

**DEVON AREA
INTERNAL REPORT**



**ENVIRONMENT
AGENCY**

**REPORT ON THE SURVEY OF SBM
HANDLERS IN DEVON**

JANUARY 1997

DEV/W/1/97

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ENVIRONMENT AGENCY

Information Services Unit

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Due Date

1.0 INTRODUCTION

This report describes the information collected following Agency visits to Specified Bovine Material (SBM), handlers located within the Devon Area Waste boundary. The report includes general overview of the surveys findings, together with more detailed site specific information, which is recorded in the form of spread sheets in Appendix A.

2.0 OBJECTIVES

The survey is associated with the Bovine Spongiform Encephalopathy (BSE) problem. In particular it is linked to the potential for BSE infective material to escape into the environment from sites handling SBM, where inadequate protective measures are in place. This is a cause of concern because of the apparent environmental resistance of the BSE prion and possible risk of infection, particularly where SBM containing wastes are spread on pasture land. To this end, the primary purpose of the survey was to check that SBM was being handled and disposed of in accordance with the guidance issued by the Spongiform Encephalopathy Advisory Committee (SEAC). In particular, the following was checked:

- 4mm (or less) screens were provided and positioned so as to ensure that effluent was screened prior to discharge to sewer, septic tank, cess pit or in-house treatment works;
- Particulate matter caught in screens/drainage traps was treated as SBM;
- SBM was stored and disposed of in the correct manner, i.e. rendering or incineration.

3.0 METHODOLOGY

SBM currently includes cattle brain, spinal cord, tonsils, thymus, spleen, intestine and particulate matter caught in drainage traps at sites processing cattle. The SBM handlers targeted included:

- Hunt Kennels;
- Abattoirs;
- Knackers Yards; &
- Incinerators;
- Renderers.

Joint Water Quality/Waste Regulation visits were made to the larger operations. Smaller operations, with simpler drainage arrangements were visited either by an individual Water Quality or Waste Regulation Officer. A number of the premises visited were found not to handle SBM. They are listed in Appendix B, but are otherwise excluded from this report.



A total of 35 sites handling SBM were visited between September 1996 to January 1997. It is anticipated that this number will be added to as additional sites are discovered. The sites visited were identified by consultation with the Meat Hygiene Service, reference to the Yellow Pages and by the local knowledge of individual officers.

An inspection checklist (reproduced in Appendix C) was used to ensure that information was collected in a consistent manner. Consistency was also achieved by using a limited number of water quality/waste regulation staff, all familiar with the objectives of the survey.

Sites found to be handling SBM correctly were classed as satisfactory, where no further action was necessary. Sites where problems were identified were classed as unsatisfactory and have been sent a letter outlining what is required. Copies were also sent either to MAFF or SWW where appropriate, for advice and back up. It is anticipated that follow up visits will be required to check compliance.

4.0 RESULTS

A total of 19 sites were found to be unsatisfactory (representing 54% of the sites visited). The main reasons for non compliance were:

- Absence of an adequately sized screen, &/or poorly fitted screen (18 sites);
- Incorrect disposal of SBM (1 site), i.e. screenings being sent to landfill. Now resolved.

Additionally, 11 sites were found to have problems outside the remit of the survey, which will require follow up work. These included absence of a discharge consent, sites sending waste to be spread on agricultural land without pre-notification, overflowing septic tanks and an unsatisfactory incinerator.

South West Water were found to have been active in requiring 4mm screens at sites discharging to sewer. MAFF do not appear to have taken much interest in the 4mm screen requirement, and several sites regularly visited by MAFF were found wanting. In fairness however, MAFF actively supported the Agency's advice and were instrumental in resolving the situation where SBM (in the form of screenings) was being sent to landfill.

5.0 CONCLUSIONS

- With one exception (now resolved), SBM was satisfactorily dealt with.
- The SEAC guidelines regarding 4mm screens were only known and being implemented at the larger sites (abattoirs, renderers).

- The majority of the small operations (Hunt Kennels, Knackers Yards) were unaware of the SEAC guidelines, and consequently did not have adequately sized screens.
- Achieving the objectives of the survey was best achieved by visiting each SBM site (particularly, joint waste/water quality visits at large sites), followed by the provision of a written explanation of the work required at unsatisfactory sites.

6.0 RECOMMENDATIONS

- Follow up visits are made to those sites which were identified as being unsatisfactory. Waste Regulation to take the lead.
- Follow up visits are made to those sites where problems outside the remit of the SBM survey were identified. Water Quality/Waste Regulation to take the lead, as appropriate.
- Appropriate trade journals could be targeted by the Agency, with the aim of publicising the SEAC guidelines. Relevant journals may include the Meat Trade Journal; or the newsletter of the Licensed Animal Slaughters and Salvaging Association (Devon Area Waste can provide a contact for the latter).

APPENDIX A

Spreadsheet of SBM Survey Results

Abattoirs, renderers, butchers & knackers yards

AB = Abattoir, RD = Renderers

Name	Catchment	AB/RD	To Water/Land/Sewer	Separate lines for clean and cull cattle (Y/N)	SBM (Y/N)	4mm Screen at Inlet (Y/N)	4mm Screen at Outlet (Y/N)	SBM / Storage Handling	Effluent Treatment Process	Effluent Disposal	SBM Disposal	SBM Screenings Disposal Method	Sludge Disposal	Super-natant Disposal	Disposal of Other Wastes	Disposal of Surface Water	Cleaning and Sanitation	Comments
C H Baker & Son Clapper Lane Honiton	04B	AB	S	N/A No cattle	N	N	Y	N/A	To sewer	N/A	N/A	To J.L. Thomas	Digestion	N/A	J L Thomas	S/W sewer	N/A	Received by Honiton WWTW. Discharge point is River Otter. No downstream WTW. No cattle handled. Two settlement pits prior to the sewer.
J Coles Higher Rill Farm East Hill Ottery St Mary	04B	AB	L	N/A	Y	N	10-15mm	210 litre bins (sealed)	200,000g slurry store	To land	J L Thomas	SBM bins - J L Thomas	Spread to land	Spread to land	Guts to J L Thomas. See comments for blood.	To slurry store	N/A	Blood - approximately 20 gallon per week goes into above ground slurry tank, later mixed with farm slurry and spread to land 2-3 cattle killed per week.
F Lake & Son (Butcher) Saxton Lapford Creddon	05K	AB	L, S	N/A	Y	N	Y	Stored in plastic bins	To sewer	N/A	J L Thomas	SBM bins - J L Thomas	N/A	N/A	Guts and bones to J L Thomas. 160 m3 blood to land	Washings discharged to sewer	N/A	1000 kilos guts - J L Thomas 270 kilos bones - J L Thomas Skins - Exeter Skin & Hide Lairage pens - foul sewer
Lloyd Maunder Limited Willand Cullompton	05C	AB	W	N/A	Y	Y	3-4mm	Sealed bins J L Thomas	DAFF unit, please year ditch	To controlled waters	J L Thomas	SBM screenings to SBM bins (according to MAFF)	Belt press - to land	To controlled waters	Guts and blood to Peninsula Proteins	Washings into private plant with consent	N/A	Deal with poultry, pigs and cattle. Cattle killed on 1 morning per week. Hides - Exeter Hide & Skins, & Skins International
S J Newcombe 7 High Street Hatherleigh Okehampton	29D	AB	S	N/A	Y	N	N	Hatherleigh Abattoir	To sewer	N/A	To abattoir J L Thomas	J L Thomas	N/A	N/A	Blood and guts to J L Thomas	Washings into sewer under SWW discharge	N/A	7 cattle dealt with weekly. Hides - Skins International Paunch - Land at Hatherleigh
North Devon Meats School Lane Torrington	29B	AB	S/L	N/A	Y	Y	Y 2mm	Sealed bins J L Thomas	To Peninsula Proteins	Recycled for wash-water/land application	J L Thomas	J L Thomas	Screened solids removed by contractor	Peninsula Proteins	Blood and guts to J L Thomas	Washings through WTW	N/A	1200 cattle dealt with. Effluent screened, solids removed by contractor. Further screening, then diss. air flotation and oxidation ditch at Peninsula Proteins
Peake Bros Yolland Brook Bittaford Ivybridge	09B	AB	W	N/A	Y	N	Y >4mm	To Liskeard depot	Settlement tank - filter bed	To controlled waters	To Liskeard	N/A	To Liskeard	Tankered off site	Offal/bones (non SBO) to J L Thomas	Washings enter sewerage system	N/A	Has its own sewage plant. Not known if there is discharge to Yolland Brook. Unable to locate a discharge pipe as area is overgrown. Only takes fallen stock. Currently redundant.
J L Thomas & Co. Ltd. Exeter	05A	RD	S	Y	Y	Y	Y 0.75mm	Processed 24 hrs/day	Disch. via dedicated secondary P.S. to Exeter STW (Secondary treat)	To sewer	Incinerated/ rendered	Incinerated/ rendered	Avonmouth 40 ton/week	To sewer	Meat & bone to Greendale store. Tallow to bonded store at Camvey Is.	To sewer	Clean & cull collect and stored separately	Effluent receiving environment - Exe Estuary, not used for drinking water; boating, amenity.
Peninsula Proteins Ltd Torrington Devon	29B	RD	L	Y	Y	Y	Y	Sealed tomes processed every day	Passwater ditch on site Screens/Dissolved air flotation/Oxidation Ditch	Screened solids removed. Fine eff. spread on land by Mr P Hem	Incinerated/ rendered	Incinerated/ rendered	Spread to land by P. Hem	Vapourised & condensed	Meat & bone meal, & tallow to Camvey Is.	To own works	Separate storage & collection	Effluent receiving environment - spray irrigation onto land; not equifer; no connection with water courses.

NB: Please see additional schedule for RE class and use for premises discharging to sewer or watercourse

Abattoirs, renderers, butchers & knackers yards

AB = Abattoir; RD = Renderers; B = Butchers; KY = Knackers Yards

Name	Catchment	AB/RD/B/KY	To Water/Land/Sewer	SBM (Y/N)	Separate lines for clean and cull cattle (Y/N)	4mm Screen at Inlet (Y/N)	4mm Screen at Outlet (Y/N)	SBM / Storage Handling	Effluent Treatment Process	Effluent Disposal	SBM Disposal	SBM Screenings Disposal Method	Sludge Disposal	Super-natant Disposal	Disposal of Other Wastes	Disposal of Surface Water	Cleaning and Sanitation	Comments
K W Durrant 76 Wallingford Road Kingsbridge	08A 08B	AB	S	Y	N/A	N	Y	Sealed bins to J L Thomas		To sewer	J L Thomas	J L Thomas	N/A	N/A	J L Thomas	To sewer	N/A	
H Lang & Son Gages Farm Buckfastleigh Road Ashburton	08A	AB	S	Y	N/A	N	Y 3mm	Bins to J L Thomas		To sewer	J L Thomas	J L Thomas	N/A	N/A	J L Thomas	To sewer	N/A	Killing days are Mon, Tues, Thur (cattle Thurs only)
Farm to Freezer Church Comer Combe Martin	31A	AB	S	Y	N/A	N	Y (not funct. properly) 4-5mm	Bins - J L Thomas	Primary settlement - biological	To sewer	J L Thomas	J L Thomas	N/A	N/A	J L Thomas Mon + Thurs	To sewer	N/A	Skins to Saunders of Barnstaple
Plymouth Fresh Meat		AB	S	N	N/A	Y 2mm	Y	N/A	Unknown	To sewer	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Closed at time of visit. Due to re-visit, it will be re-opening
D & J Goff 7 Westcombes Chardstock Axminster	02C	AB	ST	Y	N/A	N	10-15mm	Sealed bins	N/A	Emptied every 2 mths Dest. not known from here. Minor poll probs. WQO to address.	J L Thomas	L Thomas	N/A	N/A	J L Thomas	Sewer SW	N/A	All waste goes to J L Thomas. Deal with 12-13 cattle per week.
D R Heyman The Orakes Woodbury Exeter	05D	AB	ST	Y	N/A	N	Y 4-5mm	Sealed bins	N/A	Tankered off site 6 monthly	J L Thomas	L Thomas	N/A	N/A	Offal waste goes to J L Thomas	All foul washings go to cesspit, Pumped ev 6 months		All waste to J L Thomas. Deals with 2-3 cows per week.
W S Putts & Sons Ltd Knackers Yard Graycoat Lane Newton Abbot	06A 06B	B	ST	Y	N/A	N	>4mm	Incinerated on site	N/A	Tank contents collected by Baker of Liverton	Special Bovine Offal Incinerated on site.	Incinerated	N/A	N/A	Blood and guts to J L Thomas	Washings drained to a sealed septic tank		Deal with 2-3 cows at present - 5-6 cows prior to ben. Incineration residue taken to Bickley Ball by Haul Waste
J Vaysey & Sons 30 Fore Street Cullompton	05C	B	S	Y	N/A	N	Y	Sealed bins	N/A	N/A	J L Thomas	J L Thomas	N/A	N/A	Guts to J L Thomas	Washings go into sewer		Effluent received by Cullompton STW Visited by SWW

Hunt Kennels

ST= Septic Tank; SA = Soakaway AB = Abattoir; RD = Renderers; HK = Hunt Kennels

Name	Catchment	AB/RD/HK	Water / Land / Sewer / ST / SA	SBM (Y/N)	Separate lines for clean and cull cattle (Y/N)	4mm Screen at Inlet (Y/N)	4mm Screen at Outlet (Y/N)	SBM / Storage Handling	Effluent Treatment Process	Effluent Disposal	SBM Disposal	SBM Screenings Disposal Method	Sludge Disposal	Super-natant Disposal	Disposal of Other Wastes	Disposal of Surface Water	Cleaning and Sanitation	Comments
Dart Vale & South Pool Harriers Little Oaks Farm Halwell Blackawton	08A	HK	ST	Y	N/A	N	Y	J L Thomas	Tankered off site	Totnes STW	J L Thomas	J L Thomas	N/A	N/A	J L Thomas	To sealed tank	N/A	
Dartmoor Hunt Kennels Monksmoor Farm Bittaford Ivybridge	09B	HK	ST	Y	N/A	N	Y 1/2"	Sealed bins J L Thomas	Tankered off site spread to land		J L Thomas	J L Thomas	N/A	N/A	J L Thomas	To sealed tank	N/A	Hides to Nuneaton. Inspected by MAFF.
Modbury Harriers Kennels Flote Estate Ermington	09A	HK	ST & SA	Y	N/A	N	Y >4mm	Sealed bins J L Thomas	Septic tank to S/A via 3 lagoons		J L Thomas	No screening owing to screen size		N/A	J L Thomas	To tank	N/A	Screen only a drain cover.
Axe Vale Hunt Kennels Lower Downhayne Farm Nr Colyton	02B	HK	ST & SA	Y	N/A	N	Y 10-15mm	Steel bins - J L Thomas	Septic tank & soakaway	Spread to land	J L Thomas	J L Thomas	To land	N/A	J L Thomas	To tank	N/A	
Dulverton Foxhounds (West) Ltd The Kennels Coney Park Stoke Rivers Brayford	30G	HK	ST & SA	Y	N/A	N	Y 15mm	Incinerated	Septic tank & large soakaway	Tankered off site by Haul Waste	Tankered off site by Haul Waste	Incinerated	N/A	N/A	J L Thomas	Unknown	N/A	New Incinerator installed
Eggesford Foxhounds Hunt Kennels Wembworthy Chulmleigh	00B 30E	HK	ST & SA	Y	N/A	N	N	Incinerated	Septic tank to soakaway	Emptied every 2 mths by Haul Waste	Emptied every 2 months by Haul Waste	Incinerated	Haul Waste	N/A	J L Thomas	To tank	N/A	Skins to Exeter Hides
Scott S Stevenstone St. Giles Torrington	29B	HK	ST	Y	N/A	N	N	Steel bins - J L Thomas	Tank (sealed)	Never been desludged	Never been desludged	No screen	Never done	N/A	J L Thomas	To tank	N/A	
South Devon Foxhounds Kennels Pulstord Nr Denbury Ipplepen	07B/ 06A	HK	ST	Y	N/A	N	Y 10mm	Incinerated	Sealed tank	Tank emptied by Haul Waste	Tank emptied by Haul Waste	Incinerated	N/A	N/A	J L Thomas	To tank	N/A	Ash from incinerator taken by Haul Waste
Tiverton Foxhounds The Kennels Hensleigh Tiverton	05E	HK	ST & SA	Y	N/A	N	Y 10mm	Incinerated	Tank emptied by Haul Waste			Incinerated	N/A	N/A	J L Thomas	To tank	N/A	

Mid Devon Hunt Kennels Factory Cross Chagford	06C	HK	ST & SA	Y	N/A	N	Y >4mm	J L Thomas	Septic tank to S/A emptied every 12 mths by local farmer		No screenings	J L Thomas	N/A	J L Thomas	Skins to Exeter Hides		N/A	
Devon & Somerset Foxhounds Exford	05G	HK	ST & SA	Y	N/A	N	Y 10mm+	J L Thomas	Soakaway		J L Thomas	Haul Waste remove	Soakaway	J L Thomas		To tank	N/A	Hides to Liskeard
Tiverton Staghound Kennels Mouseberry Farm East Worlington Nr Crediton	00E	HK	L	Y	N/A	N	N	J L Thomas	3 sealed tanks O/F to pond tanks. Empted off site. All solids into 1st tank. No S/A.	Same as previous column	J L Thomas	J L Thomas	To land by Mr Webber	To pond	Skins left on ground	To pond	N/A	Very poor set up - needs re-visit by WQ & Waste Regs
Exmoor Foxhounds Simonbath	05H	HK	ST & SA	Y	N/A	N	N	Incinerated	Soakaway	N/A	Incinerated	Tankered off site	Soakaway	J L Thomas		To tank	N/A	Hides - Exeter Skin & Hides
Cotley Harriers Kennels Bewley Down Nr Chard	02C	HK	ST & SA	Y	N/A	N	Y 10mm+	Steel bins - J L Thomas	Soakaway	N/A	J L Thomas	Tankered off site	Soakaway	J L Thomas		To tank	N/A	
Stowford Hunt Lewdown		HK	ST & SA	Y	N/A	N	N	J L Thomas in bins	Soakaway	N/A	J L Thomas	J L Thomas	Haul Waste	S/A	J L Thomas	To tank	N/A	

BSE Cull Sites

ST = Septic Tank; Incin = Incinerator

Name	Catchment	Abattoir/Renderers	To Water/Land/Sewer/ST	SBM (Y/N)	Separate lines for clean and cull cattle (Y/N)	4mm Screen at Inlet (Y/N)	4mm Screen at Outlet (Y/N)	SBM / Storage Handling	Effluent Treatment Process	Effluent Disposal	SBM Disposal	SBM Screenings Disposal Method	Sludge Disposal	Super-natant Disposal	Disposal of Other Wastes	Disposal of Surface Water	Cleaning and Sanitation	Comments
West Devon Meat Ltd The Abbatior Hatherleigh Okehampton	29D	A	S L	Y	N	N	Y	Sealed bins	Large holding tank	Tankerred to STW	JL Thomas	J L Thomas	STW	STW	Blood and guts to J L Thomas	Marsh area at front	Bactericide used (foam agent) washings to eff. tank	Deal with 250 cattle per week. STW is Crediton & Bodmin. Approx. 73-111000g/week. Tank vol = 37,380 gallons. Ave BOD = 448 mg/L. Effluent goes to either Crediton STW or exempt storage lagoon near Bodmin for application to agricultural land.
Tellams Yard Cheriton Bishop	05K 06C	incin.	ST	Y	No cull - cattle only	N	Y	Incinerated	2x3000 gallon tanks	Following MAFF guide lines Crediton STW	Incinerated		N/A	N/A	Ash to Greendale	Sealed pits for collection of run-off from recept. and load area	Very good	BSE incinerator
P J Hayman & Sons Raxhayes Farm Holcombe Lane Ottery St Mary	04B	AB & Incin.	ST	Y	Cull cattle only & pig & sheep	N	Y	Incinerated on site	3 sealed tanks	Sheep & Pig contents are spread to land. Cull cattle to J L Thomas	Incinerated on site	Incinerated	N/A	N/A	Offal goes to skip and collected by J L Thomas 4 times/week.	Washings spread to land via vac tank	None used	Serious pollution problem, warning letter sent. WQO to make follow up visit.

APPENDIX B

Sites included on original spreadsheet but not visited and / or included on final spreadsheet

BSE VISITS

Below is a list of sites included on the original spreadsheet that have not been visited and the reason why.

<u>SITE</u>	<u>REASON</u>
South West Meat Ltd Chard	Company does not exist
Dorest County Foods Mosterton	Not in Devon Area and company does not exist
South Devon Hunt Halwell	Hunt kennel does not exist
Spooners & West Sampford Spinney	Hunt kennel does not exist
Britannia Naval College	Does not handle live animals, meat all pre-processed
Mr R Pearce South Brent	Does not slaughter on site or handle cattle
Devon Crest Poultry Tiverton	Only handle chickens and turkeys
Venbridge Farm Cheriton Bishop	Does not slaughter, or handle SBM
F D Statton Hatherleigh	No longer operational
Shippam Ltd Lapford	Only handles poultry
Forthglade Ltd Winkleigh	Does not handle SBM, processes meat for pet food market

SITE

REASON

Kelly
Elston Farm
Crediton

Only processes poultry

Monument Venison
Hemyock

Only handles deer

Butchers Davis
Dulverton

Does not slaughter, or handle SBM

Ham's Bacon
Poundswell

Pigs only

Pipers Farm
Langford
Cullompton

Does not slaughter or handle SBM

Tiverton Hunt
East Anstey

Does not exist

APPENDIX C

DEVON AREA - SBM HANDLERS INSPECTION CHECKLIST

Site Name:	Site Tel. no:
Site Address:	NGR:
Contact name for site:	Date:
Inspector(s):	
Nature of Process (Circle): Abattoir, Knackers Yard, Renderers, Hunt Kennel, Incinerator, Licensed SBM Collection Centre, Other (specify)	
Animals being processed (Circle): Cattle, Sheep, Pig, Poultry, Other (specify):	
Is the site participating in the BSE Eradication Programme (> 30 Month): YES/NO/NA	

SBM STORAGE/HANDLING AREA (If applicable)

Is the area drained to foul sewer, in-house treatment works, sealed tank, or other? Specify below:

Is the effluent screened prior to discharge to the above?

YES/NO

What is the screen size?

(Screen should be $\leq 4\text{mm}$)

What is the type of Screen? (e.g Bar, Slot, Perforated Plate)

For storage/handling area's drained to in-house treatment works:

Description of works:

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..... (Attach process diagram if available)

How is sludge from treatment process disposed?

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Do works discharge to controlled waters, foul sewer, or other (specify):

If treatment works discharges to controlled waters:

Name of receiving water:

River Ecosystem Classification & Use:

If Site discharges to foul sewer (either directly or via in-house treatment works):

Name of receiving works:

Description of treatment process:

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Name of the receiving water that the works discharges to:

River Ecosystem Classification & Use:

Does sewer have any SSO/EO's?

YES/NO

If yes, list the NGR's of SSO/EO's and name of receiving waters:

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SBM STORAGE/DISPOSAL (If applicable)

Is SBM securely stored prior to disposal?

How is SBM disposed? (Full description):

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How are screenings disposed if different than above? (Full description):

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