

6 June 2012

Mr Pat Byrne
Environmental Protection Agency
Johnstown Castle Estate
Co Wexford

An Roinn
Talmhaipchta,
ENVIRONMENTAL PROTECTIOBRE MEUS Mara

18 JUN 2012

RICHVIEW
ENVIRONMENTAL LICENSING UNIT

## Re. Category 1 Rendering Plants

Dear Mr Byrne

I refer to previous correspondence in relation to the possibility of disposing of BSE positive carcasses in Category 1 Rendering Plants.

I am now enclosing a copy of this Department's submission outlining the case to have the following Category 1 Rendering Plants approved for this purpose:

Dublin Products, Dunlavin, Co Wicklow.

College Proteins, College Road, Nobbes Co Meath.

ABP Proteins, Christendom, Ferrybank, Waterford.

We would be grateful if the EPA could examine the possibility of making the technical amendments to the relevant IPPC licences of these Plants.

Yours sincerely

Dermot Murphy

Principal

Tel. 01 6072657

# Protocol for the Transport and Rendering of BSE Positive Carcasses at Category 1 Processing Plants

# **Background**

Bovine Spongiform Encephalopathy (BSE) is considered to be a zoonotic<sup>1</sup> prion disease of bovines linked with the occurrence of new variant CJD in humans.

At the height of the BSE epidemic in Ireland, many cases were being diagnosed annually; in 2002 three hundred and thirty three (333) new cases were diagnosed; however eradication measures have been very successful and in 2010 two (2) new cases only were diagnosed with three (3) new cases only diagnosed in 2011 (See Appendix 1). In pragmatic terms the disease is virtually eradicated from the cattle population but, as typical of a disease with a long incubation disease, modelling predicts there will be a tail in the epidemic curve with a trickle of cases (reducing numbers) each year for a number of years to come.

EU Council Regulation 1069/2009 & Commission Regulation 142/2011 provides for legal disposal of the carcasses of BSE positive cases via rendering (termed processing in this legislation) with subsequent disposal of Meat & Bone Meal by incineration/co-incineration. Specified Risk Material (SRM) from all carcasses (bovine & ovine) at slaughter-plants is already processed and disposed of in this manner. At present carcasses from BSE suspect positive cases (very few in numbers) are transported to and disposed of by AFBI (state-laboratory) in Northern Ireland in their incinerator. However, this is only an interim solution provided by the Department of Agriculture & Rural Development (DARD), Northern Ireland. The Department Of Agriculture, Fisheries & Marine (DAFM) and Department of Agriculture & Rural Development (DARD), Northern Ireland would prefer a situation where the BSE positive cases are disposed of in ROI. Moreover, the AFBI incinerator facilities are currently out of action, and have been for some time, leaving DAFM with no alternative contingency plan to dispose of these carcasses.

DAFM now describes the protocol which will be used for these BSE carcasses and therefore requests that the EPA would positively consider the protocol allowing the rendering (processing) of carcasses from BSE confirmed cases to take place at approved Category 1 Rendering (processing) plants within the state, given that the controls and processing parameters are adequate to ensure negligible risk to both animal and public health.

<sup>&</sup>lt;sup>1</sup> Transmissible To Humans

Measures employed during collection and transport of a BSE positive carcass from a knackery, slaughter plant or Regional Veterinary Laboratory to ensure negligible risk to both animal and public health.

- The Veterinary Inspector (VI) responsible will make an arrangement with DAFM's Suspect Collection Service to come and collect the positive/inconclusive carcase at the knackery, meat plant or Regional Veterinary Laboratory. In setting up the time of collection and other transport arrangements, please note that ABP regulations stipulate that a carcase cannot be over-nighted in a vehicle but must proceed directly to its destination (apart from time required to stop for meal breaks, refuelling, and similar activities required under transport regulations).
- 2. The VI should inspect the carcase before it is collected, to make sure that all body parts are available for collection and that it complies with the requirements below. The Veterinary Official will need to be in attendance at the premises when the carcase is being collected.
- 3. If the carcase is in a knackery, the VI will make an arrangement with an RO from the Local Regional laboratory to come out and remove the head from the BSE rapid test positive/inconclusive carcase
- 4. The head must be removed in such a way that one of the official identity tags remains attached to the carcase via a flap of skin.
- 5. **Before** the carcase is loaded, the Veterinary Official must verify that the vehicle transporting the carcase is listed on DAFM's register for the transport of ABPs, is clean and dry, and is labelled on both sides with a label with the following wording: "Category 1 Animal By-Products for disposal only". The Veterinary Official must also verify that the container or vehicle is covered and leak-proof. The traulier registration code and receptacle number must also be prominently displayed on both sides of the container.
- 6. After the carcase has been loaded, the VI will seal the truck door with a DAFM seal and will note the seal number on the commercial document.
- 7. The VI will complete the ABP commercial document in full and in quadruplicate.
- 8. The completed commercial document must accompany the carcass to the rendering plant.
- 9. The VI will fax, or email a scan, of the commercial document to Shay Wright in Ag House (fax 01.6072474) and to Aidan Cahill in Backweston (fax 01.6275969).
- 10. The VI will retain a copy of the commercial document for the DVO file.
- 11. The VI must ensure that any equipment which was in contact with the positive/inconclusive carcase and the area where the carcase was stored overnight is cleaned and disinfected using a 20,000-ppm solution of available chlorine. A 20,000 ppm solution of available chlorine may be achieved by diluting "Chloros" 1:4.
- 12. If in a knackery, the VI must ensure that all contaminated run-off and washings are transferred from the small retention tank to the Category 1 container. This will then be sent for Category 1 rendering.
- 13. In knackeries where carcases are retained in a pile while awaiting BSE results, in the event of a positive/inconclusive result, no harvesting of either hides or meat must be permitted from any of the carcasses as these may inadvertently have become contaminated. All carcases overnighted in the pile must be disposed of in their entirety in the Category 1 container.
- 14. Knackeries, as well as DVOs, must maintain auditable records to show that all parts of positive and inconclusive animals are disposed of in accordance with the legislation.

# Protocol Employed at Category 1 Processing Plants Minimising Risks Posed By Rendering of BSE Positive Carcasses

- 1. There are currently 4 active Category 1 processing plants in Ireland approved by DAFM under Animal By-Product (ABP) legislation. Of these one (1) deals exclusively with the rendering of ABP diagnostic and research samples and would be unsuitable to Render BSE Carcasses. See Appendix 2.
- 2. All CATEGORY 1 plants processing plants in Ireland utilise Processing Method 1 rendering which means that following cooking of raw material to 80°C the product separates into tallow and greaves. Following separation the greaves is pressed to extract more tallow and then the tallow is filtered and clarified in order to further remove insoluble impurities. The pressed graves then becomes Meat and Bone Meal (MBM). Both of these products, i.e. the MBM and the tallow are sterilised at a minimum of 133°C for 20 minutes at 3 bar Pressure using a batch process. These heat treatment parameters have been demonstrated to be the most effective at degrading prion infectivity.
- 3. The products derived from 2. include Meat and Bone Meal (MBM) and Tallow
  - a. MBM produced at CATEGORY 1 plants is permanently marked with a marker called GTH, using a validated process in each plant, so that this MBM may be differentiated from Processed Animal Protein produced at CATEGORY 3 processing plants.

#### And

b. At present all MBM presently produced at each CATEGORY 1 plants is disposed of by means of incineration/co-incineration in other Member states or by co-incineration at a cement manufacturing plant within the state with the ash being incorporated into cement. Each consignment is accompanied by a commercial document which is completed in quadruplicate

### And

- c. At present all CATEGORY 1 rendering plants reconcile the ultimate disposal of MBM by means of return of incineration/co-incineration certificates from the companies. Included on these certificate returns is the official seal number associated with each consignment/load, verifying that the load has reached destination & the seal has not been tampered with in transit and that the load of material has been incinerated.
- 4. At present all Tallow produced at each CATEGORY 1 plant is used as a fuel in a thermal boiler either on site, or at another approved plant or at an approved biodiesel plant. Reconciliation of said movement and use is recorded & officially controlled.
- 5. At present all waste water from the dirty area is re-circulated back through the rendering process in each CATEGORY 1 plant, none of this waste water is disposed of by other means.
- 6. At present all gases produced in the cooker or steriliser at CATEGORY 1 plants are treated using a thermal oxidiser prior to discharge. Thermal Oxidiser Specifications vary but typically the gases

- are heated to a minimum of  $850^{\circ}$ C with a retention time of >2 seconds. Some plants operate a time-temperature destruction parameter of  $1100^{\circ}$ C for >0.2 seconds.
- 7. All CATEGORY 1 plants implement bio-security protocols (dedicated personnel, security, separation & cross-contamination prevention), sanitation/hygiene & pest control programmes and have a health & safety statement in place for employees.
- 8. The documentation will be checked by the VI at the rendering plant to ensure that the seal is intact and that the carcass is the carcass referred to on the document.

## **Summary**

In summary DAFM would be very grateful if the EPA could facilitate DAFM by looking favourably on the protocol described above allowing for the processing of BSE positive carcasses at approved Category 1 Processing plants with ultimate disposal of the MBM as waste by incineration/co-incineration and the tallow will be used as fuel for combustion on site or at another approved plant, given that the number of said cases are dramatically lower than at the height of the BSE epidemic in cattle to the point of being almost zero and given that CATEGORY 1 processing plants have been designed, and are operated and officially controlled so as to mitigate risks both to public and animal health.

# Appendix 1 BSE Case Numbers by Stream between 1989 and 2011

Year case	Passive	Fallen Stock	Healthy	Casualty	BSE	Totals
confirmed	surveillance		Släughter	Slaughter	eradication	
1989	15		of terre	-	-	15
1990	14	- inspir	<u> </u>	-	-	14
1991	17	- FORTH	-	-	-	17
1992	18	- Grant Conserved	-	-	-	18
1993	16	- nsent		-	-	16
1994	19	CG,	-	-	-	19
1995	.16			-	-	16
1996	73	-	-	-	1	74
1997	77	-	-	-	3	80
1998	79		-	-	4	83
1999	91	-	-	-	4	95
2000	138	7	-	-	4	149
2001	123	81	34	4	4	246
2002	108	183	34	4	4	333
2003	40	106	31	4	1	182
2004	31	75	19	0	1	126
2005	9	47	12	1	0	69
2006	5	30	6	0	0	41
2007	4	15	6	0	0	25
2008	3	16	3	0	1	23
2009	0	5	4	0	0	9
2010	0	1	1	0	0	2
2011	0	3	0	0	0	3
Totals	896	569	150	13	27	1655

**Appendix 2 List of Category 1 Processing Plants** 

Approval Number	Name	Town/Region	Category Activities and Product types	Activity
R910	<b>Dublin Products</b>	Co. Wicklow	C1	Active
R911	College Proteins	Co. Meath	C1	Active
R919	Waterford Proteins	Co. Waterford	C1	Active
R922	Ecosafe Systems Ltd	Co. Dublin	C1	Active (Samples & Medical)

