RAPPORT B2009

Certification rules for digestate

ISSN 1103-4092

AVFALL SVERIGE
utveckling

PREFACE

These certification rules lay down requirements for certification, technical requirements and requirements for continuous control of certified digestate.

The technical requirements laid out in Chapter 3, along with requirements for continuous control according to Chapter 4 and 5, have been decided by the Swedish Waste Management (Avfall Sverige) together with SP Byggnadsteknik, SWECO VIAK (former VBB VIAK), Dansk Jordforbedring and Svenska Lantbruksuniversitetet, among others. The certification is made by SP Certification in accordance with Chapter 2.

The ongoing inspection consists of the producer's self-monitoring and SP's supervisory inspection. The self-monitoring include among other things testing of finished digestate. SP's supervisory inspection is carried out through producer visits and includes inspection of the producer's self-monitoring. SP collect samples for analysis of the finished products during the visits with the purpose to verify the conformity of the analysis results presented in the producer's self-monitoring.

The certification rules are based on prevailing standards and the Swedish Waste Management's requirements, which are documented in the RVF report 99:2 (AFR report 257) "Sjösättning av certifieringssystem för kompost och rötrest". When necessary, the certification rules are updated in order to be as accurate as possible. Current edition of the certification rules is published on the SP website, http://www.sp.se. The certification rules are also based upon other documents such as the European parliament and council's regulation no. 1774/2002 from October 3, 2002, stating health directions for animal by-products not destined for use in food items, and the Swedish Environmental Protection Agency's guidelines with general advice about methods for storing, digestion and composting of waste.

The relevancy of the certification rules is granted by decisions taken by the direction committee for certification of compost and digestate. The direction committee has two annual meetings. It is entirely in their interest that as many as possible of the parties involved are represented in the direction committee. At present the direction committee has representatives of both producers, users, experts, and trade organizations concerned. The certification rules are regularly updated on the basis of decisions taken by the direction committee.

This edition of SPCR 120 is replacing the December 2006 edition.

Borås, December 2007

SP Technical Research Institute of Sweden
Certification

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GENERAL INFORMATION ABOUT CERTIFICATION AT SP

Certification denotes the guarantee from an independent third party of the product's conformity to standard or specific requirements. Within SP, certification is performed by a special unit, SP Certification, which is completely separate from the other testing and inspection units. They report to a certification board, comprising representatives of various industry sectors. The board can appoint expert groups for various product areas, e.g. technical committees. Certification of products by SP is performed in accordance with SS-EN 45011.

Requirements for certification are set out in specific certification rules (SPCR), which are put out for each particular application area. Before certification starts, the certification rules must, unless they are entirely made from authorities' directions, be discussed with parties involved, and thereafter they can be approved by SP's certification board. This procedure ensures that certification is based on rules that have been carefully considered, are relevant and have a sound basis.

Products can be certified by SP if they in an initial assessment, with for example tests, show that they meet the requirements. This is affirmed by a certificate, which normally is a permission (licence) to use the certification mark. A continuous control, consisting of the producer's self-monitoring, and the SP supervisory inspection, will guarantee that the requirements are fulfilled during the validity time of the certificate.

1.2 Scope of the certification rules

These certification rules concern non-mandatory certification of digestate from clean source-separated organic waste in regard of requirements for incoming input material, deliverers, collection and transport, process of treatment, final product as well as table of content and "Recommendations and directions for digestate usage". The certification rules are made primarily for anaerobic digestion plants, but may also be of use in wet composting plants on condition they use with input material approved in accordance with the certification rules.

The certification rules are continuously updated by the direction committee and information from the most recent update is stated in Appendix 7.

Please note that the rules do not comprise digestate made from digestion sludge in sewage sludge treatment plant. The purpose is, at this stage, not to certify the finished soil mixture containing materials other than digested sludge from organic waste, such as peat, topsoil, gravel, sand, artificial fertilizer etc. A mixed soil product containing certified digestate may be marked with the certification system's mark, even if the final product is not included by the system on condition that it clearly shows that only the digestate is certified, and that the share of soil mixture consisting of certified digestate is given.

The certification rules are based on results from the project “Kvalitetssäkring av kompost och biogödsel från organiskt avfall”. Reports from the project, such as report 99:2 “Sjösättning av certifieringssystem för kompost och rötrest”, can be ordered from the Swedish Waste Managment on the following address: Avfall Sverige, Prostgatan 2, 211 25 Malmö

Other documents the certification rules are based upon are the European parliament and council’s regulation no. 1774/2002 from October 3, 2002, stating health directions for animal by-products not destined to be used in food items, and the Swedish Environmental Protection Agency’s guidelines with general advice about methods for storing, digestion and composting of waste.

1.3 Definitions

Additives	Additives intended to improve the quality of the final product. Approved additives are specified in Appendix 1b.
Animal by-product	See ABP regulation, EG no. 1774/2002.
Certification body	Organization authorized to perform inspections and testing, as well as issuing and withdrawal of certificates.
Deliverer	Company assigned by an organization or local authority to collect and/or deliver organic waste.
Digestive tract content	Stomach or intestine contents from mammals or ostrich birds, regardless of whether or not the content has been separated from the stomach/intestines.
Distributor	Juridical person who, by contract with the producer, delivers digestate to the end-user.
Impartial authority	Organization with no profit interest in the business of producers and users.
Inspection body	Organization authorized to perform inspections and testing assigned by of the certification body.
Inspections	Tests and other documented routines carried out to certify the fulfillment of the intended product quality.
Manure	All sorts of faeces and/or urine from guano or production animals, with or without litters, which may be either processed or non-processed, according to Chapter III of Appendix VIII, or transformed in a biogas or composting plant.
Pasture land	Land covered by grass or other herbage and is used for pasturage on a regular basis.
Process	All the steps in the process from input material to compost.
Process aids	Additive intended to facilitate or enable steps in the treatment process. Approved process aids are specified in Appendix 1b.
Producer	Juridical person producing compost.
Product	Product in these certification rules signifies fully finished compost to which supplements, such as peat, topsoil, gravel, sand, artificial fertilizer etc., have not yet been added.
Qualification year	Certificate may be granted at the soonest after a year of inspections, a so called qualification year. The qualification year starts when the inspection body has carried out its first impartial test.
Input material	Organic waste intended for treatment in an anaerobic digestion.
Second part audit	The digestate producer’s audit of entrepreneurs whose work affects the quality of the product, for example input material suppliers
Supplier	Household or organization where organic waste is produced.

2. DIGESTATE CERTIFICATION CONDITIONS

2.1. General information

The conditions for certification are specified in this chapter, and have been based upon the standard directions for certification according to "Sjösättning av certifieringssystem för kompost och rötrest", RVF Utveckling, Rapport 99:2. The conditions have been established by a direction committee consisting of a large range of representatives from various groups within the agriculture sector. The conditions are revised when necessary and the date of last revision is given in Appendix 7. An initial assessment of the product and of the continuous control is made during the qualification year, before the certificate is issued. A certificate is thereafter valid on condition of a functioning continuous control, among other things. Other conditions are specified in Chapter 6.

2.2 Application

The application for certification must be in writing and, during the qualification year, completed with:

- Technical data (test reports etc.)
- A description of the producer's self-monitoring
- Suggestions for labeling according to Section 2.3.5

2.3. Qualification year

The qualification year begins when the inspection body performs its first impartial test as described in Appendix 2. Certification of additional products does not require a second qualification year.

The initial assessment examines received documents against the requirements set out in the certification rules. When the assessment is completed and the documents of the applicant are considered to meet the requirements, the inspection body will carry out impartial sampling and analysis through producer visits, and verify that the reported self-monitoring meets the requirements specified in Chapter 4. The first hygiene inspection shall also be carried out during the qualification year and performed as described in Appendix 5. This will all take place during the qualification year at the given frequency described in Appendix 2. If both self-monitoring and impartial tests meet the requirements presented in Chapter 4 and 5, an agreement on continuous control between the producer and the inspection body is signed. Thereafter the certificate is issued.

2.3.1. Production during the qualification year

Given the product is approved (see Section 3.6) the product produced during the qualification year will be considered and used as a certified product. The product may not however carry the certification mark until after the qualification year is completed and the certification is issued.

2.3.2. Non-conforming product during the qualification year

The qualification year will start over if a product is non-conforming (once or several times) during the qualification year, without an adequate explanation of the causes, and if no actions were taken to solve the problem causing the defect in quality.

2.3.3. Technical data

For the product in question the applicant must present technical data containing the following information:

- A declaration of contents according to Section 3.7, as well as recommendations and directions for digestate usage according to Section 3.8.
- A test report to show the fulfillment of the technical requirements according to Section 3.6, which is based on tests during the qualification year. The report must be coming from an impartial body and may, provided that no considerate process changes have been made since the date of issue, be two years of date at the most from the time of the application.
- A process declaration, in which the producer accounts for the treatment process, for example which are the units involved and where the production takes place.

The tests shall be performed by a, for the particular test method, accredited laboratory. The laboratory shall be approved by the direction committee for compost and digestate certification. The laboratory must also be approved by SP Certification, see 6.1.

2.3.4. Continuous control

The continuous control shall guarantee that the certified products continuously fulfill the requirements described in the certification rules. It includes self-monitoring as described in Chapter 4, which the producer performs, and a supervisory inspection according to Chapter 5. The continuous control is appointed in an agreement between the producer and the certification body.

2.3.5. Labeling

Products certified by the system have the right to be labeled with the mark “CERTIFIERAD ÅTERVINNING”. The design of the mark is presented in Appendix 4.
Products, delivery notes etc. labeled with the certification system’s mark must also hold information of the certificate number, name of the certificate holder, product name, serial number/date of production or equivalent. The presentation of the labeling must be approved by the certifying authority.

2.4. The certificate’s validity

The validity of the certificate is five years. The validity period can be extended, after application from the certificate holder, based on for example supervised inspection reports.

2.5. Modification of a certified product

The certificate holder is obliged to inform the certifying authority prior to modification of input material (not entirely classified in Appendix 1a) or treatment process, who then determines if the nature of the modification is one that can be accepted without supplementary tests, inspections or revision of the certificate.

3. SYSTEM REQUIREMENTS AND TECHNICAL REQUIREMENTS

3.1. Input material

Clean and source-separated organic waste from:

- Parks, gardens, and other grass areas.
- Greenhouses, garden centers etc.
- Households, large scale kitchens and restaurants.
- Food related retail trade and wholesale.
- Food related refinement industry and packaging industry.
- Animal by-products
- Farming
- Forestry

Examples of waste types included are given in Appendix 1a.

The input materials are essential to the quality of the product. Potentially hazardous substances must therefore be avoided. The producer must take measures to minimize the level of undesirable substances.

Materials which contain hazardous or foreign substances that significantly affect the quality of the digestate negatively, or in a negative way influence the acceptance of the recycling system or the final product, are not appropriate input material.

Sludge from sewage sludge treatment plants, night soil, and sludge from single wells are covered by separate legislation and is therefore quality-assured by separate systems.

If digestion of ABP Category 2 (exclusively manure, digestive tract content which has been separated from the stomach and intestine system, milk and raw milk) and/or Category 3 (see Appendix 1a) takes place in the plant, the plant must be approved by the Swedish Board of Agriculture and meet the requirements specified in Appendix 3. The former concepts high and low-risk animal waste are replaced by the three categories specified in ABP 1774/2002

3.1.1. Additives and process aids

Additives and process aids may be used in the process. They must be declared and described in the producer's intern quality system, quality manual or equivalent. Approved additives or process aids are specified in Appendix 1b. There is no maximum limit for the extent of their implication. It is the producer's responsibility to inform the inspection body of how they affect the product.

3.2. Suppliers

The suppliers shall deliver input material as in accordance with Section 3.1. All deliverers shall receive information regarding the types of input material approved and source separation of it. The delivery must be managed in such a way that amounts of undesirable substances are minimized. Large scale suppliers must also perform self-monitoring in order to ensure that quality of the material meets the standards for input material and final products.

Second part audit of the deliverer's quality management can be performed when necessary.

3.3. Collection and transport

The deliverer shall document the collecting depots and the quantity of waste of each transport. The transporter must manage the transfer so that the quality of the material is not impaired by hazardous or foreign substances. Precautions must be taken to avoid re-infection by contaminants during the transport. Self-monitoring shall be made to guarantee the fulfillment of these requirements.

3.4. Reception

Weight or volume of received material is registered. The quality of the material is controlled and any hazardous or foreign substances are removed to the utmost possible extent. The risk of contamination must be minimized. As for plants which receive material in closed systems without possibility of visual control, the total of the volumes registered at the collecting depot must correspond with the received quantity at the plant.

3.5. Treatment process

The treatment process must be carried out by experts and by using a functional biologic process technique. The risk of contamination of hygienized material or by interference from non-certified material must be minimized. Current operational parameters of relevance for the product quality shall be measured and documented.

Requirements for current operational parameters for digestate are the following:

- Type and quantity of input material and additives.
- Temperature and pH in the reactor.
- Time between digestion chamber loadings.
- Hydraulic dwell time
- Combination of time and temperature in septic tanks.
- Organic load
- Volume load
- Measures against recontamination
- Potential process disturbances

3.6 Requirements for final product

Requirements for guideline values regarding the quality of finished products are presented below. A list of analysis methods to be used is described in Appendix 2.

Metals

Guideline values for metal content in digestate are set out in Table 1.

Table 1. Guideline values for metal content in compost.

METAL	MAXIMUM CONTENT, mg/kg TS[1)]
Lead	100
Cadmium	1
Copper	600[2)]
Chromium	100
Mercury	1
Nickel	50
Zinc	800[2)]

1) All values, aside from those of copper and zinc, are conforming to the guideline values for soil impro vers according to the "EU flower".

2) The values applied to copper and zinc are the same as for waste water sludge allowed for dispersion on fields, see SNFS 1998:4.

Disease control

The product must meet the requirements for disease control specified in Appendix 3.

Visible impurities

'Visible impurities' means foreign substances such as plastic, glass, metals and composites. The total content of visible impurities >2 mm must not exceed 0.5 % of the dry substance weight.

If the input material is of a kind that has a low probability for visible impurities, the certifying authority can give approval of dispensation from this requirement.

Requirements for solid digestate

- **Viable weed seeds and plant parts** – requirements for approval are that the product contains less than 2 viable weed seeds or plant parts per liter.
- **Organic substance** – The product must contain at least 20 % of organic substance, measured as loss on ignition in percent of the dry substance weight.

3.7 Declaration of contents

The product must have a written document called declaration of contents. The declaration of contents should at least contain the information specified in section 3.7.1. The measurements presented in the declaration should be updated at least once every year and be average values from analyses made the last 12 months.

3.7.1 Minimum standards for the declaration of contents of digestate intended for usage in farming.

General information

- Premises of production
- Production manager
- The input material, additives, and process aids included, in accordance with Appendix 1a or Appendix 1b, given in percent of weight or volume.
- Recommendations and directions for digestate usage specified in Section 3.8.
- Affirmation of the fulfillment of environmental requirements for heavy metals, disease control, and visible impurities.
- Date when declared parameters were last revised

Other parameters should be presented as in Table 2.

Table 2. Parameters to be included in the declaration of contents of the digestate.

PLANT NUTRIMENT	TERM	UNIT
Total Nitrogen	Tot-N	kg/tonne **and** kg/m^3
Ammoniacal Nitrogen	NH_4-N	”
Total Phosphorus	Tot-P	”
Total Potassium	Tot-K	”
Magnesium	Mg	”
Sulfur	S	”
Calcium	Ca	”
SOIL IMPROVING AND PHYSICAL QUALITIES	TERM	UNIT
Organic substance	-	Loss on ignition in % of TS
pH	-	-
Dry substance content	TS	Weight percentage

3.8. Recommendations and directions for compost usage

A document named “Recommendations and directions for digestate usage” must be written for the product as specified in this section. However, this is not required if the digestate is solely used as input material for soil and manure mixtures.

The recommendations and directions for digestate usage shall state the quantity of digestate that should or, in occurring cases, is allowed for dispersion in different fields of applications. For usage in farming, restrictions regarding supply of plant nutriment (Table 3) and metals (Table 4) should be applied, as laid out in SJVFS 2004:62. The substance which limits the dispersion must be presented.

Table 4. Supply of plant nutriment for use in farming [9].

PHOSPHORUS GROUP OF THE SOIL1	TOTAL PHOSPHORUS (kg/ha)	AMMONIACAL NITROGEN (kg/ha)
I och II	35	150
III – V	22	150

1 Phosphorus content (P-AL), Group per 100 grams of dry soil:
I < 2; II 2,0-4,0; III 4,1-8,0; IV 8,1-16; V >16

Table 5. Guidance values for metal supply on fields.

METAL	ANNUAL MAXIMUM LIMIT (g/ha)
Lead	25
Cadmium	0,75
Copper	300[1)]
Chromium	40
Mercury	1,5
Nickel	25
Zinc	600

1) Larger quantities of copper can be accepted if the need for an additional contribution can be proved at the particular field where the dispersion is intended.

4. THE PRODUCER'S SELF-MONITORING

4.1. General information

The producer must perform regular self-monitoring to guarantee the fulfillment of the requirements set out for carrying the certification mark. The self-monitoring must be described in the inspection program, the quality manual or equivalent, and include the requirements specified in this chapter. If the producer has a management system in accordance with SS-EN ISO 9001 or SS-EN ISO 14001 that has been certified by an accredited certification body, this may be considered to fulfill the requirements for organization, the management's inspection of the self-monitoring, documentation, and complaints described below.

4.2. Organization

4.2.1 Quality policy

The producer must have a quality policy which describes the product quality goals.

4.2.2 Responsibilities and powers

The organization of the self-monitoring must be described with names of those responsible for the inspection and with the powers to take actions to prevent defective quality.

4.2.3 Producer's representative

The producer must appoint one person to be representative applicable to the self-monitoring. The representative has authorized powers and responsibility to guarantee the fulfillment and maintenance of the intended quality on certified products.

4.3. The management's inspection of the self-monitoring

The management or producer's representative, see Section 4.2, must at least once a year perform documented inspections to guarantee the efficacy of the self-monitoring. The management's inspection is based on results from internal audits, deviation reports, test results and action plans.

4.4 Staff training

All staff whose work affects the quality of the products must complete the required training. The producer's representative must complete certification training approved by the certification system's direction committee.

4.5 Documentation

Only the most recent editions of documents may be accessible to the staff of the company. There must be a record of documents and a distribution list, as well as routines for making new documents, document changes, and collection of invalid documents.

4.6 Testing and Control

4.6.1 Input material, distributors, collection and transport

The producer must present routines for control of input material, suppliers, collection, and transport.

4.6.2 Reception

Incoming input material of importance for the quality of the product must be controlled in accordance with the documented routines. The control must be performed in the extent considered necessary to

certify that the coming material and products meet the specified requirements.

If a situation would arise which means a risk of a higher content of impurities, there must be routines laid down for more elaborate analyzing and special treatment of the product.

4.6.3 Treatment process

Control during the treatment process must be of the extent considered necessary to certify that the products produced meet the specified requirements. The operational parameters stated in Section 3.5, are essential to the quality and must be documented.

4.6.4 Final product

Control of final product must be of the extent considered necessary to certify that the product meet the requirements specified. The producer must set up a sampling plan from methods laid down in Appendix 2. The sampling plan must include information such as sampling frequency, analyses and measures to be taken in case of a non-conforming result. Examples of such measures could be increased frequency of samplings, separation of non-conforming sections etc.

Access to instructions for the sampling performance is mandatory.

The minimum frequency for sampling through self-monitoring, or impartial inspection, during the qualification year and during the continuous control is laid down in Appendix 2.

Analysis reports are audited at the same time as the recurrent inspections.

4.6.5 Equipment and methods

Calibration, control, adjusting and maintenance of equipment shall be presented in applicable cases. Methods laid down in Appendix 2 should be used. Other methods can be use if validated as equivalent.

4.7 Treatment of non-conforming product

Products that do not meet the specified requirements must be separated. Any labeling suggesting authorization must be removed. Non-conforming products cannot be marketed under the same name or mark as certified products. If the product has been delivered when the defects are detected the client must be informed. Thereafter the consequences will be investigated.

4.8 Directions for labeling

There must be directions for the procedure and time of the labeling of certified product.

4.9 Handling of finished products

Finished products must be handled so that a satisfactory homogenization is achieved. Prevention of damages and impairments in handling, storing, packaging and delivery should be described.

4.10 Traceability

Delivered products should be traceable to intermediate storage, period of manufacture etc.

4.11 Preventive measures

The producer must make an action plan for the guaranteeing and the amelioration of the product quality. Actions taken for the purpose of the continuous minimization of undesirable substances must be

described. Preventive measures are, for example, measures in the production to help avoid any defects in quality, re-infection by contaminants or contact between undesirable substances and incoming materials.

4.12 Correction measures

Measures taken in case of defects in product quality must be described, as well as measures to prevent such defects from being repeated. The routines shall at least include an investigation of the causes of the defects, and the establishment of necessary measures to minimize the risk of repetition. Investigation and measures should be documented and shown to the inspection body.

4.13 Complaints

Complaints from clients regarding certified products, labeling, marketing etc. should be documented along with measures taken, and kept accessible to the inspection body.

4.14 Quality records – record keeping

The producer must be able to prove that the products meet the specified requirements through relevant documentation. The documents may be kept as computer files or as paper copies. The documentation of inspections and tests must be made so thoroughly that it makes required traceability possible. Records must include both comments from cases of non-conforming results and a description of measures taken.

A minimum of the following information should be presented once every year:

- Information about received quantities and the types of input material.
- Information about the quantities of digestate produced.
- Results from analyses.
- Information about the quantities of certified products delivered during the past year.
- Information about the quantity of non-conforming products and how it has been handled.

Archiving times must be presented for documents from the self-monitoring. Records from inspections and tests must be kept accessible to the inspection body for a period of at least five years.

5 THE SP SUPERVISORY CONTROL

5.1 Implementation

The supervisory control is made once or twice every calendar year depending on the extent of the production, and carried out through unannounced producer visits on hours decided by the inspection body (SP). Each inspection visit is either a half day (4 working hours exclusive of travelling time) or a whole day (8 working hours exclusive of travelling time).

The inspection body makes a running assessment of the visit extent needed to ensure the fulfillment of the requirements laid down in SPCR120. The most important aspects considered when making an assessment of the extent of the visits, are a well functioning self-monitoring and products which meet the set requirements. Please note that more frequent visits may be resulted by significant alterations of the treatment process and/or changes of input material (see also Section 2.5).

The first hygiene inspection is made during the qualification year. Thereafter a follow-up inspection is made every five years, to follow up on any changes made at the plant etc.

On visits, the inspection body should check that the self-monitoring described by the producer operates as intended, and make a sampling and control of certified products as described in Section 5.2.

If the producer uses a quality system which is certified by an accredited certification body (see Section 4.1) this part of the inspection body's inspection of the self-monitoring can normally be limited to a control of test results and revision reports.

5.2 Testing and controls

Supervised sampling is made at the inspection to ensure the sampling is performed correctly. The sample is then analyzed or discarded in accordance with the plant's ordinary routines. Handling and analysis of the sample must be made according to methods stated in Appendix 2.

If the producer's self-monitoring fails the inspection, the causes shall be investigated by the inspection body. The investigation may result in a new inspection visit, in a reinvestigation, or in a disapproval of the continuous control.

5.3 Measures if product or inspection of self-monitoring fails

If sampling and analysis performed after the self-monitoring show inadmissible values, the producer is obliged to report this to the inspection body or certification body.

5.4 Reporting

The supervisory control must be reported in writing to the producer, as well as to the certificate holder, if the certificate holder is someone else than the producer.

6. OTHER CONDITIONS FOR CERTIFICATION

6.1 General information

The conditions in these certification rules, Chapter 2 and 6, are based on principles presented in the SP manual for certification quality. Subcontractors typological testing and supervisory inspection must be approved by SP Certification.

SP is both certification body and inspection body. SP is in capacity as certification body included in the control body described in Section 6.9.

6.2 Revision of certification rules

SP reserve the right to make alterations in the certification rules on decision by the direction committee for certification of compost and digestate. Information about the last date of revision is found in Appendix 7. Prolongation of certificate is approved on condition that the certificate holder binds himself to follow the revised rules.

The certificate holder should however be given a reasonable time of period to enable adaption to the revised rules, unless there are particular reasons for which an exception should be made.

6.3 Responsibility of the certificate holder

The certificate holder is responsible for guaranteeing that products covered by the certificate and labeled with the certification body's certification mark, in all respects conform with the certified product according to the certificate, and that these products fulfill their purpose and do not cause damage or other nuisance.

6.4 The right to use the mark

The certificate holder has the right to label products which are comprised by the certificate with the certifying authority's certification mark, and to use the mark in advertising or other publicity of the products. Advertising which could cause confusion between labeled and non-labeled products is not allowed.

6.5 Certificate

The certificate is not transferable.

6.6 Withdrawal of certificate

The certification body can with immediate effect withdraw the certificate, definitely or temporarily, if:

a. The certificate holder has used the certification mark on or in connection with products which do not fulfill the requirements;
b. The certificate holder has used the certification mark on products not covered by the certificate;
c. The continuous control has stopped or given non-conforming results;
d. The certificate holder has not complied to the conditions for the certificate in other respects;
e. The certificate holder has failed to pay the fees within the prescribed time limits;
f. The certificate holder has been declared bankrupt, has gone into liquidation, or has assigned the production;
g. Certificate non-conformities are revealed. The certificate holder should however be given reasonable time for adaptation to the new conditions, given that there are no specific reasons for other measures;
h. The product is found to be inappropriate for its purpose or in other ways capable of causing damage or nuisance.

6.7 Obligations followed by certificate withdrawal

If the certificate holder's certificate is withdrawn, definitely or temporarily, he/she must:

a. Immediately cease all certification reference to the certificate in advertising or other publicity of the product in question;
b. Remove the certification mark from all products in stock, if the certification body so demands;
c. Defray all costs for replacing defect and already delivered products with products fulfilling the requirements in the certification rules, if the certification body so demands.

6.8 Certificate return

The same rules are valid when a temporarily withdrawn certificate is given back as when it was first received the first time, see Section 2.3. A new qualification year is not required if less than one year has passed since the certificate was withdrawn, on condition that no certification rules or production conditions have changed.

6.9 Responsibility of the control body

The certification system's direction committee (of which the certification body is part) is bound to see to that technical requirements of the certification rules are based on obtainable knowledge and experience, for example accredited standards or equivalent specifications, that they fulfill requirements set out in the legislation, and that the rules reflect what is considered a relevant quality level by the parties involved.

The inspection body is responsible for guaranteeing that inspections of certified products are carried out with due precision according to standards presented in these certification rules.

6.10 Confidentiality

All information the certification body or inspection body take part of is protected by confidentiality, apart from the following exceptions:

- The certification body or their partners keep registers of accredited certificates. The registers contain information about the certificate holder, certification number, certified products, classifications if any and validity time. These registers are published on the web site of the certification body.
- The certification body has the right to publish decisions about certification withdrawal and misuse of certification or labeling.
- The certification body has the right to publish information about the total quantity of input material and products covered by the certification system, but not information about separate plants.
- The certification body has the right to publish information about the average quality standard of products, but not information about the quality at separate plants.

6.11 Appeals

An appeal against a decision by SP should be made in writing to SP. Measures due to the appeal are decided by the SP certification board.

6.12 Fees

The fees for the initial assessment (certification), auditing, supervisory inspection and prolongation of the validity period shall be defrayed by the applicant/certificate holder.

CERTIFICATION RULES FOR DIGESTATE
SPCR 120

APPENDIXES

For date of last revision of each appendix,
see Appendix 7

APPENDIX 1A

Input material

Input material of certified digestate must be clean, source-separated, and biodegradable waste according to Table 1.

Table 1. Input material for certified digestate.

INPUT MATERIAL SOURCES	EXAMPLES
Parks, gardens and other grass areas	Leaves, grass, branches, fruit, flowers, plants and plant parts.
Gardens, garden centers etc.	Tops, weeds, soil and peat.
Households, large scale kitchens and restaurants[1]	Fruit and vegetable remainders, coffee and tea remainders, food remainders, egg shells, cardboard, paper, paper bags, biodegradable bags, plants, and flower soil. Bags for source-separated household waste should fulfill EN 13432 from 1/1 2005.
Food related retail trade and wholesale[1]	Fruit, vegetables, potatoes, dairies, paper towels, paper napkins, bread, meat, meat parts (bones etc.), delicatessen, flowers, pot-plants, soil, and peat. Approved input material is also decay products from the food industry containing additives approved for food production.
Food related refinement and packaging industry[1]	Approved input material is decay products from the food industry containing additives approved for food production.
Agriculture	Manure from pigs, neat cattle, sheep, horses, fowl, and pets. Straw, harvest remainders, silage, green material, energy crops, and catch crops. (Note that manure is regarded as ABP.)
Forestry	Bark, wood chips, sawdust and fiber sludge from the paper industry.
Animal by-products Category 2	Note that only manure, digestive tract content which has been separated from the stomach and intestine system, milk and raw milk are approved ABP in Category 2.
Animal by-products Category 3	See the ABP regulation.

1 If this category contains animal by-products (according to the table above) the regulation for animal by-products should be followed.

APPENDIX 1B

Additives and process aids

Rules for additives and process aids are stated in Section 3.1.1.

Table 2. Approved additives.

APPROVED ADDITIVES ACCORDING TO SPCR 152
Organic[1] or mineral fertilizer
Lime

1 Organic fertilizers must follow the ABP regulation.

Table 3. Approved process aids.

APPROVED PROCESS AIDS ACCORDING TO SPCR 120
Iron chloride
Iron oxide
Bentonite
KMB1
Diatomaceous earth

APPENDIX 2

Sampling and digestate analysis

In this appendix three elements are presented:

- Sampling and analysis frequency
- Sampling methods
- Analysis methods for digestate

Sampling and analysis frequency

The minimum sampling and analysis frequency depend on the size of the plant as Table 4 shows. The samples must be spread evenly over the year. The table makes reference to sampling of the parameters mentioned in:

- Section 3.6 Final product requirements (metals, disease control, and the three requirements for solid digestate).
- Section 3.7.1 Minimum requirements for the declaration of contents of digestate intended for usage in farming.

Table 4. Minimum frequency of sampling and analyses.

Amount of input material (tonnes/year)	SELF-MONITORING(SAMPLES/YEAR)			
	Qualification year		Minimum frequency of continuous control	
	All samples except the bacterio-logical	Bacterio-logical samples[1]	All samples except the bacterio-logical	Bacterio-logical samples[2]
Less than 5 000	2	4	1	4
More than 5 000	4	4	2	4
More than 10 000	8	4	4	4

1 Sampling should, during the qualification year, be made in three sections as described in Appendix 5. After the qualification year samples are only taken on the product (the digestate).

2 The bacteriological sampling at the continuous control should at two occasions consist of a sampling where n=5 (according to the Swedish Board of Agriculture). At the other two occasions n=1 and the result should then be less than 1000. The total number of samples during a year then equals 12.

Sampling methods

Due sampling methods for microbiological sampling and general sampling of wet digestion are presented below.

Sampling methods for microbiological sampling in anaerobic digestion plants

- The sampling day should be picked so that the laboratory can make the analysis no later than the next day. Normally this means that sampling not is possible on Thursdays, Fridays, and Saturdays. Discuss this with the laboratory in question.
- The location of the sampling depends on the type of sample.
- In order to obtain an accurate analysis result the sample must not be contaminated by extraneous micro organisms. If a dipper or bucket is used when moving the sample from the tank to the jar, these must be cleaned thoroughly and rinsed from potential detergents. A tap hose should be kept above the jar and not inside it.
- Ensure that the sample material is representative. If the sample is drawn from a tube, a quantity corresponding to a minimum of the volume of the tube should be drawn before the sample container is filled. Samples from tanks should be taken immediately after stirring.
- The sample quantity should be approximately 250 ml.
- Fill the sample jar entirely to preserve the anaerobic (oxygen free) conditions. Tightly fasten the lid, clean the jar from all spillage, and attach a waterproof label.
- Fill out a delivery note. Both the jar and the delivery note of each sample should be marked with the sample's location, sample number, time and date, and name of sample taker.
- Place each jar in a separate plastic bag and close it. Carefully cool the samples by placing them in water of 15 degrees for ca. 20 minutes, then change the cooling water, give the sample jars a shake and continue cooling them for another 20 minutes before they are placed in a cooling box or equivalent along with fully frozen ice packs. Please note that it is extremely important that the samples do not freeze.

- The samples must be delivered to the laboratory no later than the next day. If the samples are sent by mail they shall be contained in a cooling box or equivalent and posted on the same day as the samples were taken. If the laboratory does not have the samples at hand the next day, the samples must be retaken (delayed examination means a risk for incorrect bacteria count).

General sampling method for wet digestion

Good stirring conditions are important for wet digestion. The sample should be taken on the finished product before additives are added. If the finished product is dewatered the filter size must be given.

The sample should be taken from a storage/tank during stirring. Every week an appropriate quantity is sampled and frozen immediately. In accordance with the given analysis frequency the last accumulated samples of each week are thawed. The samples are then mixed together in equal parts under constant stirring.

A final sample of 2 liters shall be placed in a labeled container and be sent to the laboratory in a cooling box, to as far as possible avoid any change in the sample as a result of the transport. The laboratory must receive the sample the next day to enable immediate start of the analysis. Sampling on Fridays and Saturdays is therefore inappropriate. A sampling record, signed by the sample taker and the client, should be enclosed with the sample to show the sample's identity, name of client, name of sample taker, date and location. Any deviations from the sampling directions should be noted.

Handling of incoming samples and pre-treatment

Handling of samples as well as pre-treatment prior to analysis at the laboratory must be conducted so that the results of the analysis are not negatively affected.

Analysis methods for digestate

Analysis and reporting of data should be performed according to the methods set out in Table 5 below. The laboratory performing the analyses must be accredited.

Table 5. Methods for analysis of digestate. Other methods may be used if, by ring tests or otherwise, been proved to give equivalent test results with equivalent or more precise accuracy.

ANALYSIS PARAMETERS	METHOD	REFERENCE
Total metal content (Pb, Cd, Cu, Cr, Hg, Ni, Zn)	SS-EN13346mod/SS11885-1.	Section 3.6
Visible impurities	BGKII:10 1998:4	Section 3.6
Viable weed seeds and plant parts (only for solid digestate)	BGKII:9 1998:4	Section 3.6
Dry substance content	SS 12880	Section 3.7
Organic substance (only for solid digestate) Measured as loss of ignition in % of the dry substance	SS-EN 12879-1	Section 3.6 and Section 3.7
Total Nitrogen	SS02801-1 / SS-ISO 11261	Section 3.7
Total Phosphorus	SS-EN13346/mod SS11885-1	Section 3.7
Total Potassium	SS-EN13346/mod SS11885-1	Section 3.7
Ammoniacal Nitrogen	St.Meth.16 417A+D	Section 3.7
Magnesium	SS-EN13346/mod SS11885-1	Section 3.7
Sulfur	SS-EN13346/mod SS11885-1	Section 3.7
Calcium	SS-EN13346/mod SS11885-1	Section 3.7
pH (taken directly from fresh product)	SS-EN12176	Section 3.7

MICROBIOLOGICAL ANALYSIS PARAMETERS[1]		
Escherichia coli	NMKL no 125, 2005, 4:e edition	Appendix 3
Enterococaceae	NMKL no 68, 2004, 4:e edition	Appendix 3

1 These analyses must be performed with the standard methods presented by NMKL (Nordisk metodikkommitté för livsmedel, National Veterinary Institute, Oslo, Norge).

APPENDIX 3

Requirements for disease control for different plant categories

Different plant categories and requirements for these are given in this appendix. The scope of the requirements depends on whether or not ABP is used as input material. For analysis methods, see Appendix 2.

Requirements for different plant categories

Table 6. Requirements for hygiene inspection, continuous operational inspection, and final product inspection for plant categories A, B and C.

PLANT CATEGORY		HYGIENE INSPECTION	CONTINUOUS OPERATIONAL INSPECTION	FINAL PRODUCT INSPECTION
A	Plant treating organic waste and animal by-products category 2 (see Appendix 1a) and/or category 3. Product use according to level 1.	X	X	X
B	Plant treating organic waste, but not animal by-products. Product use according to level 1.	X	X	-
C	Plant treating the same waste types as category B. Product use according to level 2.	-	X	-

Requirements for product use

The digestate should be used as described in level 1 or level 2 in Table 7.

Table 7. Description of digestate use.

LEVEL	USE
1	For use on agricultural land the Swedish Board of Agriculture's rules and recommendations for plant nutriment should be followed. But otherwise there are no hygienic restrictions. If the digestate contains ABP, the ABP regulation should be followed, particularly when the digestate is spread on pasture land.
2	For use on agricultural land the Swedish Board of Agriculture's rules and recommendations for plant nutriment should be followed, but with the following restriction: the residue product should first hand be used on acreages with straw crops or technical crops. In other cases involved clients should first be consulted.

Preventative measures against recontamination
The same vehicle must not be used for transportation of input material to the plant as for the processed product from the plant unless the vehicle has undergone internal cleaning and disinfection prior to the next transportation. This rule regards Category A and B plants. Containers used for both incoming material and outgoing products shall undergo internal cleaning and disinfection between the transportations. The cleaning requirements mentioned do not concern transportations of park and garden waste. The requirements concern on the other hand category C plants is there is an obvious need.

It is every plant owners' responsibility (category A, B, and C) to be aware of process disturbances etc. that could result in uncontrollable dispersion of contaminants at the plant. If such a situation would arise the supervisory authority should be contacted for an investigation of required sanitation measures.

A manual in epizoology may provide guidance in sanitation of containers.

Eligibility check, ongoing operational control and final product inspection

Hygiene inspection

Category A and B plants
A hygiene inspection shall be carried out during the qualification year as described in Appendix 5.

For plants in category A (input material containing ABP) is must be verified that the Swedish Board of Agriculture has given its approval. The approval from the Swedish Board of Agriculture include for example the different types of ABP treated, standard requirements, specific requirements for premises, hygiene, treatment, and reduction of pathogens. For further information, see ABP regulation.

Category C plants
Eligibility check is not necessary.

Continuous operational inspection

Category A plants (according to the ABP regulation, Appendix VI, Ch. 2C)

Category 3 materials used as input material in anaerobic digestion plants equipped with a pasteurizing/ disinfection unit must meet the following minimum requirements:

- Maximum particle size: 12 mm
- Minimum temperature for all material in the unit: 70 °C
- Minimum time without stop in the unit: 60 minutes

Also see Section 3.5 for the running operational parameters which should be measured and documented.

Category B and C plants:
The process requires the following conditions:

- Incoming waste material shall be comminuted
- Temperature/time: Minimum of 55°C for at least 6 hours
- Hydraulic dwell time: Minimum of 7 days
- The reactor should have constant stirring conditions and even temperature distribution, if not higher requirements than those described above are put forward.

Also see section 3.5 running operational parameters which should be measured and documented.

Final product inspection

Category A plants
(according to the ABP regulation, Appendix VI, Ch. 2D revision EG 208/2006)

Representative samples of digested sludge from during or immediately after treatment in the anaerobic digestion plant for the sake of process surveillance shall meet the following requirements:

Echerichia coli n = 5, c = 1, m = 1000, M = 5000 in 1 g

or

Enterococcaceae: n = 5, c = 1, m = 1000, M = 5000 in 1 g

and

Representative samples of digested sludge taken during storage at the anaerobic digestion plant, or at the moment when storage at the plant would cease, shall meet the following requirements:

Salmonella: no findings in 25 g: n = 5, c = 0, m = 0, M = 0

where:
n = number of samples to be tested;

m = threshold value for the number of bacteria; the result is considered satisfactory if the number of bacteria in all the samples do not exceed m;

M = maximum value for the number of bacteria; the result is considered unsatisfactory if the number of bacteria in one or more samples is M or more; and

c = number of samples the bacteria count of which may be between m and M, the sample still being considered acceptable if the bacterial count of the other samples is m or less.

Category B and C plants
No final product inspection in reference of contamination is necessary. However, other requirements shall be fulfilled, see Chapter 3.

APPENDIX 4

The design of the certification mark

Colored 

Grey scale 

APPENDIX 5

Directions for hygiene inspection of anaerobic digestion plants

Purpose
The purpose of the hygiene inspection is to certify that handling and treatment of organic waste in the anaerobic digestion plants is satisfactory from the disease control point of view. The hygiene inspection is performed during the qualification year and result in a statement about the status of the plant from a disease control point of view.

Inspector
- The sample taker, inspector or other person, must have completed relevant training to have permission to carry out inspections according to Appendix 2. The minimum requirements for training
- The inspector must be approved by the certification body.

Implementation
The hygiene inspection consists of two inspections:

- Microbiological inspection
- Technical inspection

Both inspections shall be documented in an Inspection Report, see section “Results”.

Prior to the hygiene inspection, it is necessary to establish that the plant is functioning and operating (machinery/plant components, load/material flows) normally, in accordance with the “normal conditions” of the intended certification.

The hygiene inspection can only be approved if the inspection was performed at the plant under normal operating conditions (in other words, that the plant was functioning with the ordinary process, conform

to the requirements in SPCR 120). Under other conditions the hygiene inspection can only be regarded as a pre-inspection and a supplementing inspection or sampling is required.

Microbiological inspection
The following requirements should be met in the microbiological inspection:

- Samples are taken as laid out in Appendix 2.
- The first sampling is carried out at the time for the hygiene inspection (the inspection visit) and supervised by the inspector. Following sampling during the qualification year is performed by the operators themselves.
- Sample taking is made in three sections:

    1. Incoming substrate
    2. After hygienization step
    3. Digestate (finished product)

- Enterococcus (Fecal Streptococcus, FS) and *Echerichia coli* are used as indicator organisms with the following treatment requirements:

    - The number of FS should after the hygienization be reduced to $4\log_{10}$ units.

    - *Echerichia coli:* n=5; c=1; m=1000; M=5000 in 1 g.

    n = number of samples to be tested;

    m = threshold value for the number of bacteria; the result is considered satisfactory if the number of bacteria in all the samples do not exceed m;

    M = maximum value for the number of bacteria; the result is considered unsatisfactory if the number of bacteria in one or more samples is M or more; and

    c = number of samples the bacteria count of which may be between m and M, the sample still being considered acceptable if the bacterial count of the other samples is m or less.

- Analysis methods set out in Appendix 2 should be applied.
- Analysis should be made by an accredited laboratory.

If the above indicator organisms are not represented in the raw substrate at the specific plant, a specific inspection program is set up bases on current conditions. The certification body is taking part of this work together with disease control experts.

Technical inspection
The technical inspection should lead to an assessment of the process and operation of the plant from a technical disease control point of view. The plant shall be evaluated on the fulfillment of following requirements:

- Superior requirements specified in Appendix 3, including for example operating conditions, transportations and process disturbances.

- Check questions specified in this chapter. An assessment whether potential deviations are “major” or “minor” is made for each check question (see section Criteria).

During the inspection a check is made as follows:

Plant check up
Prior to the inspection visit the inspector should look up information about the construction and function of the plant by studying prevailing flow charts, process descriptions etc. from the operator. Other documents (such as detailed drawings, process instructions, records, quality assurance documents) are studied at the inspection visit.

The plant check up should follow the waste material’s course through the plant, from reception unit to final storage. Control rooms should be inspected. The check up should also comprise the receiving of waste material and the picking up of digestate at the plant.

The following questions shall be answered during the inspection.

Technical planning
1. Is there an updated flow chart of the plant?
2. Is the transfer of materials within the plant performed in closed systems (from reception to storage)?
3. Is the plant divided in hygiene units, in other words, one ”clean” and one ”unclean” unit for treatment of processed and non-processed material?
4. Can the content in the septic tank/reactor if necessary be lead back to the pre-storage tank or other container in the “unclean” unit?
5. Does the plant have technical solutions when it comes to the hygenization step, piping, pumping etc., which could have a negative effect on the hygienization process?
6. Is incoming waste material comminuted?

Operation and maintenance
7. Is there updated operational and maintenance instructions at the plant?
8. Has the staff through training gained necessary knowledge in the system use, machines and instruments?
9. Is the operational surveillance and the alarm system adjusted to:
   - the temperature conditions in the hygienization step?
   - required dwell times (time between loads at periodic hygienization, and loading rate at conti nuous hygienization) in the hygienization step?
   - stirring in the hygienization step?
   - any shut-off valves in connection to the hygienization step?

   Are any of the above functions described/documented? (Inspection might be required for certification.)
10. Are there any existing routines if a situation would arise where process disturbances lead to failing hygienization process, for example if requirements for time/temperature are not met?
    Are these routines described/documented?
11. Is there an action plan if a situation would arise where non-processed material contaminates hygienized material or plant components intended for hygienized material? (For example if non-pro-

cessed substrates would reach the digestion chamber or if input material loading is accidentally made in the reception unit.) Are such routines described/documented?

12. Are there any routines for vector control?
13. Has the plant an established contact with local/regional experts on disease control (such as a district veterinarian)?
    Is there access to, or documentation of, name and address/phone numbers?
14. Have process disturbances which could violate the hygiene safety occurred?
15. Is there written documentation of maintenance and/or improvement plans for machines and plant components such as shut-off valves, transmission level indicator etc.?
16. Is there any hygiene adjusted maintenance routines for cleaning of reception units/areas and equipment intended for use in the "unclean" unit? Are these routines described/documented?
17. Is there a written plan for calibration/inspection of the temperature indicating function?
18. Is there a logbook or journal etc. for documentation of process disturbances or other occurrences at the plant, including documentation of received types of waste and quantities?
19. Are the running process parameters described in detail in the self-monitoring (Appendix 3)?

Transportation

20. Is there preventative methods against recontamination of processed material connected to outgoing transports?
    - Separated transport fleets?
    - Cleaning and disinfection of vehicles?
    - Other methods?
21. Are transport vehicles of input material cleaned externally?
22. How are tanks, containers etc. in the transport vehicles cleaned internally/disinfected (disinfectants, application time etc.)? (Has it been certified that the method used provides satisfactory cleaning/disinfection?)
23. Are there clear instructions for the cleaning procedures?
24. Is the water used for vehicle washing safely deposited?
25. Is wash water from sealed surfaces in the plant safely deposited?

The inspection questions are an indication of what is expected of the plant for it to be considered of having a safe hygienization system. A further description of criteria is given in the section Criteria. If there are questions regarding for instance vehicle wash, the inspector shall turn to disease control experts for answers.

Results

Results from the microbiological inspections and the technical inspection are reported in a separate Inspection Report, given in Appendix 6, along with a recommendation stating whether or not the plant is approved from a hygiene point of view. On basis of the recommendation the certification body will make an overall evaluation during the first qualification year. The Inspection Report is also used as foundation for follow up inspections.

The Inspection Report shows only the assessments made from the performed inspections, not the results from mandatory samplings and microbiological analyses which are to take place during the qualification year, see Appendix 2.

Criteria

Plant approval is given on the following criteria:

- Results from the microbiological inspections must fulfill the prevailing requirements. Samples are taken during the entire qualification year, which is why these are not part of the assessment from the initial inspection visit within the frames of the hygiene inspection.
- If major deviations were noted at the hygiene inspection the plant is non-conforming. Actions against major deviations must be taken and checked before approval can be given.
- If minor deviations are noted at the hygiene inspection the plant is given the approval on condition that measures against the deviations are taken and reported within 3 months.

Major deviations

Examples of major deviations:

- The plant has insufficient technical solutions (including operational system), meaning that waste material could pass through the plant without satisfactory hygienization.
- Non-processed or insufficiently processed material in the hygienization step could, in case of process disturbances or a breakdown, be transferred to the digestion chamber or storage tanks for processed material.
- The plant has routines which will lead to contamination of hygienized material by non-processed waste material, for example in vehicle and material transportations.
- The plant has showed other defects of major impact on the hygienization safety.

Minor deviations

Examples of minor deviations:

- Demanded operational or control routines were lacking and/or not documented (routine descriptions and verification system).
- Demanded maintenance routines were lacking and/or not documented (routine descriptions and verification system).
- No contact had been established with disease control experts with knowledge in the operation and waste management at the plant regarding digestate used in farming.

The disease control related routines and verification systems (a check off of the completed measures) may be formed as a separate document or added as a complement to already existing operational and maintenance instructions etc.

APPENDIX 6

Hygiene Inspection Report

Producer	Plant category (Appendix. 3)
Producer's representative	Date of visit
Address	Inspector/supervisor
City	Number of Appendixes
Particular circumstances at the hygiene inspection, comments.	

No.	Check point	Note
1	Flow chart – plant	
2	Closed process system	
3	Clean-unclean material	
4	Recirculation of the hygienization step	
5	Technical solutions	
6	Comminution	
7	Operational and maintenance instructions	
8	Staff training	
9	Operation surveillance/alarm system	
10	Routines for inadequate hygienization	
11	Measures for other contamination	
12	Vector control	
13	Disease control experts - contact	

No.	Check point	Note
14	Reoccuring process distrurbances	
15	Plan for maintenance and upgrading	
16	Cleaning routines	
17	Control/calibration of temperature	
18	Documentation/journal	
19	Documentation of process parameters	
20	Preventing of contamination of trp	
21	External vehicle wash	
22	Internal vehicle wash/ disinfection	
23	Vehicle wash – instructions	
24	Water from vehicle wash	
25	Wash water from other surfaces	

Sampling
First supervisory inspection completed (yes/no):
Number of remaining samplings this qualification year (number):
Analysis laboratory (name, city):
A copy of the analysis results has been sent to the certification body (yes):
Remarks:

Recommendations by the inspector

☐ Approved	☐ Approved on condition that sample results meet the pretended requirements.	☐ Additional inspection recommended
☐ Not approved	☐ Actions against minor deviations shall be taken and reported to the certification body within 3 months.	☐ Actions taken against significant deviations shall be reported in writing to the certification body.

City/Date_____

Inspector_____

APPENDIX 5

Revision of SPCR 120 and Appendixes

Table 8. Date of last revision of the certification rules' separate parts.

CHAPTER	UPDATED
Certification rules for compost SPCR 120	December 2007
Appendix 1a	2004-11-02
Appendix 1b	2006-11-29
Appendix 2	2007-12-10
Appendix 3	2006-08-16
Appendix 4	2004-11-02
Appendix 5	2006-08-16
Appendix 6	2004-11-02
Appendix 7	2007-12-10

The producer's representative at any plant holding a certificate or any plant under a qualification year should immediately be informed by e-mail of any changes in SPCR 120

RAPPORTER FRÅN AVFALL SVERIGE 2009

AVFALL SVERIGES UTVECKLINGSSATSNING

2009:01 Verktyg för bättre sortering på återvinningscentraler

AVFALL SVERIGES UTVECKLINGSSATSNING, BIOLOGISK BEHANDLING

B2009 Certification rules for compost

B2009 Certification rules for digestate

B2009:01 Insamlade mängder matavfall i olika insamlingssystem i svenska kommuner

AVFALL SVERIGES UTVECKLINGSSATSNING, DEPONERING

D2009:01 Övervakning av tätskikt i deponier med impedansspektroskopi

“Vi är Sveriges största miljörörelse. Det är Avfall Sveriges medlemmar som ser till att svensk avfallshantering fungerar - allt från renhållning till återvinning. Vi gör det på samhällets uppdrag: miljösäkert, hållbart och långsiktigt. Vi är 9 000 personer som arbetar tillsammmans med Sveriges hushåll och företag.”

AVFALL SVERIGE
utveckling

Avfall Sverige Utveckling B2009
ISSN 1103-4092

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