



Dunbia (UK) 2021 Annual Performance Report

Prepared by Luke Healy

Date 17th January 2022

Contents	Page
1.0 Introduction	3
2.0 Monitoring Results Comparison	3
2.1 Production	4
2.2 Water	5
2.3 Effluent	6
2.4 Energy	7
2.5 Waste	8

1.0 Introduction

Dunbia (UK) became a division of the Dawn Meats group in the latter half of 2017. Dunbia (UK) operates an animal slaughtering and meat processing business at its Llanybydder facility under a PPC Permit, No. BV9863IH issued by Natural Resources Wales. The facility at Llanybydder is comprised of slaughter and boning of carcasses into primal cuts for further processing / retail packing at other facilities.

Condition 4.2.2 of permit BV9863IH requires the operator to produce a report of the performance of the activities with a comparison over the previous year to include the following:

- (a) A review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;
- (b) The annual production/treatment data set out in schedule 4 table S4.2; and
- (c) The performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

2.0 Monitoring Results Comparison

This section reviews the monitoring results required to be submitted under permit BV9863IH and aims to explain any patterns or changes to the data submitted.

2.1 Production

Year	Slaughtering of Animals (Carcase Sales Tonnes)	Primal Cuts & Retail Packs (Boning Hall Sales Tonnes)	Total Production (Tonnes)
2007	Production data was not collected in this format prior to licence review in 2013.		
2008			
2009			
2010			
2011			
2012			
2013	3,992.404	23,971.66	27,964.064
2014	3,897.663	21,125.312	25,022.975
2015	2,696.765	19,442.125	22,138.890
2016	2,213.251	17,516.19	19,729.441
2017	3,176.316	18,983.913	22,160.23
2018	2,668.596	15,183.404	17,852.000
2019	2,430.390	13,613.667	16,044.057
2020	2,505.065	14,175.751	16,680.816
2021	2,047.167	19,814.29	21,861.457

Explanation for change in 2021

Carcass sales tonnage was reduced in 2021 compared to 2020 as a result in the change in activities on site. The changes include the addition of a beef slaughter hall. For a period during the construction of the beef slaughter hall the lamb slaughter hall was not operational to facilitate the works. Boning sales tonnage was increased to facilitate strong retail sales in 2021 which links to a greater demand seen due to covid.

2.2 Water

Year	Mains Water (m ³)	Borehole Water (m ³)	Total Water (m ³)	Water Usage per Tonne of Production (m ³ /T)
2007	2,895	56,514	59,409	Production data was not collected in this format prior to licence review in 2013.
2008	2,752	56,868	59,620	
2009	6,954	48,083	55,037	
2010	8,738	35,785	44,523	
2011	7,378	54,147	61,525	
2012	4,625	52,759	57,384	
2013	5,390	58,575	63,965	2.287
2014	2,464	75,645	78,109	3.12
2015	2,294	90,522	92,816	4.19
2016	3,068	91,762	94,830	4.806
2017	2,465	99,365	101,830	4.595
2018	2,502	101,256	103,758	5.812
2019	2,061	104,520	106,581	6.643
2020	1,448	81,939	83,387	4.999
2021	1,091	87,909	89,000	4.071

Explanation for change in 2021

Total water usage has increased in 2021 compared to 2020. However, the water use per tonne produced has decreased. This was due to improved efficiencies achieved following the completion of water reduction projects including the upgrade of the knife sterilisers on site.

2.3 Effluent

Year	Discharged to Sewer via S1(m ³)	Discharged to River via W1 (m ³)	Total Effluent (m ³)	Effluent Generation per Tonne of Production (m ³ /T)	Imported Effluent (m ³)
2007	63,667	0	63,667	Production data was not collected in this format prior to licence review in 2013.	0
2008	63,176	0	63,176		0
2009	47,902	0	47,902		0
2010	30,103	16,504	46,607		0
2011	0	50,293	50,293		0
2012	0	66,220	66,220		0
2013	0	71,451	71,451	2.555	0
2014	0	94,862	94,862	3.791	0
2015	0	89,987	89,987	4.065	0
2016	0	86,933	86,933	4.406	0
2017	0	104,866	104,866	4.732	0
2018	0	105,871	105,871	5.930	0
2019	0	110,052	110,052	6.859	0
2020	0	84,335	84,335	5.056	0
2021	0	70,624	70,624	3.231	0

Explanation for change in 2021

Total effluent discharged from Dunbia (Llanybydder) decreased in 2021 compared to 2020. This is in line with the reduction in water use as mentioned in 2.2 above.

2.4 Energy

Year	Total Electric (mWh)	Total Gas Oil (mWh)	Total Energy (mWh)	Total Energy per Tonne of Production (mWh/T)
2007	4,370.42	3,631.41	8,001.83	Production data was not collected in this format prior to licence review in 2013.
2008	4,756.03	3,146.87	7,902.9	
2009	4,825.281	3,034.91	7,860.19	
2010	4,900.073	3,788.12	8,688.19	
2011	4,949.416	3,437.347	8,386.76	
2012	4,597.886	3,593.08	8,190.97	
2013	5,454.174	4,688.136	10,142.31	0.363
2014	5,537.363	4,632.90	10,170.26	0.406
2015	5,144.454	5,340.09	10,484.54	0.474
2016	5,409.877	4,945.46	10,355.34	0.525
2017	5,773.418	4,872.81	10,646.23	0.480
2018	5,919.908	6,162.41	12,082.31	0.677
2019	5,745.143	5,426.60	11,171.74	0.696
2020	4,984.611	5,096.36	10,080.97	0.604
2021	4,633.35	4,221.85	8,855.20	0.405

Explanation for change in 2021

There has been a decrease in overall total energy consumption and a reduction in energy consumption per tonne of production in 2021 compared to 2020. This reduction in energy consumption is due to increased efforts around KPIs and energy usage reduction projects and improved shutdown practices facilitated by ISO50001.

2.5 Waste

Year	Average BOD (mg/L)	Hazardous Recovery (Tonnes)	Hazardous Disposal (Tonnes)	Non Hazardous Recovery (Tonnes)	Non-Hazardous Disposal (Tonnes)	Total Waste per Tonne Production (T/T)
2007	1,590.44	2.81	0	14,522	231	Production data was not collected in this format prior to licence review in 2013.
2008	1,477.35	2.59	0	15,301.22	213.15	
2009	136.9	35.76	0	12,248.54	230	
2010	182.51	65.07	0	11,548.99	225	
2011	2.39	61.46	0	13,712.96	219.3	
2012	2.16	74.85	0	12,522.28	136.44	
2013	2.03	10.68	0	13,555.59	254.92	0.494
2014	2.12	11.92	0	4,378.48	0	0.175
2015	1.34	38.31	0	6,137.47	0	0.279
2016	1.21	27.10	0	3,723.87	0	0.190
2017	1.95	33.38	0	3,336.71	0	0.152
2018	1.55	21.035	0	4,218.65	0	0.238
2019	2.0	2.35	0	4,170.29	0	0.2589
2020	1.96	6.343	0	4,902.72	0	0.2943
2021	1.73	35.172	0	2,007.606	0	0.0934

Explanation for change in 2021

The average BOD of the effluent discharge has decreased slightly in 2021 compared to 2020.

There is a decrease in tonnage of non-hazardous wastes removed from Dunbia (Llanybydder) in 2021 compared to 2020. The decrease in non-hazardous waste was due to the performance improvements of the effluent treatment plant resulting in less liquid sludge required to be removed via tankering.

There is an increase in tonnage of hazardous wastes removed from Dunbia (Llanybydder) in 2021 compared to 2020. This was due to planned deep clean of the blood tank and bund.

All waste was diverted from landfill in 2021.