

# BT-15

Ver 0.2

Monitoring of dioxins and  
dioxin-like PCBs in fats, oils  
and other products





## DOCUMENT HISTORY

Version and approval date	Reasons for revision	Revision scope	Ultimate date of application
0.0 21/12/2012	Implementation of specific requirements for the monitoring of oils and fats as regards the presence of dioxins and dioxin-like PCBs	Entire document	01/01/2013
0.1 21/10/2016	New lay-out	Entire document	21/10/2016
	Modification of the designation (logo and standard)	Entire document	
0.2 1/03/2017	Amendments following the publication of Regulation (EU) No 2015/1905 and the joint assessment OVOCOM/GMP+ International	Entire document	1/03/2017



# Table of contents

<b>1. SCOPE</b> .....	<b>4</b>
1.1. PRODUCTS.....	4
1.2. COMPANIES.....	4
1.3. OVERVIEW.....	5
<b>2. DEFINITIONS</b> .....	<b>7</b>
<b>3. MONITORING FREQUENCY</b> .....	<b>9</b>
<b>4. POSITIVE RELEASE</b> .....	<b>20</b>
<b>5. SAMPLING &amp; ANALYSIS</b> .....	<b>26</b>
5.1. SAMPLING.....	26
5.2. ANALYSIS.....	26
5.3. BATCH SIZE.....	26
5.4. OTHER REQUIREMENTS / REMARKS.....	26



# BT-15 : Monitoring of dioxins and dioxin-like PBCs in fats, oils and other products



**Note:** This document has been drawn up in close collaboration with GMP+ International and is therefore also part of the GMP+ FSA System.

## 1. Scope

### 1.1. Products

This document provides specific requirements<sup>1</sup> for monitoring the level of dioxins and dioxin-like PCBs in oils and fats, which:

- Are derived from the processing of oil seed, oil refining, animal fat processing and/or fat blending, and;
- Are used in animal feed, and;
- Are produced, traded, stored, transported or used by companies certified for Feed Chain Alliance.

Furthermore, these requirements also apply to imported oils & fats, sold directly to the feed industry, and to products used in the internal flows.

Fat and/or oil blends as well as products derived from fats and oils are also affected by this document.

These requirements must be included in the monitoring plan, which all companies certified for Feed Chain Alliance are required to implement and execute.

### 1.2. Companies

Feed companies placing oils, fats and/or derived products intended for use in animal feed, including compound feed, on the market, must have these products analyzed in accredited laboratories for the sum of dioxins and dioxin-like PCBs<sup>2</sup>. For detailed requirements, see point 5: Sampling and Analysis.

The monitoring applies to producers as well as to traders and import companies.

Traders and import companies are exempt from monitoring:

1. If they dispose of an analysis result, covering the purchased batch (No. of batch must be included in the analysis report) and;
2. If their own monitoring, determined on the basis of their HACCP analysis, does not require a new analysis of the purchased batch.

NOTE 1: This monitoring, coupled with the application of a negative list (cf. 'BT-14: Negative List'), goes further than the legal aspects developed in Regulation (EC) No 183/2005 and its amendments.

NOTE 2 : In order to improve readability of the document, we have chosen to use the word "company" to replace the word "Feed business operator" from Regulation (EC) no. 183/2005 (Article 3-b.).

---

<sup>1</sup> These requirements are based on EU-legislation, as laid down in Reg. (EU) No 183/2005 (Annex.II) including the amendments regulated by Regulation (EU) No. 2015/1905.

<sup>2</sup> In compliance with Commission Regulation (EC) No 152/2009, including the amendments regulated by Regulation (EU) No. 691/2013.

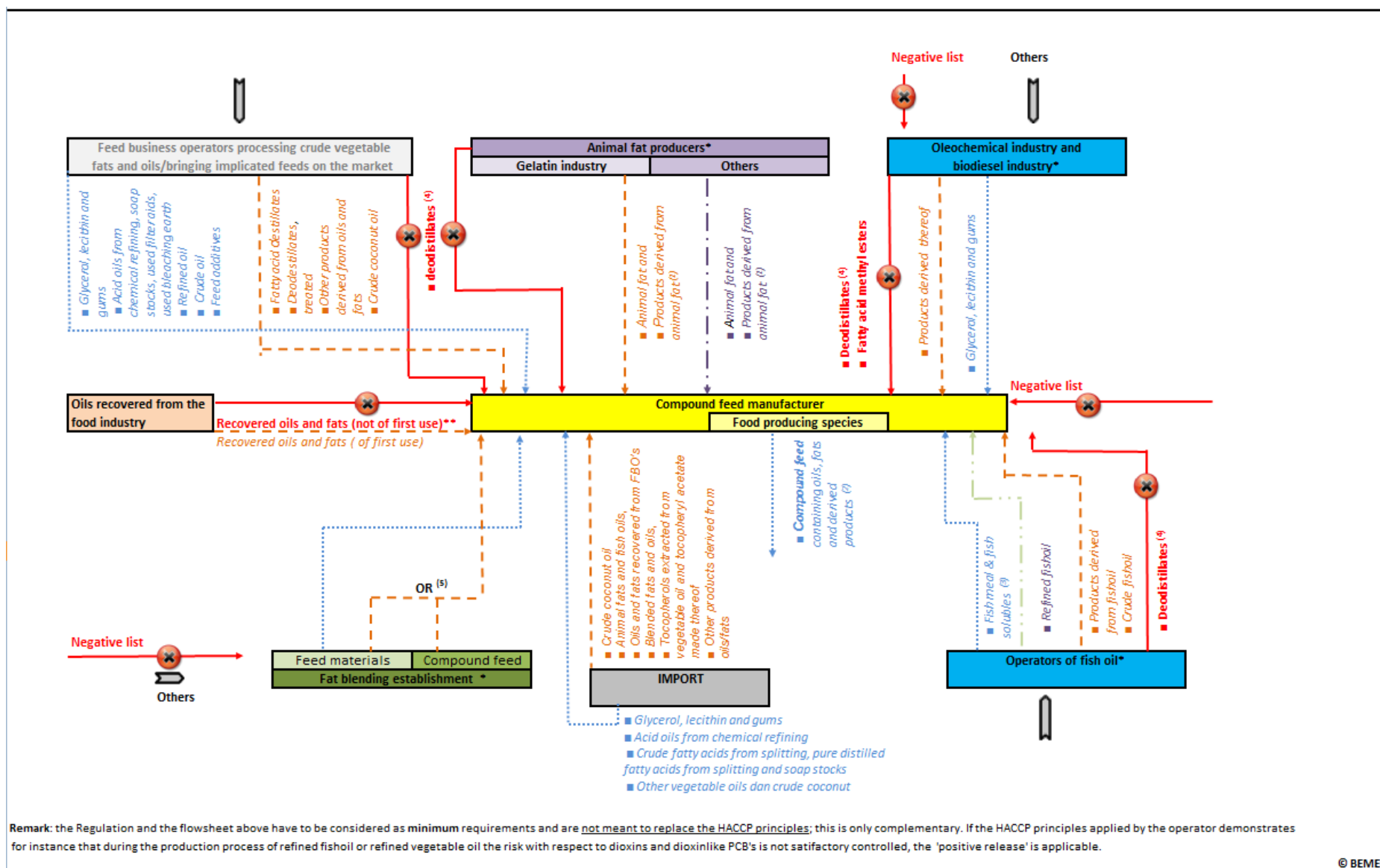
### 1.3. Overview

In this paragraph, a schematic overview of different companies from the fat and oil chain is presented. This overview is prepared by Bemeffa, Belgium.

The Commission Regulation (EU) N° 225/2012 of the 15th of March 2012 amending Annexe II to Regulation (EC) N° 183/2005 of the European Parliament and of the Council as regards the approval of establishments placing on the market, for feed use, products derived from vegetable oils and blended fats and as regards the specific requirements for production, storage, transport and dioxin testing from oils, fats and products derived thereof.	
The Commission Regulation (EU) 2015/1905 of 22 October 2015 amending Annex II to Regulation (EC) No 183/2005 of the European Parliament and of the Council as regards the dioxin testing of oils, fats and products derived thereof.	
MODALITIES OF APPLICATION	
* Traders/operators placing in the market included.	
** ALL recovered oils & fats that are not of first use (not only from food industry) belong to the negative list.	
(1) E.g. fatty acids, fatty acid distillates, soap stocks, acid oils, ...	
(2) Sampling frequency of 1 % of the batches of manufactured compound feed containing oils, fats and derived products is not applicable if these are purchased from suppliers that fulfill their obligations.	
Monitoring according to the general HACCP principles is only necessary in case the production process would increase the risk for contamination (dioxin and dioxin-like PCBs). According to BEMEFA, this is not the case.	
(3) In Belgium those feed materials were subject to mandatory analysis for the sum of dioxins and dioxin-like PCBs but they do not fall under the scope of Regulations 225/2012 and 2015/1905.	
(4) Processed and non-processed.	
➔ Incoming flows according to Regulations 225/2012 and 2015/1905.	
⊗ Negative list	'regime I'
- - - Analysis of each batch (a batch may comprise maximum 1000 T) ('positive release')	'regime II'
- . . . 1 representative analysis per 2000 T ('mandatory monitoring')	'regime III' - 2000 T
- - - 1 representative analysis per 5000 T ('mandatory monitoring')	'regime III' - 5000 T
..... HACCP	'regime IV'
<b>Positive release: see 2.2.4</b>	
(A) The operator placing the feed on the market is responsible for the sampling and analyses. Only if the analysis result is favorable, the feed can be delivered (together with the report of analysis of the concerned batch as a proof).	
(B) the buyer is responsible for the sampling and the analyses, but only starts using the feed after receipt of a favorable analysis report. This derogation is only possible with buyer's approval and with informing of the FASFC. There is a written agreement between supplier and purchaser.	
(C) The operator placing the feed on the market is responsible for the sampling and analyses. Feeds are stored at location of purchaser. Only if the analysis result is favorable, the feed can be delivered (together with the report of analysis of the concerned batch as a proof) and used. This derogation is only possible with buyer's approval and with informing of the FASFC. There is a written agreement between supplier and purchaser.	
<b>Mandatory monitoring: see 2.2.5</b>	
(5)	
<b>Blended fat:</b>	
(A) when 2 or more feed materials are mixed and the result is legally considered to be a compound feed (which means that the maximum limit for compound feed is applicable).	
▶ 'positive release' is compulsory.	
(B) when 2 or more feed materials are mixed and the result is legally considered to be another feed material (which means that the maximum limit for feed material is applicable).	
1. The utilized oil, fats, and derived products are purchased from operators who fulfill their obligations (and they provide the necessary documents as a proof of that).	
▶ 'positive release' is not compulsory (HACCP can be applied), except if the production process would increase the risk of contamination (dioxin and dioxin-like PCBs).	
The documents (providing the proof with respect to the blended ingredients), are provided to the buyer of the blended fat (feed material), together with the composition of the feed material (upon delivery at the latest).	
2. Not all the utilized oil, fats, and derived products are purchased from operators who fulfill their obligations (or provide the necessary documents as a proof of that).	
▶ 'positive release' is compulsory.	
<b>Analysis:</b> Analysis is carried out in accredited laboratories for the sum of dioxins and dioxin-like PCBs in accordance with Commission Regulation (EC) No 152/2009.	
<b>Sampling:</b> According to the Royal decree of the 21st of February 2006 establishing the conditions for approval and authorization of business establishments in the animal feed sector.	

© BEMEFA





## 2. Definitions

Term	Description	Remarks
Batch	An identifiable quantity of feed, determined as having common characteristics, such as origin, variety, type of packaging, packer, consignor or labeling, and, in the case of a production process, a unit for production within a single plant, using uniform production parameters, or a number of such units, when produced in continuous order, and stored together	A batch, subject to a class 2 monitoring, may comprise of maximum 1000 tons <i>For an explanation of 'Classes', reference is made to point 3.</i>
Products derived from oils and fats	Any product derived directly or indirectly from crude or recovered oils and fats by oleochemical process or biodiesel production, or distillation, chemical or physical refining, other than: <ul style="list-style-type: none"> <li>the refined oil,</li> <li>products derived from refined oil, and</li> <li>feed additives.</li> </ul>	
Fat blending	Manufacturing of compound feed (= when all components belong to the same entry in part C of the European Catalogue of feed materials and are derived from the same plant or animal species) or feed materials based on the mixture : <ul style="list-style-type: none"> <li>of crude oils,</li> <li>of refined oils,</li> <li>of animal fats,</li> <li>of oils recovered from food companies, falling within the scope of Regulation (EC) No 852/2004,</li> <li>or of products derived thereof</li> </ul> <p>to produce a blended oil or fat.</p> <p>The exclusive storage of consecutive batches, and exclusive mixing of refined oils are not considered "fat blending".</p>	Fat blending, is, under EU legislation, only allowed with an approval in accordance with Regulation (EC) No 183/2005. A (collection) tank may be filled exclusively with a product from one single production facility. This is to be considered as one batch, even if the tank is loaded discontinuously. This should not be considered as fat blending, therefore an approval is not required. This situation is described in section 4, Option 3.
Positive Release	The analysis results relating to	Several options as regards

Term	Description	Remarks
	dioxins and dioxin-like PCBs must be available, attached to and within the specifications before any use in feed materials such as compound feed and pre-mixtures.	acceptable Positive Release systems are provided in section 4.
Refined oil or fat	Oil or fat having undergone a refining as mentioned in No 53 of the glossary of processes listed in part B of the European Catalogue of feed materials.	
Representative analysis per 2000 tons	This notion does not define the batch size, but rather a minimum analysis frequency. A representative analysis per 2000 tons, is independent of the definition of a batch size. A batch may, after all, be smaller or larger than 2000 tons, whereas the representative analysis, has 2000 tons as upper limit. A sample is listed as representative, if it has the same characteristics as the products under examination.	A representative analysis per 2000 tons is applicable to producers and, if appropriate, to traders of fish oil (see point 1.2). This is mentioned in the tables and contain processes and products in point 3 mentioned below.  At the latest at the time of delivery, the buyer receives a statement specifying that the representative analyses have been carried out will be provided to the buyer. The buyer will be informed on a periodical basis of the results of these analyses.
Representative analysis per 5000 tons	This notion does not define the size of the batch but rather a minimum analysis frequency.  A representative analysis per or 5000 tons is independent of the of the size of the batch. A batch may indeed, be smaller or larger than 5000 tons, whereas the representative analysis has 5000 tons as upper limit.  A sample is listed as representative, if it has the same characteristics as the products under examination	A representative analysis per 5000 tons is applicable to producers and, if appropriate, to traders (see section.1.2) of animal fat and derived products belonging to category 3 material. This is indicated in the tables and contain processes and products in point.3 mentioned below.  At the latest at the time of delivery, a statement that the representative analyses are carried out will be provided to the buyer. The buyer will be periodically informed of the results of these analyses
Representative sampling: (source: ISO 5555: Animal and vegetable fats and oils - Sampling).	The purpose of a representative sampling is to obtain a small fraction from a batch in a way that the determination of a particular characteristic of this fraction will represent the mean value of the characteristic of the batch. The batch shall be sampled by repeatedly taking increments	



Term	Description	Remarks
	at various single positions in the batch. These increments shall be combined by mixing to form a bulk sample from which representative laboratory samples will be prepared by division.	

### 3. Monitoring frequency

The minimum monitoring frequency depends on the type of fat/oil, and is indicated in every one of the following tables shown as follows:

Classe	1	2	3	4
	Not allowed in feed. Included in the tables for reason of transparency and completeness.  See also document 'BT-14: Negative List'	Product intended for use in feed	Product intended for use in feed	Product intended for use in feed
Monitoring frequency <sup>3</sup>	Not applicable. Products are prohibited in feed.	The presence of dioxins and dioxin-like PCBs is possible:  100% monitoring with a Positive Release.  One analysis per batch (max.1000 tons <sup>4</sup> )	The presence of dioxins and dioxin-like PCBs is highly unlikely:  One representative analysis per 2000 tons or 5000 tons <sup>5</sup> (with a minimum of one representative analysis per year)	Monitoring of dioxins and dioxin-like PCBs must be based on the company's internal risk assessment <sup>6</sup>

The labeling of feed materials that fall under this monitoring should – where possible – use the denominations listed in the European Catalogue of feed materials (Regulation (EU) no. 68/2013).

Such a denomination ensures that the product is properly identified and to determine with maximum certainty that the monitoring (class 1, 2, 3 or 4) to which this feed material was subjected.

<sup>3</sup> If not further specified, a batch of products to be analyzed shall not exceed 1000 tons.

<sup>4</sup> If can be demonstrated that a homogenous consignment is bigger than the maximum batch size, and has been sampled in a representative way, the results of the analysis, of the appropriately drawn and sealed sample, will be considered acceptable.

<sup>5</sup> One representative analyse per 2000 tons for specific fish oils and per 5000 tons for specific animal fats (cat-3) with a minimum of one representative analysis per year. See tables below.

<sup>6</sup> It is important to highlight that the monitoring frequencies, as is specified in the following tables, are not meant to substitute the individual feed business operator's HACCP system, and do not exempt a feed business operator from applying the HACCP principles, which includes the establishing of an adequate monitoring plan. This monitoring plan must, at least, include the analysis, required in the following tables.

In case the denomination used is not included in Regulation (EU) no. 68/2013, only monitoring conform product class 1 (forbidden products) or product class 2 can be applied (see tables under point 3).

A Class 3 or class 4 monitoring may only be applied for products of which the denomination is included in the European Catalogue of feed materials and for which a class 3 or class 4 has been identified in the tables mentioned under point 3

### Exemple

On departure at a biodiesel manufacturer, Glycerin must not be analyzed. Nevertheless it is necessary for this document (BT-15) to be identified as such.  
If an identical outbound product has a denomination other than the one in the Feed Material Catalog ('product x' instead of 'glycerin'), it will be considered 'All other products derived from oils and fats', and an associated monitoring of class 2 must be applied.

As an example, the table below reproduces several names and definitions listed in the European Catalogue of feed materials (Regulation (EU) no. 68/2013) :

Number	Name	Description
2.20.1	<b>Vegetable oils and fats</b> <sup>(2)</sup>	Oils and fats obtained from plants (excluding castor oil from the ricinus plant), may be degummed, refined and/or hydrogenated.
2.21.1	<b>Crude lecithins</b>	Product obtained during degumming of crude oil from oilseeds and oil fruits with water. Citric acid, phosphoric acid or sodium hydroxide may be added during degumming of the crude oil
9.2.1	<b>Animal fat</b>	Product composed of fat from warm-blooded land animals. If extracted with solvents, may contain up to 0,1 % hexane.
10.4.6	<b>Fish oil</b>	Oil obtained from fish or parts of fish followed by centrifugation to remove water (may include details specific to the species e.g. cod liver oil).
10.4.7	<b>Fish oil, hydrogenated</b>	Oil obtained from the hydrogenation of fish oil
13.6.1	<b>Acid oils from chemical refining</b> <sup>(3)</sup>	Product obtained during the deacidification of oils and fats of vegetable or animal origin by means of alkali, followed by an acidulation treatment with subsequent separation of the aqueous phase, containing free fatty acids, oils or fats and natural components of seeds, fruits or animal tissues such as mono-, and diglycerides, lecithin and fibres.
13.6.2	<b>Fatty acids</b>	Glycerides obtained through esterification of glycerol with fatty acids. The product may contain up to 50

Number	Name	Description
	<b>esterified with glycerol</b> <sup>(4)</sup>	ppm Nickel after hydrogenation.
13.6.4	<b>Salts of fatty acids</b> <sup>(4)</sup>	Product obtained through the reaction of fatty acids with at least four carbons with hydroxides, calcium oxides or salts, magnesium, sodium or potassium hydroxides, oxides or salts. The product may contain up to 50 ppm Nickel after hydrogenation.
13.6.5	<b>Fatty acid distillates from physical refining</b> <sup>(3)</sup>	Product obtained during the deacidification of oils and fats of vegetable or animal origin by means of distillation containing free fatty acids, oils or fats and natural components of seeds, fruits or animal tissues such as mono- and diglycerides, sterols and tocopherols.
13.6.6	<b>Crude fatty acids from splitting</b> <sup>(3)</sup>	Product obtained by oil/fat splitting. By definition it consists of crude fatty acids C 6 -C 24, aliphatic, linear, monocarboxylic, saturated and unsaturated. May contain up to 50 ppm Nickel after hydrogenation.
13.6.7	<b>Pure distilled fatty acids from splitting</b> <sup>(3)</sup>	Product obtained through the distillation of crude fatty acids from oil/fat splitting potentially plus hydrogenation. By definition it consists of pure distilled fatty acids C 6 -C 24, aliphatic, linear, monocarboxylic, saturated and unsaturated. May contain up to 50 ppm Nickel from hydrogenation
13.6.8	<b>Soap stocks</b> <sup>(3)</sup>	Product obtained during the deacidification of vegetable oils and fats through an aqueous solution of calcium, magnesium, sodium or potassium hydroxide solution, containing salts of fatty acids, oils or fats and natural components of seeds, fruit or animal tissues such as monodiglycerides, lecithin and fibres (cellulose).
13.6.9	<b>Mono- and diglycerides of fatty acids esterified with organic acids</b> <sup>(4)</sup> <sup>(5)</sup>	Monodiglycerides of fatty acids with at least four carbon atoms esterified with organic acids.

Number	Name	Description
13.6.10	<b>Sucrose esters of fatty acids</b> <sup>(4)</sup>	Esters of sachharose and fatty acids.
13.6.11	<b>Sucroglycerides of fatty acids</b> <sup>(4)</sup>	Mixture of esters of saccharose and mono and di-glycerides of fatty acids.
13.8.1	<b>Glycerine, crude</b>	<p>By-product obtained from:</p> <ul style="list-style-type: none"> <li>- the oleochemical process of oil/fat splitting to obtain fatty acids and sweet water, followed by concentration of the sweet water to get crude glycerol or by transesterification (may contain up to 0,5 % methanol) of natural oils/fats to obtain fatty acid methyl esters and sweet water, followed by concentration of the sweet water to get crude glycerol;</li> <li>- the production of biodiesel (methyl or ethyl esters of fatty acids) by transesterification of oils and fats of unspecified vegetable and animal origin. Mineral and organic salts might remain in the glycerine (up to 7,5 %).</li> </ul> <p>May contain up to 0,5 % Methanol and up to 4 % of Matter Organic Non Glycerol (MONG) composing Fatty Acid Methyl Esters, Fatty Acid Ethyl Esters, Free Fatty Acids and Glycerides;</p> <ul style="list-style-type: none"> <li>- saponifications of oils/fats of vegetable or animal origin, normally with alkali/alkaline earths, in view of obtaining soaps.</li> </ul> <p>May contain up to 50 ppm Nickel from hydrogenation.</p>
13.8.2	<b>Glycerine</b>	<p>Derived product:</p> <ul style="list-style-type: none"> <li>- the oleochemical process of (a) oil/fat splitting followed by concentration of sweet waters and refining by distillation (see part B, glossary of processes, entry 20) or ion-exchange process; (b) transesterification of natural oils/fats to obtain fatty acid methyl esters and crude sweet water, followed by concentration of the sweet water to get crude glycerol and refining by distillation or ion-exchange process;</li> <li>- the production of biodiesel (methyl or ethyl esters of fatty acids) by transesterification of oils and fats of unspecified vegetable and animal origin with subsequent refining of the glycerine. Minimum Glycerol content: 99 % of dry matter;</li> </ul>

Number	Name	Description
		<p>- saponifications of oils/fats of vegetable or animal origin, normally with alkali/alkaline earths, to obtain soaps, followed by refining of crude Glycerol and distillation.</p> <p>the product may contain up to 50 ppm Nickel after hydrogenation.</p>
<p>( 2 ) The name shall be supplemented by the plant species.</p> <p>( 3 ) The name shall be supplemented by the indication of the botanical or animal origin.</p> <p>( 4 ) The name shall be amended or supplemented to specify the fatty acids used.</p> <p>( 5 ) The name shall be amended or supplemented to specify the organic acid.</p>		

For all feed materials mentioned in the catalog, the monitoring is carried out according to the class mentioned in the table below:



1. Companies producing products listed below (by processing oil seeds) and/or placing products listed below on the feed market																	
Processes and products <sup>7</sup>	Description	Palm	Palm kernel	Rape seed	Soya bean	Sunflower seed	Coconut	Groundnut	Linseed	Maize	Shea kernel	Safflower	Sesame	Walnut	Cottonseed	Castor bean	Other Oil
<b>Pressing and extraction</b>																	
Crude oil/fat	Oils and fats from pressing/extraction	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>Degumming</b>																	
Lecithin, glycerol and gums		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>Storage</b>																	
Tank bottom <sup>8</sup>	Viscous, solid remains on the bottom of a tank	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>General <sup>9</sup></b>																	
Products derived from oils and fats – others then mentioned in this table 1.	<p>Any product derived directly or indirectly from crude or recovered oils and fats</p> <ul style="list-style-type: none"> <li>• by oleochemical processing</li> <li>• by biodiesel processing,</li> <li>• by distillation, or</li> <li>• by chemical or physical refining</li> </ul> <p>other than refined oil, products derived from refined oil, and feed additives</p>	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Used filter aids & used bleaching earth		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
<b>Physical refining</b>																	

<sup>7</sup> A batch subject to a Class 2 monitoring may comprise maximum 1000 tons of these products

<sup>8</sup> Any company, producing or handling this product, must have it defined within its internal documentary system. A traceability must be in place (in/out and volumes concerned).

<sup>9</sup> Meal (or expeller) are not considered as products derived from vegetable oils.





1. Companies producing products listed below (by processing oil seeds) and/or placing products listed below on the feed market																		
Processes and products <sup>7</sup>	Description	Palm	Palm kernel	Rape seed	Soya bean	Sunflower seed	Coconut	Groundnut	Linseed	Maize	Shea kernel	Safflower	Sesame	Walnut	Cottonseed	Castor bean	Other Oil	
Refined oil/fat <sup>10</sup>	Oils/fats treated, in order to remove abnormalities in terms of color, odor and taste	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Feed additives		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Fatty acid distillates	Distillates originating from deodorization during physical refining	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Chemical refining																		
Refined oil/fat <sup>10</sup>	Oils/fats treated to remove color, odor and taste	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Feed additives		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Neutralisation paste (Soap stock) and acid oils	Caustic soda refining and soap stock splitting	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Deodistillates, treated	Deodistillates, obtained through deodorization during chemical refining, treated specifically	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

<sup>10</sup> Including products derived from refined oils/fats

2. Companies producing products listed below (from animal fat production) and/or bringing products listed below on the feed market	Animal fats from land animals						Fish oil
	Tallow	Lard	Pig fat	Ruminant fat	Poultry fat	Animal fat (multi-species)	Fish oil
<b>Processes and product <sup>11</sup></b>							
<b>Fat processing</b>							
Fat processors, edible fats and oils (Regulation (EC) 853/2004)	3	3	3	3	3	3	
Cat. 3 companies, fats and oils (Regulation (EC) 853/2004)	3	3	3	3	3	3	
<b>Chemical refining</b>							
Acid oils & soap stocks	3	3	3	3	3	3	
Distillates obtained from deodorization after chemical refining	3	3	3	3	3	3	
<b>Physical refining</b>							
Fatty acid distillates	3	3	3	3	3	3	
<b>Gelatin production</b>							
Fat from gelatin production <sup>12</sup>	2	2	2	2	2	2	
<b>Fish oil processing 12</b>							
Crude fish oil							2
Oils with no monitoring history, of an unspecified origin, or from Baltic Sea							2
Soap stock and acid oils from fish oil							2
Oils from fish by-products from non-EU approved establishments manufacturing fish for human consumption							2
Oil from blue whiting or menhaden							2

<sup>11</sup> Producers and, if applicable, traders of animal fat: when subject to a Class 3 monitoring, one representative analysis per 5000 tons shall be carried out with a minimum of one representative analysis per year. At the latest at the time of delivery, a statement that the representative analyses are carried out will be provided to the buyer. The buyer will be informed on a periodical basis of the results of these analyses.

<sup>12</sup> Operators of fish oil or gelatin: when subject to a Class 2 monitoring, a batch may comprise maximum 1000 tons of fish oil or fat



2. Companies producing products listed below (from animal fat production) and/or bringing products listed below on the feed market	Animal fats from land animals						Fish oil
	Tallow	Lard	Pig fat	Ruminant fat	Poultry fat	Animal fat (multi-species)	Fish oil
<b>Processes and product</b> <sup>11</sup>							
Products (outgoing batches) derived from crude fish oil other than refined fish oil – others than mentioned in this table 2 under « fish oil processing »							2
Refined fish oil (and all other fish oils not specified above)							3 <sup>13</sup>

<sup>13</sup> Producers and, if appropriate, traders : When subject to Class 3 monitoring, one representative analysis per 2000 tons shall be carried out. At the latest at the time of delivery, a statement that the representative analyses are carried out will be provided to the buyer. The buyer will be periodically informed of the results of these analyses.



3. Companies producing products listed below (oleochemical processing & biodiesel production) and/or bringing products listed below on the feed market		Fats from vegetable or animal origin used as raw material for oleochemical or biodiesel production							
		Coconut Oil (crude)	All other products derived from vegetable oils	Other vegetable oil (crude and refined)	Oils and fats recovered from	Acid oils and Soap Stocks	lecithin, glycerol and gums	oil (with the exception of the ones already tested)	Blends
<b>Processes and products</b> <sup>14</sup>	See document 'BT-14: Negative List'								
<b>INCOMING batches</b>	<b>1</b>	4	2	4	2	4	4	2	2
<b>Oleochemical production (OUTGOING)</b>									
Products derived from the processing of the indicated products	<b>1</b>	4	2	2		4	4	2	2
<b>Biodiesel production (OUTGOING)</b>									
Fatty acids with methyl esters ( <i>fatty matter</i> ) <sup>15</sup>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>		<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
All other products derived from the processing of the indicated products	<b>1</b>	4	2	2		4	4	2	2

NOTE : If products are derived from several incoming products, and one of the incoming products are UCO's (recovered from the food industry or other (see document 'BT-14: Negative List') or Category 1 or 2 Animal Fats, these derived products are not allowed for use in feed (Class 1).

<sup>14</sup> A batch subject to a Class 2 monitoring must not exceed 1000 tons of this product

<sup>15</sup> Fatty acids with methyl esters (also called fatty matter) collected after methanol recovery at a biodiesel production, are prohibited for feed purposes, since lipophile additives, used in biodiesel production, concentrate in fatty acids.

4. Companies producing products listed below (fat blending) and/or bringing products listed below on the feed market	Mixtures of oils/fats and/or products thereof for fat blending							
		Coconut Oil (crude)	Other products derived from oils and fats	Other vegetable oil (crude and refined)	Oils and fats recovered from food companies	Lecithin, glycerol, gums and other products <sup>16</sup>	Animal fat and fish oil (with the exception of the ones already tested by supplier)	Blends
Processes and product <sup>14</sup>	See document 'BT-14: Negative List'							
<b>INCOMING batches</b>	1	2	2	4	2	4	2	2
OR <sup>17</sup>								
<b>Batches of blended fats intended for feed (OUTGOING)</b>	1							2

5. Imports <sup>18</sup>	Placing the following feed on the market :							
	Coconut Oil (crude)	Fatty Acid Destillates and Deodestillates, Tocopherols extracted from vegetable oil and	Other products derived from oils and fats	Other vegetable oil (crude and refined)	Oils and fats recovered from food companies	Lecithin, glycerol and gums and other products	Animal fat and fish oil (with the exception of the ones already tested by supplier)	Blends <sup>19</sup>
Products Fout! Bladwijzer niet gedefinieerd.								
<b>INCOMING batches</b>	2	2	2	2	2	4	2	2

<sup>16</sup> Acid oils from chemical refining, crude fatty acids from splitting, pure distilled fatty acids from splitting and soap stocks

<sup>17</sup> If blending results in a compound feed (cf. Reg (EC) 767/2009), there must be compliance with all relevant (legal) requirements and the option 'batches of blended fats intended for feed (OUTGOING)' is always acceptable. In case blending does not result in a compound feed, the fat blender shall declare (to the competent authority and eventually to the XXXXX), in the context of his risk assessment, which alternative (incoming or outgoing batches) he will choose.

<sup>18</sup> Imports concern 1) import from outside the European Union (EU) to the EU, and 2) imports between non-EU member states

<sup>19</sup> Blended fats and oils.



## 4. Positive release

To comply with the Positive Release requirements, companies (producers and, if applicable, traders, see section 1.2) within the supply chain, may use various systems. In this section, a number of systems, are explained. These systems are allowed to be used by companies certified for FCA , active within the supply chain. However, if the competent authority, or a customer, has additional requirements, these must also be satisfied.

NOTE: with 'shipped' is meant that the product is transported from the producer's facility to (for example) a storage tank, located at the customer's facility. The producer still owns the product and is therefore responsible for the product. With 'delivered' is meant that the product is not only transported to the customer, but also the ownership of the product is transferred to the customer.

No.	Option	Remarks
1	The producer, takes a representative sample of the product located at his refinery/storage tank, he then sends the sample to a laboratory for the analysis of dioxin and dioxin-like PCBs. The product is shipped, and delivered to the customer, once the test results are known, and are within the specifications.	<ul style="list-style-type: none"><li>- For more details as regards sampling and analysis, see section 5.</li><li>- Customer will be informed of the results, through means of an Analytical Report.</li></ul>
2	The producer takes a representative sample of the product, located at his refinery/storage tank, he then sends the sample to a laboratory for an analysis as regards dioxin and dioxin-like PCBs. Meanwhile, the product is shipped to the customer. The actual delivery of the product (transfer of ownership) will take place once the dioxin analysis results are known and are within the specifications.	<ul style="list-style-type: none"><li>- For more details as regards sampling and analysis, see section 5.</li><li>- In order to use this option, there must be an agreement between the producer and the customer.</li><li>- The customer will be informed of the analysis results, through means of an Analytical Report.</li></ul>





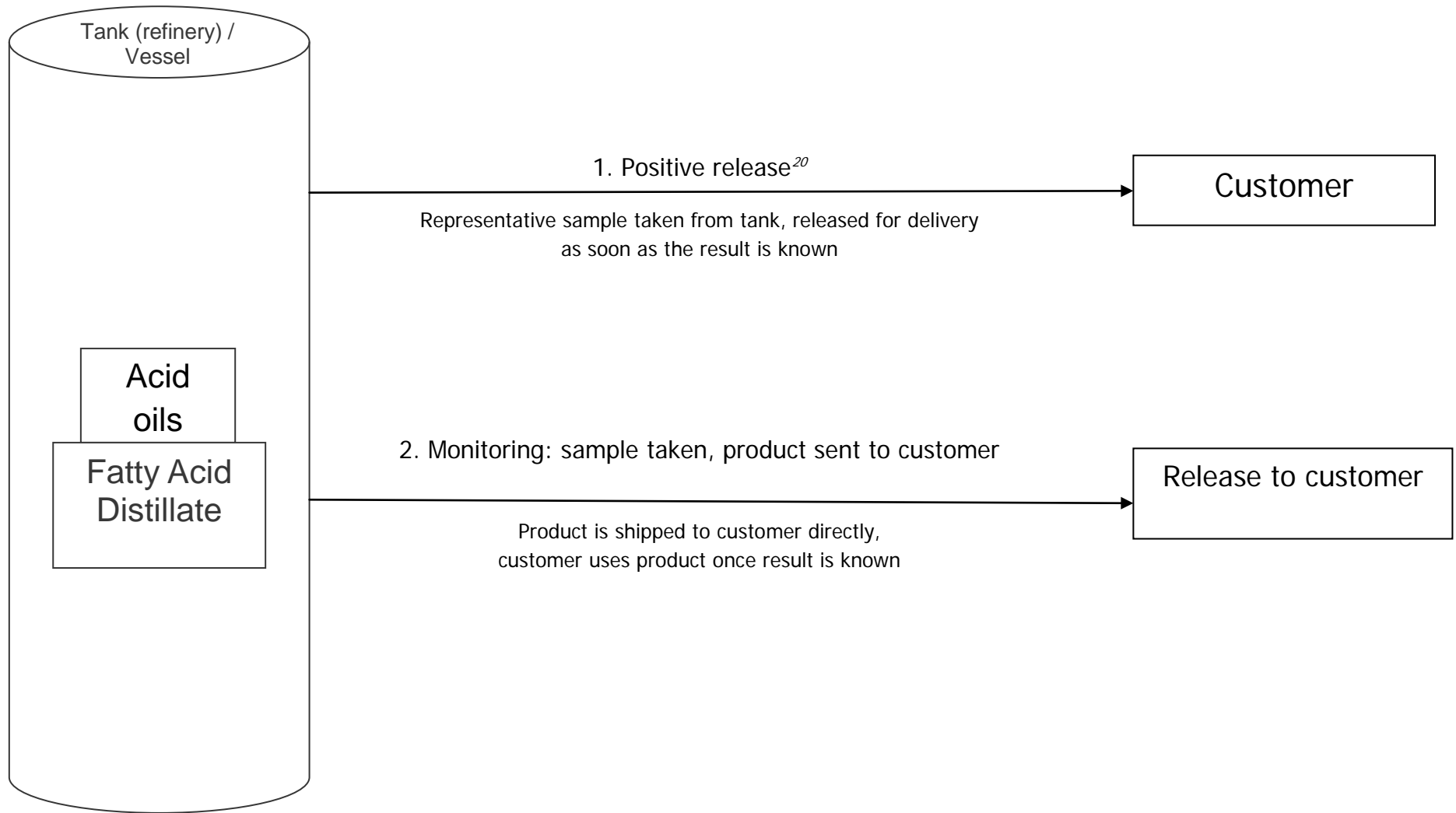
No.	Option	Remarks
3	<p>The producer ships the product (from one plant) to a collection tank (located at another site). This can be a tank; located at his own facilities, or at a third-party tank. Sampling, will be performed in the collection tank. The collection tank is exclusively filled with one single batch. The tank can be loaded discontinuously, e.g. by truck, or by vessel, but the sum of the individual loads, loaded in the tank must correspond with the continuous production of a single plant. The product, will only be delivered from this tank to the customer, if the results of the dioxin analysis are known.</p>	<ul style="list-style-type: none"><li>- One single kind of fat/oil product.</li><li>- One producer/one production plant.</li><li>- Although the product is shipped from the production plant, the producer remains responsible for the required monitoring. He must arrange the proper corrective actions, if the analysis results exceed the product standards.</li><li>- The tank does not necessarily have to be located in the same country as the production site.</li><li>- The producer will need to have full control of the operational storage activities, or will need to have an agreement with the storage company, upon use of a third-party tank.</li><li>- Registration of production, transport and storage must be clear and show a complete balance.</li><li>- See section 5 for more details about sampling and analysis.</li><li>- The customer is informed of the analysis results, by means of an Analytical Report.</li></ul>



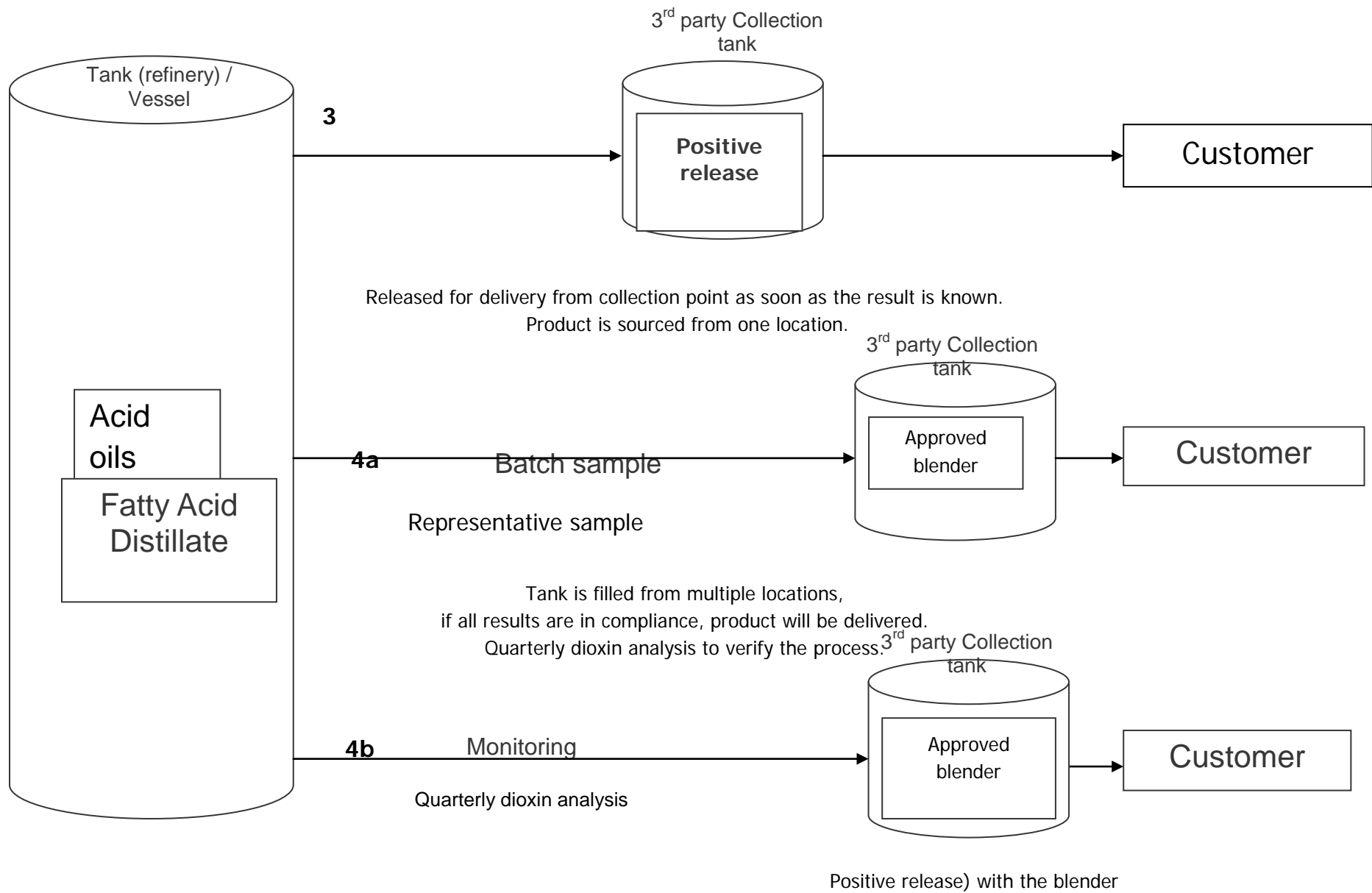
No.	Option	Remarks
4a	<p>The producer will take a representative sample for the analysis of dioxin and dioxin-like PCB's, before the products leave the production facility. The products are then shipped to a collection tank (which may be located at their own facilities, or with a third-party tank). When all samples, representing the contents of the tank, are falling within the required limits, as regards dioxin and dioxin-like PCB's, the product may then be delivered, from the third-party collection tank, to the customers.</p> <p>For verification purposes, the producer shall take every quarter a sample of the mixture from the collection tank.</p> <p>In case the contents of the tank, are not composed with batches, originating from one single production facility (option 3), the legal entity, operating the tank, will need to have an approval, as a fat blending operator (in the EU).</p>	<ul style="list-style-type: none"><li>- This option is only valid in case that product, delivered to the customer, is a feed material. When the product is a compound feed, this option 4a is not applicable.</li><li>- There may be more than one production plant involved, also from other producers.</li><li>- Although the product is shipped from the production plant, the producer stays responsible for the required monitoring. He must have arranged for proper corrective actions, in case the results of analysis exceed the product standards.</li><li>- The tank does not necessarily have to be located in the same country as the production site.</li><li>- The producer will need to have full control of the operational storage activities, or will need to have an agreement with the storage company, upon use of a third-party tank.</li><li>- The registration of production, transport and storage, must be clear, and must provide a complete balance.</li><li>- The file containing the analysis certificates must be complete, and must be clear.</li><li>- The customer will be informed of the analysis results, by means of all underlying analysis results, and the composition (including the proportion of the different components), unless the producer and customer agree, that the customer will be informed by means of a Conformity Note. The contents of the Conformity Note must be clear, unambiguous and verifiable. There must be a clear link between the Conformity Note, the delivered batch and the analysis certificates.</li><li>- The producer is responsible for the quarterly add-on monitoring.</li><li>- When the product turns out not be meeting the requirement and, as a consequence, the status of the product label has to be changed, the customer will be informed to send written confirmation back to the supplier that the product label is changed.</li></ul>



No.	Option	Remarks
4b	<p>Fat blending: different producers (which can be different plants and/or different legal entities), will deliver the product to the third-party collection tank. Sampling, will take place in the collection tank, at the fat blender's facilities, after production of the fat blend.</p> <p>Each individual producer will monitor all products shipped to the third-party collection tank, via quarterly sampling (as an add-on to monitoring required). The individual producers are obliged to provide the monitoring results to the fat blender.</p>	<ul style="list-style-type: none"><li>- This option is mandatory, if the fat product is a compound feed.</li><li>- The product could be one single kind of fat/oil product, or a mixture of different fat/oil products.</li><li>- Product is owned by fat blender.</li><li>- The tank does not necessarily have to be located in same country as the production site.</li><li>- The producer needs to have full control of the operational storage activities, or need to have an agreement with the storage company, upon use of a third-party tank.</li><li>- The fat blender is responsible for the quarterly add-on monitoring.</li><li>- The registration of production, transport and storage must be clear and provide a complete balance.</li><li>- The file, containing the analysis certificates must be complete and must be clear.</li><li>- The customer will be informed of the analysis results, by means of an Analytical Report of blend.</li></ul>



<sup>20</sup> Example 1 to 4b: positive release not necessary in case the blend consists for 100% out of Acid Oils.



## **5. Sampling & Analysis**

### **5.1. Sampling**

Sampling must be performed in compliance with the general FCA requirements. For the sampling of fats and oils, several sampling techniques and procedures are available. Samples must represent the batch. The samples must be taken from homogeneous and clearly identified batches.

### **5.2. Analysis**

The analysis, as regards the levels of dioxins and dioxin-like PCBs must be performed by a laboratory, accredited according to ISO17025 for dioxin/dioxin-like PCB's in oil, fats and fatty acids/distillates as scope.

The laboratory must use an officially recognized method of analysis, in accordance with the Commission Regulation (EC) No 152/2009, including the amendments regulated by Regulation (EU) No. 691/2013. The certificate of analysis must indicate clearly the results of both dioxin and dioxin-like PCB's. The level of both these contaminants, must not exceed the maximum residue levels (see document 'BT-01: Additional standards for animal feed and by-products for reprocessing').

Informing the competent authority must be in compliance with the applicable legal obligations.

### **5.3. Batch size**

In the tables, the maximum batch sizes, are indicated. If can be demonstrated that a homogenous consignment is bigger than the maximum batch size (indicated in the tables = max. 1000 tons), and that it has been sampled in a representative way, the results of the analysis, of the appropriately drawn and sealed sample, will be considered acceptable.

### **5.4. Other requirements / remarks**

There must be a clear link between the delivered batch and the certificate of analysis / analytical report from an approved lab.