

PrimusGFS v3.0 Questions & Expectations

TABLE 1: AGRONOMIC INPUTS

(Including Question Applicability Table)

REVISED AUGUST 22, 2018

This agronomic inputs section should be completed for each of the farm and indoor agriculture operations.

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AGRONOMIC INPUTS

This agronomic inputs section should be completed for each of the farm and indoor agriculture operations.

IF USING: SEWAGE SLUDGE (BIOSOLIDS)

The use of sewage sludge (biosolids), which are by-products of waste water treatment is an automatic failure for indoor growing operations, and also where specifically prohibited under best management practices (e.g., LGMA, T-GAPs).

Complete Page: 1

2.08.01 / 3.09.01

IF USING: ANIMAL BASED COMPOST

This question is specifically targeting compost produced from raw animal manures, as opposed to green waste.

Complete Pages: 2-3

2.08.02 / 3.09.02

IF USING: UNTREATED ANIMAL MANURE

(e.g., raw manure &/or uncomposted, incompletely composted animal manure &/or green waste or non-thermally treated animal manure, etc.) The use of raw manure and/or uncomposted, incompletely composted animal manure and/or green waste or non-thermally treated animal manure is an automatic failure in the Indoor Agriculture audit.

Complete Page: 4

2.08.03 / 3.09.03

IF USING: NON-SYNTHETIC CROP TREATMENTS

(e.g., compost teas, fish emulsions, fish meal, blood meal, bio-fertilizers, etc.)

Examples include but are not limited to compost teas (also known as agricultural teas), fish emulsions, fish meal, blood meal, inoculants (beneficial microbes), and “bio fertilizers” that are produced from animal materials.

Complete Pages: 5-6

2.08.04 / 3.09.04

IF USING: SOIL OR SUBSTRATE AMENDMENTS

(e.g., plant by-products, humates, seaweed, inoculants, and conditioner, etc.)

This refers to soil or substrate amendments (except inorganic nutrients/fertilizers) used that do not contain animal products and/or animal manures. Examples include but are not limited to plant by-products, humates, seaweed, and conditioners.

Complete Page: 7

2.08.05 / 3.09.05

IF USING: INORGANIC FERTILIZERS

(e.g., ammonium nitrate, ammonium sulfate, chemically synthesized urea, etc.)

Examples of manufactured inorganic fertilizers include ammonium nitrate, ammonium sulfate, chemically synthesized urea, etc.

Complete Page: 8

2.08.06 / 3.09.06

Where laws, commodity specific guidelines and/or best practice recommendations exist and are derived from a reputable source, then these practices and parameters should be used. This includes FSMA guidelines, and where any FSMA guidelines are stricter than the audit guidelines, the FSMA guidelines prevail, including compost produced in-house. Audit users should allow a degree of risk association if laws, guidelines, best practices, etc., have not been documented.

(Questions in the same column as the Agronomic Inputs used in the growing operation should be answered. The question number is dependent on the module being completed (Farm or Indoor Agriculture). The cells in dark gray are not applicable based on the specific input type)

Points	Question	Sewage Sludge (Biosolids)	Animal Based Compost	Untreated Animal Manure	Non-synthetic Crop Treatments	Soil or Substrate Amendments	Inorganic Fertilizers
0	Informational gathering question.	2.08.01 / 3.09.01	2.08.02 / 3.09.02	2.08.03 / 3.09.03	2.08.04 / 3.09.04	2.08.05 / 3.09.05	2.08.06 / 3.09.06
15	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	2.08.01a / 3.09.01a	2.08.02a / 3.09.02a	2.08.03a / 3.09.03a	2.08.04a / 3.09.04a	2.08.05a / 3.09.05a	2.08.06a / 3.09.06a
15	Are there fertilizer use records available for each growing area, including application records?	2.08.01b / 3.09.01b	2.08.02b / 3.09.02b	2.08.03b / 3.09.03b	2.08.04b / 3.09.04b	2.08.05b / 3.09.05b	2.08.06b / 3.09.06b
10	Are applications incorporated into the soil prior to planting or bud burst for tree crops and not applied during the growing season?	2.08.01c / 3.09.01c	2.08.02c / 3.09.02c	2.08.03c / 3.09.03c			
15	Is the material applied in a manner that does not contact the edible portions of the crop?				2.08.04c / 3.09.04c		
10	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	2.08.01d / 3.09.01d	2.08.02d / 3.09.02d	2.08.03d / 3.09.03d	2.08.04d / 3.09.04d	2.08.05c / 3.09.05c	2.08.06c / 3.09.06c
15	Are there Certificate(s) of Analysis (CoA) and/or letters of guarantee stating that the materials used are free from animal products and/or animal manures?					2.08.05d / 3.09.05d	
15	Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	2.08.01e / 3.09.01e	2.08.02e / 3.09.02e	2.08.03e / 3.09.03e	2.08.04e / 3.09.04e		
10	Are there Certificate(s) of Analysis (CoA), letters of guarantee or other documents from the supplier(s) that cover heavy metal testing?	2.08.01f / 3.09.01f	2.08.02f / 3.09.02f	2.08.03f / 3.09.03f	2.08.04f / 3.09.04f		
15	Does the fertilizer/crop nutrition material go through a physical/chemical/biological process to inactivate human pathogens and the auditee has validation study documentation that shows that the material is safe and at least meets the following microbial parameters: no detectable <i>L. monocytogenes</i> , <i>Salmonella</i> , or <i>E. coli</i> O157:H7 and less than 1000 MPN fecal coliforms/gram of total solids?		2.08.02g / 3.09.02g		2.08.04g / 3.09.04g	2.08.05e / 3.09.05e	2.08.06d / 3.09.06d

SEWAGE SLUDGE (BIOSOLIDS)			PAGE 1 OF 1
Question No.	Question	Total Points	Expectation
2.08.01/ 3.09.01	Is sewage sludge (biosolids) being used as an input for this operation?	0	Informational gathering question.
2.08.01a/ 2.09.01a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.
2.08.01b/ 3.09.01b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.
2.08.01c/ 3.09.01c	Are applications incorporated into the soil prior to planting or bud burst for tree crops and not applied during the growing season?	10	If used, the applications should be incorporated into the soil prior to planting or bud burst for tree crops.
2.08.01d/ 3.09.01d	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).
2.08.01e/ 3.09.01e	Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	15	Certificates of analysis should be available for each lot of crop treatment (containing animal materials) used. Tests should include microbiological test analysis. As a minimum, microbial testing should include <i>Salmonella</i> and <i>E. coli</i> O157:H7 for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and <i>Salmonella</i> , <i>E. coli</i> O157:H7 and fecal coliforms for animal based compost, using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed.
2.08.01f/ 3.09.01f	Are there Certificate(s) of Analysis (CoA), letters of guarantee or other documents from the supplier(s) that cover heavy metal testing?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other documents should be available from the crop treatment supplier(s) that cover heavy metal testing. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).

ANIMAL BASED COMPOST			PAGE 1 OF 2
Question No.	Question	Total Points	Expectation
2.08.02/ 3.09.02	Is animal based compost being used as an input for this operation?	0	Informational gathering question.
2.08.02a/ 3.09.02a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.
2.08.02b/ 3.09.02b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.
2.08.02c/ 3.09.02c	Are applications incorporated into the soil prior to planting or bud burst for tree crops and not applied during the growing season?	10	If used, the applications should be incorporated into the soil prior to planting or bud burst for tree crops.
2.08.02d/ 3.09.02d	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).
2.08.02e/ 3.09.02e	Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	15	Certificates of analysis should be available for each lot of crop treatment (containing animal materials) used. Tests should include microbiological test analysis. As a minimum, microbial testing should include <i>Salmonella</i> and <i>E. coli</i> O157:H7 for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and <i>Salmonella</i> , <i>E. coli</i> O157:H7 and fecal coliforms for animal based compost, using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed.

ANIMAL BASED COMPOST (CONTINUED)				PAGE 2 OF 2
Question No.	Question	Total Points	Expectation	
2.08.02f/ 3.09.02f	Are there Certificate(s) of Analysis (CoA), letters of guarantee or other documents from the supplier(s) that cover heavy metal testing?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other documents should be available from the crop treatment supplier(s) that cover heavy metal testing. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	
2.08.02g/ 3.09.02g	Does the fertilizer/crop nutrition material go through a physical/chemical/biological process to inactivate human pathogens and the auditee has validation study documentation that shows that the material is safe and at least meets the following microbial parameters: no detectable <i>L. monocytogenes</i> , <i>Salmonella</i> , or <i>E. coli</i> O157:H7 and less than 1000 MPN fecal coliforms/gram of total solids?	15	These requirements are required for indoor farming operations (e.g., mushroom growing).	

UNTREATED ANIMAL MANURE				PAGE 1 OF 1
Question No.	Question	Total Points	Expectation	
2.08.03/ 3.09.03	Is untreated animal manure being used as an input for this operation?	0	Informational gathering question (examples include raw manure, incompletely composted animal manure, green waste, etc.)	
2.08.03a/ 3.09.03a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.	
2.08.03b/ 3.09.03b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.	
2.08.03c/ 3.09.03c	Are applications incorporated into the soil prior to planting or bud burst for tree crops and not applied during the growing season?	10	If used, the applications should be incorporated into the soil prior to planting or bud burst for tree crops.	
2.08.03d/ 3.09.03d	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	
2.08.03e/ 3.09.03e	Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	15	Certificates of analysis should be available for each lot of crop treatment (containing animal materials) used. Tests should include microbiological test analysis. As a minimum, microbial testing should include <i>Salmonella</i> and <i>E. coli</i> O157:H7 for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and <i>Salmonella</i> , <i>E. coli</i> O157:H7 and fecal coliforms for animal based compost, using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed.	
2.08.03f/ 3.09.03f	Are there Certificate(s) of Analysis (CoA), letters of guarantee or other documents from the supplier(s) that cover heavy metal testing?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other documents should be available from the crop treatment supplier(s) that cover heavy metal testing. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	

NON-SYNTHETIC CROP TREATMENTS				PAGE 1 OF 2
Question No.	Question	Total Points	Expectation	
2.08.04/ 3.09.04	Are non-synthetic crop treatments being used as an input for this operation?	0	Informational gathering question (examples include compost teas, fish emulsions, fish meal, blood meal, biofertilizers, etc.)	
2.08.04a/ 3.09.04a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.	
2.08.04b/ 3.09.04b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.	
2.08.04c/ 3.09.04c	Is the material applied in a manner that does not contact the edible portions of the crop?	15	Non-synthetic treatments that contain animal products or animal manures should not be applied to the edible portions of crops.	
2.08.04d/ 3.09.04d	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	
2.08.04e/ 3.09.04e	Are there Certificate(s) of Analysis (CoA) from the supplier(s) that cover pathogen testing (plus any other legally/best practice required testing) and does the grower have relevant letters of guarantee regarding supplier SOPs and logs?	15	Certificates of analysis should be available for each lot of crop treatment (containing animal materials) used. Tests should include microbiological test analysis. As a minimum, microbial testing should include <i>Salmonella</i> and <i>E. coli</i> O157:H7 for non-synthetic crop treatments (e.g., compost teas, fish emulsions, fish meal, blood meal, "bio fertilizers") and <i>Salmonella</i> , <i>E. coli</i> O157:H7 and fecal coliforms for animal based compost, using approved sampling and testing methods (e.g., AOAC and an accredited laboratory). All local and national legislation should also be followed.	
2.08.04f/ 3.09.04f	Are there Certificate(s) of Analysis (CoA), letters of guarantee or other documents from the supplier(s) that cover heavy metal testing?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other documents should be available from the crop treatment supplier(s) that cover heavy metal testing. Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	

NON-SYNTHETIC CROP TREATMENTS (CONTINUED)				PAGE 2 OF 2
Question No.	Question	Total Points	Expectation	
2.08.04g/ 3.09.04g	Does the fertilizer/crop nutrition material go through a physical/chemical/biological process to inactivate human pathogens and the auditee has validation study documentation that shows that the material is safe and at least meets the following microbial parameters: no detectable <i>L. monocytogenes</i> , <i>Salmonella</i> , or <i>E. coli</i> O157:H7 and less than 1000 MPN fecal coliforms/gram of total solids?	15	These requirements are required for indoor farming operations (e.g., mushroom growing).	

SOIL OR SUBSTRATE AMENDMENTS			PAGE 1 OF 1
Question No.	Question	Total Points	Expectation
2.08.05/ 3.09.05	Are soil or substrate amendments being used as an input for this operation?	0	Informational gathering question (examples include plant by-products, humates, seaweed, inoculants, conditioner, etc.)
2.08.05a/ 3.09.05a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.
2.08.05b/ 3.09.05b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.
2.08.05c/ 3.09.05c	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).
2.08.05d/ 3.09.05d	Are there Certificate(s) of Analysis (CoA) and/or letters of guarantee stating that the materials used are free from animal products and/or animal manures?	15	There should be Certificate(s) of Analysis (CoA) and/or letters of guarantee from the fertilizer supplier, stating that the materials they are supplying are free from animal products and/or animal manures. A statement of ingredients or letter from suppliers attesting this fact is acceptable. Auditor should match the names of the materials being used with the CoA's and/letters of guarantee.
2.08.05e/ 3.09.05e	Does the fertilizer/crop nutrition material go through a physical/chemical/biological process to inactivate human pathogens and the auditee has validation study documentation that shows that the material is safe and at least meets the following microbial parameters: no detectable <i>L. monocytogenes</i> , <i>Salmonella</i> , or <i>E. coli</i> O157:H7 and less than 1000 MPN fecal coliforms/gram of total solids?	15	These requirements are required for indoor farming operations (e.g., mushroom growing).

INORGANIC FERTILIZERS				PAGE 1 OF 1
Question No.	Question	Total Points	Expectation	
2.08.06/ 3.09.06	Are inorganic fertilizers being used as an input for this operation?	0	Informational gathering question (examples include ammonium nitrate, ammonium sulfate, chemically synthesized urea, etc.)	
2.08.06a/ 3.09.06a	Is fertilizer being used where the country regulations/guidelines ban the use of such materials (e.g., Californian Leafy Green Commodity Specific Guidelines)? ANY DOWN SCORE IN THIS QUESTION RESULTS IN AN AUTOMATIC FAILURE OF THE AUDIT.	15	Some commodity specific guidelines have rules regarding the use of specific fertilizer types, e.g. Californian Leafy Green Commodity Specific Guidelines.	
2.08.06b/ 3.09.06b	Are there fertilizer use records available for each growing area, including application records?	15	Records should be legible and at least detail date of application, type of fertilizer, amount, method of application (drip, bulk, etc.), where it was applied and operator name. There should be sufficient identification information in the records that would make it possible to trace an application back to the site if needed. There should be an interval between application and harvest of at least 45 days for non-synthetic crop treatments and compost, and an interval of at least 120 days (but ideally 9 months) for untreated animal manure.	
2.08.06c/ 3.09.06c	Are there Certificate(s) of Analysis (CoA), specifications, product label or other documents available for review provided by the supplier stating the components of the material?	10	Certificate(s) of Analysis (CoA), letters of guarantee or other formal documentation from the fertilizer manufacturer's or supplier(s) should be current and state any inert or active ingredient substances used as "fillers" (e.g., clay pellets, granular limestone). Concerns are for heavy metals that may affect human health (e.g., Cadmium (Cd) Arsenic (As), Chromium (Cr), Lead (Pb), Mercury (Hg), Nickel (Ni), and Vanadium (V)).	
2.08.06d/ 3.09.06d	Does the fertilizer/crop nutrition material go through a physical/chemical/biological process to inactivate human pathogens and the auditee has validation study documentation that shows that the material is safe and at least meets the following microbial parameters: no detectable <i>L. monocytogenes</i> , <i>Salmonella</i> , or <i>E. coli</i> O157:H7 and less than 1000 MPN fecal coliforms/gram of total solids?	15	These requirements are required for indoor farming operations (e.g., mushroom growing).	