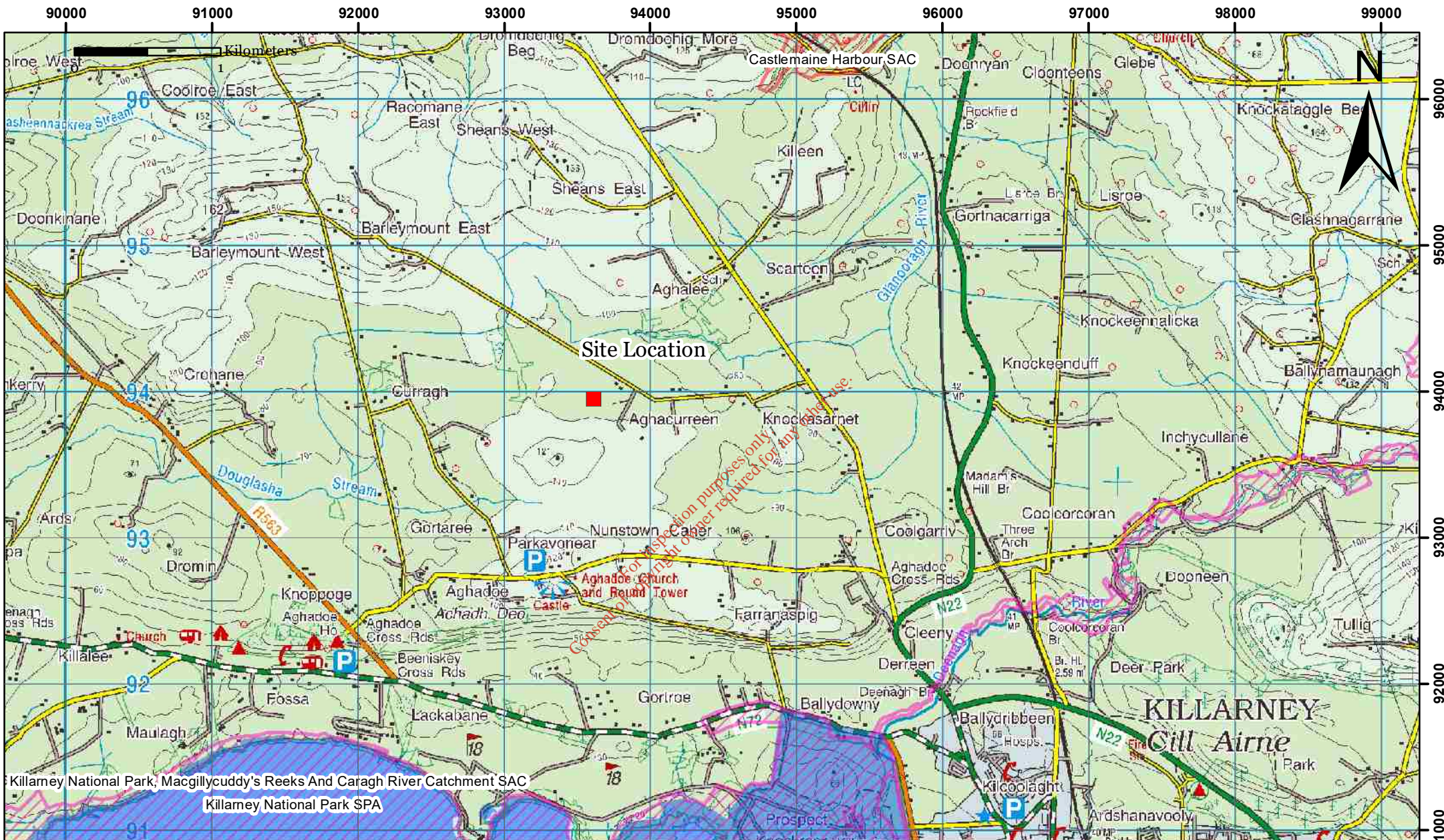
Copies of the site Synopses for the Killarney National Park, McGillicuddy Reeks and Caragh River Catchment, and the Castlemaine Harbour SACs are in Appendix 1.

3.1 Conservation Objectives

A statement of Conservation Objectives is prepared for each designated site which identifies the qualifying interests or conservation features. The Conservation Objectives are intended to ensure that the relevant habitats and species present on a site are maintained, and where necessary restored, at a Favourable Conservation Status.

Favourable Conservation Status of a habitat, as defined in 2011 Birds and Natural Habitats Regulations, is when:

- its natural range, and area it covers within that range, are stable or increasing;
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and
- the conservation status of its typical species is favourable.




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Environmental Management for Business

CLIENT
 Killarney Waste Disposal

TITLE
 Natura 2000 Sites



Details:
 Site Location
 Castlemaine Harbour SAC
 Killarney National Park, Macgillicuddy's Reeks And Caragh River Catchment SAC
 Killarney National Park SPA

Figure 9.1

Conservation Status of a species is when:

- The Favourable population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The objective for designated sites is to maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species as listed above for which the SAC/SPA has been selected. Copies of the Conservation Objectives for the Killarney McGillicuddy Reeks and Caragh River Catchment and the Castlemaine Harbour SACs are in Appendix 2.

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4. LIKELY EFFECTS

4.1 Setting

The facility is not located in or adjacent to a Natura 2000 Site. The closest Natura 2000 Site where there is a potential pathway from the facility is the Castlemaine Harbour SAC. The drain that runs through the facility connects to a tributary of the Glanooragh River which itself is a tributary of the River Laune.

The majority of the Laune catchment is in the Castlemaine Harbour SAC. Rainwater run-off from the roof of the main processing area enters the drain that runs through the site. This is the only emission to the drain from the facility.

4.2 Surface Water Quality

KWD Recycling monitors the quality of the rainwater run-off that enters the drain at two locations (R1 and R2) annually for the parameters specified in the licence. The results of the monitoring carried out in 2015 and 2016 are in Tables 4.1, 4.2, 4.3 and 4.4. At the time this assessment was completed the 2017 results were not available.

The licence does not specify emission limit values and, for assessment purposes the tables include the environmental quality standards (EQS) for a 'river water body good status' surface waters set in the EC Environmental Objectives (Surface Water) Regulations 2009. Although an EQS is not intended to be either an emission limit, or trigger value, it is useful in assessing the likely impact of a discharge on a receiving water course.

The ammonia levels exceeded the EQS (average value) but the other parameters were, as expected, significantly below the EQS, where these have been established. As the run-off comprises rainwater the cause of the elevated ammonia is not known. It may be associated with birds roosting on the roof.

Table 4.1 Surface Water Monitoring Results – 2015 R-1

Parameter	Units	02/09/2015	EQS
pH	pH units	7	4.5-9
Conductivity	uS/cm	19.1	
Ammonia as (N)	mg/l	0.32	<0.065 ¹
Chloride	mg/l	3.45	
Total Suspended Solids	mg/l	<2	
Sulphate	mg/l	1.11	
Antimony	ug/l	6.39	
Arsenic	ug/l	<1	20
Cadmium	ug/l	<1	
Chromium	ug/l	<1	32
Copper	ug/l	1.2	5
Lead	ug/l	1.3	
Mercury	ug/l	<0.5	
Nickel	ug/l	<1	
Selenium	ug/l	1.7	
Tellurium	ug/l	<1	
Thalium	ug/l	<1	
Tin	ug/l	2.6	

Table 4.2 Surface Water Monitoring Results – 2015 R2

Parameter	Units	02/09/2015	EQS
pH	pH units	6.5	4.5-9
Conductivity	uS/cm	27.6	
Ammonia as (N)	mg/l	0.3	<0.065
Chloride	mg/l	2.39	
Total Suspended Solids	mg/l	2	
Sulphate	mg/l	1.1	
Antimony	ug/l	5.27	
Arsenic	ug/l	<1	20
Cadmium	ug/l	<1	
Chromium	ug/l	<1	32
Copper	ug/l	<1	5
Lead	ug/l	<1	
Mercury	ug/l	<0.5	
Nickel	ug/l	<1	
Selenium	ug/l	<1	
Tellurium	ug/l	<1	
Thalium	ug/l	<1	
Tin	ug/l	1.3	

¹ Average concentration

Table 4.3 Surface Water Monitoring Results – 2016 R-1

Parameter	Units	01/12/2016	EQS
pH	pH units	7.2	4.5-9
Conductivity	uS/cm	27.7	
Ammonia as (N)	mg/l	1.07	<0.065
Chloride	mg/l	3.45	
Total Suspended Solids	mg/l	62	
Sulphate	mg/l	0.83	
Antimony	ug/l	34.9	
Arsenic	ug/l	<1	20
Cadmium	ug/l	<1	
Chromium	ug/l	<1	32
Copper	ug/l	3.3	5
Lead	ug/l	4.2	
Mercury	ug/l	<0.5	
Nickel	ug/l	<1	
Selenium	ug/l	<5	
Tellurium	ug/l	<1	
Thalium	ug/l	<1	
Tin	ug/l	4.8	

Table 4.4 Surface Water Monitoring Results – 2016 R-2

Parameter	Units	01/12/2016	EQS
pH	pH units	7.2	4.5-9
Conductivity	uS/cm	316	
Ammonia as (N)	mg/l	0.34	<0.065
Chloride	mg/l	24.2	
Total Suspended Solids	mg/l	2	
Sulphate	mg/l	24.4	
Antimony	ug/l	<1	
Arsenic	ug/l	1.7	20
Cadmium	ug/l	<1	
Chromium	ug/l	<1	32
Copper	ug/l	5.1	5
Lead	ug/l	<1	
Mercury	ug/l	<0.5	
Nickel	ug/l	0.28	
Selenium	ug/l	<5	
Tellurium	ug/l	<1	
Thalium	ug/l	<1	
Tin	ug/l	3.7	

The licence requires monitoring of the drain up and downstream of the site for pH, electrical conductivity and ammonia. The results of the monitoring carried out in 2016 are in Table 4.5. At the time of the preparation of this EIAR the results of the monitoring completed in 2017 were not available. The Table includes for comparison purposes the 'average' EQS for 'Good Status' waters.

Table 4.5 Surface Water Quality 2016 KWD Monitoring

Parameter	Units	16/11/2016 Upstream	16/11/2016 Downstream	16/12/2016 Upstream	16/12/2016 Downstream	EQS
Conductivity	uS/cm	266	261	268	312	
pH	pH Units	6.9	7.3	6.7	7.1	6-9
Ammonia	mg/l	0.07	0.06	0.18	0.27	0.065
BOD				2.3	1.2	<1.5 (Mean)
COD				136	52	

In the December event the ammonia exceeded the EQS at both up and downstream locations. The BOD exceeded the EQS in the upstream sample, but not in the downstream one.

In February and March 2016 the EPA monitored the quality in the drain up and downstream of the site and the results are in Table 4.6.

Table 4.6 Surface Water Quality EPA Monitoring 2016

Parameter	Units	16/02/2016 Upstream	16/02/2016 Downstream	07/03/2016 Upstream	07/03/2016 Downstream	EQS
Conductivity	uS/cm	-	-	218	306	-
pH	pH Units	-	-	6.7	7.1	6-9
Suspended Solids	mg/l	9	8	<4	4	-
Ammonia	mg/l	0.038	0.51	0.18	0.27	0.065
Chloride	mg/l	30.4	37.8	30.1	32	
Orthophosphate	mg/l	0.047		0.029	0.022	
Nitrite	mg/l	-	-	0.0183	0.0056	
BOD	mg/l	-	-	<1	1	<1.5 (Mean)
COD	mg/l	78	45	57	46	
TON	mg/l	<0.2	0.49	0.49	0.34	
Coliforms	MPN	-	-	-	687	
Faecal Coliforms	MPN	-	-	-	261	

The results were generally consistent with the KWD Recycling monitoring findings. While faecal coliforms were detected in the downstream sample in the March event, in the

absence of any results for the upstream sample it is not possible to comment on the significance of this. The results of the chemical tests indicate that facility operations were not impacting on the water quality in the drain.

4.3 Proposed Development

The proposed increase in the annual waste throughput will not require the expansion of the site, the construction/provision of any new buildings/structures, or any alteration to the existing site layout and operations. There will be no change to the waste acceptance and operational hours. It will not require the use of any new raw materials that have the potential to cause contamination.

It will not give rise to any new emissions to surface water or sewer, nor will it contribute to increased noise, dust and odour emissions or illumination. Therefore the development does not require the provision of additional emission mitigation measures.

4.4 Assessment of Effects

The Castlemaine Harbour SAC is the only Natura 2000 Site where there is a pathway (surface water) between it and the KWD Recycling facility.

Rainwater run-off from the roof of the main processing building will continue to discharge to the drain that runs through the site. The discharge will be weather dependent and periodic.

The results of the monitoring carried out by KWD indicates that the rainwater discharge has no perceptible effect on the water quality in the drain. As referred to above, the proposed development will not result in any change to either the volume or quality of the discharge to the drain.

Given the nature of the emission to the drain and the distance between the site and the stretch of the Laune that is in the Castlemaine Harbour from the Natura 2000 Sites, the proposed development will not have any perceptible effect on any of the Conservation Objectives for the Castlemaine SAC.

5. SCREENING CONCLUSION & STATEMENT

The proposed increase in the annual waste throughput will not result in any new or additional emission/disturbance that could present a significant risk to the Conservation Objectives of any of the Natura 2000 Sites within 15km of the MRF. Therefore Stage 2 Appropriate Assessment is not required.

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APPENDIX 1

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