Schwabe

February 7, 2024

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VIA E-MAIL

Columbia County Board of Commissioners
Columbia County
230 Strand Street
St. Helens, OR 97051

RE: In the Matter of an application submitted by NEXT Renewable Fuels, Inc. for a Modification of Prior Approval for a previously approved Site Design Review and a Conditional Use application for a proposed railroad branchline in the Primary Agriculture (PA-80) zone. DR 21-03 MOD / CU 23-11

Dear Columbia County Board of Commissioners:

This firm represents NEXT Renewable Fuels, Inc. ("NEXT") in the above-referenced casefiles (the "Applications"). On January 10, 2024, Columbia County held a hearing on the Applications. NEXT testified orally during the hearing. At the conclusion of that hearing, the Board closed the record to further oral testimony but allowed the written record to remain open for the following purposes and on the following schedule:

1. Until 5:00 PM on January 24th for any party to submit any evidence or testimony.
2. Until 5:00 PM on February 7th for any party to submit evidence or testimony in response to testimony submitted during the first open record period.
3. Until February 21st for Applicant's final written argument.

This letter addresses arguments and evidence submitted into the record between January 11 and January 24, 2024. It is timely submitted prior to the close of the second open record period. This letter does not contain detailed legal arguments but rather summarizes NEXT's responsive evidence, which is enclosed.

I. Summary of Enclosures

A. Diesel Particulate Emissions

Columbia Riverkeeper ("CRK") submitted a seven page letter with roughly 500 pages of attachments, the vast majority of which are comprised of NEXT's corporate filings to the SEC, which do not address an approval criterion. CRK also asserted that emissions from the rail branchline could have an adverse impact on crops growing near the Property. NEXT provides the appended response prepared by Maul Foster & Alongi, Inc. (**Exhibit 1**) which explains that

the railcars themselves will not generate emissions because their cargos will be covered, and that brake and locomotive emissions will be far below levels considered unsafe.

This letter also encloses excerpts potentially relevant sections of 7 CFR Part 205 (National Organic Program) (**Exhibit 2**) concerning organic crop certification to demonstrate that incidental diesel air pollutants are not among the substances prohibited. That is, environmental diesel pollutants do not constitute, either individually or collectively "a substance the use of which in any aspect of organic production or handling is prohibited or not provided for in the Act or the regulations of this part," because they are not "used" as an input in organic crop production.

B. Floodplain Concerns

A number of comments raised concerns about the Beaver Drainage District's Levy certification. In response, NEXT encloses a complete Flood Insurance Rate Map (FIRM) showing that this area is not designated as a flood hazard area. **Exhibit 3**. This is in addition the same map scaled as a "FIRMette" already in the record. As this is the map adopted by the County as the basis for its Flood Hazard Overlay (the Flood Insurance Rate Study dated Nov. 26.2010), the Property is not located within a Special Flood Hazard Area. CCZO 1104.2.A.

II. Conclusion

As noted above and as will be discussed further in NEXT's final written argument, neither the floodplain issues nor the rail emissions concerns raised by CRK suggest that the Application does not satisfy the approval criteria, and can be rejected on that basis.

Respectfully,

Garrett Stephenson

GST/jmhi
Enclosures

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Technical Memorandum

To:	Garrett Stephenson	Date:	February 7, 2024
From:	Chad Darby	Project No.:	M1724.01.005
Re:	Effect of Rail Emissions on Nearby Organic Farms NEXT Renewable Fuels Facility in Clatskanie, Oregon		

NEXT Renewable Fuels Oregon, LLC (NEXT) proposes to construct a renewable fuel products manufacturing facility that will be located in Clatskanie, Oregon (the facility). The facility will utilize trains to transport raw materials to the facility and to export limited quantities of renewable fuel products from the facility. Schwabe Williamson and Wyatt retained Maul Foster and Alongi, Inc. (MFA) to evaluate the impact of air emissions from rail and railyard operations at the facility on nearby organic farms. Specifically, MFA is addressing the following comment from the Columbia Riverkeepers to Columbia County Land Development Services in a letter dated January 24, 2024:

> "Finally, there are predictable air quality harms that will come from the operation of a large rail yard near sensitive mint crops and other agriculture. NEXT's Air Contaminant Discharge Permit from the Oregon Department of Environmental Quality (DEQ) does not encapsulate air pollution from the proposed rail yard. This is because trains are mobile sources, and NEXT's air permit is for the facility as a stationary source. As noted by Mike Seely, particulate pollution of any kind can have a significant impact on mint crops. DEQ's air permit did not provide either an individual or cumulative analysis of how rail-related pollution will impact mint farming, in combination with the refinery. It is necessary to do that analysis in the land use setting. Air pollution from the rail yard will not be limited to dust and could generate additional pollutants harmful to mint and other crops, some of which are certified as organic. Additionally, NEXT has moved a portion of the rail yard closer to mint fields that are actively cultivated by shifting the rail yard north. NEXT has not demonstrated that all forms of pollution - dust, soot, diesel emissions - will be consistent with mint used to produce mint oil."

The primary sources of emissions from rail hauling and railyard operations are typically fugitive emissions from cargo, emissions from rail and brake wear, and diesel combustion emissions. Each of these are addressed below:

Fugitive Emissions from Cargo

Solid raw materials delivered to the facility will include filter aid and bleaching earth. These raw materials will be transported in fully sealed hopper railcars that prevent fugitive particulate emissions during transport. Spent waste materials will also be transported in fully sealed hopper railcars. Raw feedstock oils and renewable fuel products will not be sources of particulate emissions because they are in the liquid form, but they will also be transported in fully sealed railcars.

Fugitive Emissions from Rail/Brake Wear

Limited information is publicly available on rail and break wear emissions from trains due to the difficulty with measuring emissions during train movement. However, in the journal article "Emissions of particulate matters from railways- Emission factors and condition monitoring," the authors reference a study conducted in Switzerland that estimated material losses due to wear from "brakes, wheels,

etc." may be about 16 grams per kilometer per train based on train data collected in 2006.[1] This equates to 0.016 grams per meter per train. MFA assumes this emission factor is likely representative of U.S. trains.

Rail transport to and from the facility will be limited to no more than 318 railcars per week. Based on this limitation, the facility may utilize up to 312 full unit trains per year for raw material and renewable fuel product transport. Multiplying the emission factor (0.016 grams per meter per train) by 312 trains per year results in approximately 5 grams of particulate emissions per meter per year, or 0.42 grams per meter per month on average. The journal article also states that the mass of worn material lost may not result in airborne particulate emissions as it may settle in the track ballast material under the train. For the sake of this discussion, we are assuming worn material could become airborne.

Particulate Emissions from Locomotives

Under a separate scope of work for NEXT, MFA estimated that locomotives servicing the facility may generate up to 0.15 tons of particulate matter less than 10 micrometers in aerodynamic diameter (PM_{10}) per year during raw material and renewable fuel product transport between the Port Westward rail spur and the facility railyard, equal to 297 pounds per year, or 25 pounds per month on average. The railroad length between the Port Westward rail spur and the facility railyard is approximately 7,500 feet, which is equal to 2,286 meters. Dividing the monthly PM_{10} emissions estimate (25 pounds per month) by the travel distance (2,286 meters) and multiplying by 453 grams per pound yields an emission factor of 4.92 grams per meter per month.

Standards for Particulate Deposition

There are few standards established for deposition of particulate matter. Oregon Administrative Rule 340-202-0110 establishes ambient air quality standards for particulate fallout from stationary sources. While this is not applicable to mobile emission sources, such as trains, the rule does offer a point for comparison. The particulate fallout limit for stationary sources is 10 grams per square meter per month in industrial areas and 5.0 grams per square meter per month for residential and commercial areas. MFA is aware of no deposition standards established specifically for farmlands.

As stated above, the brake and wheel wear particulate emission factor is 0.42 grams per meter per month, and the particulate emission factor from locomotive exhaust is 4.92 grams per meter per month, for a combined total particulate emission factor of 5.33 grams per meter per month. For the purposes of this analysis, MFA conservatively assumes that all particulate matter emissions from trains servicing the facility will be deposited within 7.6 meters (e.g., a distance of 25 feet from the train to the nearest farmland) of the train. This is the highest concentration that could result from deposition. In reality, emissions of fine particulate will travel for miles and will be well-dispersed prior to depositing onto lands over a much larger area. However, assuming that the train emissions per meter of travel are deposited within 7.6 meters of the train, the resulting particulate matter deposition rate would be less than or equal to 0.7 grams per square meter per month. Hence, even if 100% of particulate emissions from trains deposited within 7.6 meters of the train, the resulting impact would be well below the 5 gram per square meter per month particulate fallout standard established by the Oregon Administrative Rules for residential and commercial areas. Any deposition value determined further from the train will be much lower due to dispersion of emissions.

[1] Fridell, Erik, Ferm, Martin, and Ekberg, Anders, "Emissions of particulate matters from railways- Emission factors and condition monitoring," Transportation Research Part D: Transport and Environment, Volume 15, Issue 4, June 2010 pp. 240-245.

Impacts to Organic Certification

Comments in the January 24 letter by the Columbia Riverkeepers imply that the train and railyard emissions associated with the facility will be harmful for crops that are certified organically and specifically for mint that is used to produce mint oil. As discussed above, the train locomotives and railyard activities will result in diesel exhaust and dust from rail and brake wear. However, the Seely mint farm is already subjected to these types of activities.

Existing Operations

As shown in the figure in Attachment A, Seely farmland wraps around the west and south sides of the Port Westward site. Existing operations at the port include over 900 megawatts of power generation from large natural gas and diesel generators and rail transloading of petroleum products from rail lines. These operations will have a similar profile to the emissions to be generated at the facility (e.g. rail and brake wear and diesel emissions). If these operations have not affected the Seely organic crop certifications, the planned rail operations at the facility will not either.

Additionally, the Seely farm uses diesel-fired farm equipment in even closer proximity to their crops. This farm equipment appears to be quite old (i.e., higher emitting than newer equipment) and most likely does not use the ultra-low sulfur diesel that trains are required to use. In the photos shown below, obtained from the Seely farm website, it is obvious that diesel particulate from farm equipment is already wafting over their mint fields. If these emissions have not affected the organic certification or mint oil quality, then the planned rail operations at the facility will also have no discernible impact.

In addition to diesel emissions on farmland, the equipment used on the farm will likely have fuel drips, oil drips, and rubber tire wear that will impact the soil. None of these impacts affect the organic certification.

The planned rail operations at the facility will result in scant amounts of rail wear, particles that will most likely fall into the track ballast, and diesel locomotive emissions. None of these emissions are new to the area, but more importantly, they do not result in substances prohibited under Part 205 (National Organic Program) of the Code of Federal Regulations. Note diesel exhaust is not a prohibited substance under Part 205 regulations.

Conclusion

MFA has not conducted any dispersion modeling to determine actual deposition rates on lands surrounding the rail operations at Port Westward because the emissions are so low. The particulate emissions estimate from the trains servicing the facility indicates that potential impacts from deposition to surrounding farmlands will be very low relative to the deposition standards set by the State of Oregon. When also considering that fine particulate emissions from trains may be well dispersed over several miles at much lower concentrations depending on wind speed and direction, it would seem evident that there will be no observable impact to surrounding farmlands and no further analysis is warranted.

The emissions from rail operations at the facility will also not result in any prohibited substances that affect organic certification. If the emissions did affect organic certification, the organic certification of Seely crops would already be called into question due to existing industrial uses nearby and due to the

equipment already used by Seely farms. However, the organic certification process does not prohibit diesel emissions on or near organic farmlands.

Limitations

The services undertaken in completing this technical memorandum were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This technical memorandum is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this technical memorandum apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this technical memorandum.

Attachment A

To Longview

SR 4

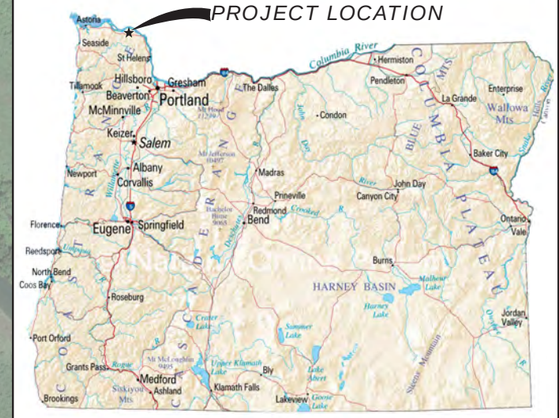
Columbia River

PORT WESTWARD

PORT WESTWARD

CRIMS ISLAND

PROJECT LOCATION



VICINITY MAP

PGE PROPERTY

BEAVER

Bradbury Slough

PORTLAND & WESTERN RR

APPROXIMATE PGE LEASE AREA

ERICKSON DIKE ROAD

SEELY EXPANDED LEASE PREMISES

SEELY EXISTING LEASE PREMISES

NEXT RENEWABLE FUELS PREMISES

KALLUNKI ROAD

OREGON

HERMO ROAD

N

T. 8 N., R. 4 W., W.M.

SCALE IN FEET

800 0 800

To Quincy/Clatskanie

NOTE:
INFORMATION PROVIDED BY PGE

NEXT Renewable Fuels, Inc.

Stewardship Solutions

NEXT RENEWABLE FUELS OREGON
PORT WESTWARD, OREGON

SEELY SUBLEASE FROM PGE

EXHIBIT

A-1

NEXT-PortWestward SubLease Jan. 31, 2024

Title 7 —Agriculture
Subtitle B —Regulations of the Department of Agriculture
Chapter I —Agricultural Marketing Service (Standards, Inspections, Marketing Practices), Department of Agriculture
Subchapter M —Organic Foods Production Act Provisions

PART 205—NATIONAL ORGANIC PROGRAM

Authority: 7 U.S.C. 6501–6524.

Source: 65 FR 80637, Dec. 21, 2000, unless otherwise noted.

Subpart A—Definitions

§ 205.1 Meaning of words.

For the purpose of the regulations in this subpart, words in the singular form shall be deemed to impart the plural and vice versa, as the case may demand.

§ 205.2 Terms defined.

Accreditation. A determination made by the Secretary that authorizes a private, foreign, or State entity to conduct certification activities as a certifying agent under this part.

Act. The Organic Foods Production Act of 1990, as amended (7 U.S.C. 6501 *et seq.*).

Action level. The limit at or above which the Food and Drug Administration will take legal action against a product to remove it from the market. Action levels are based on unavoidability of the poisonous or deleterious substances and do not represent permissible levels of contamination where it is avoidable.

Administrator. The Administrator for the Agricultural Marketing Service, United States Departure of Agriculture, or the representative to whom authority has been delegated to act in the stead of the Administrator.

Adverse action. A noncompliance decision that adversely affects certification, accreditation, or a person subject to the Act, including a proposed suspension or revocation; a denial of certification, accreditation, or reinstatement; a cease and desist notice; or a civil penalty.

Agricultural inputs. All substances or materials used in the production or handling of organic agricultural products.

Agricultural product. Any agricultural commodity or product, whether raw or processed, including any commodity or product derived from livestock, that is marketed in the United States for human or livestock consumption.

Agricultural Marketing Service (AMS). The Agricultural Marketing Service of the United States Department of Agriculture.

Allowed synthetic. A substance that is included on the National List of synthetic substances allowed for use in organic production or handling.

AMDUCA. The Animal Medicinal Drug Use Clarification Act of 1994 (Pub. L. 103–396).

Animal drug. Any drug as defined in section 201 of the Federal Food, Drug, and Cosmetic Act, as amended (21 U.S.C. 321), that is intended for use in livestock, including any drug intended for use in livestock feed but not including such livestock feed.

Annual seedling. A plant grown from seed that will complete its life cycle or produce a harvestable yield within the same crop year or season in which it was planted.

Area of operation. The types of operations: crops, livestock, wild-crop harvesting or handling, or any combination thereof that a certifying agent may be accredited to certify under this part.

Audit trail. Documentation that is sufficient to determine the source, transfer of ownership, and transportation of any agricultural product labeled as “100 percent organic,” the organic ingredients of any agricultural product labeled as “organic” or “made with organic (specified ingredients)” or the organic ingredients of any agricultural product containing less than 70 percent organic ingredients identified as organic in an ingredients statement.

Beak trimming. The removal of not more than one-quarter to one-third of the upper beak or the removal of one-quarter to one-third of both the upper and lower beaks of a bird in order to control injurious pecking and cannibalism.

Biodegradable. Subject to biological decomposition into simpler biochemical or chemical components.

Biodegradable biobased mulch film. A synthetic mulch film that meets the following criteria:

(1) Meets the compostability specifications of one of the following standards: ASTM D6400, ASTM D6868, EN 13432, EN 14995, or ISO 17088 (all incorporated by reference; see § 205.3);

(2) Demonstrates at least 90% biodegradation absolute or relative to microcrystalline cellulose in less than two years, in soil, according to one of the following test methods: ISO 17556 or ASTM D5988 (both incorporated by reference; see § 205.3); and

(3) Must be biobased with content determined using ASTM D6866 (incorporated by reference; see § 205.3).

Biologics. All viruses, serums, toxins, and analogous products of natural or synthetic origin, such as diagnostics, antitoxins, vaccines, live microorganisms, killed microorganisms, and the antigenic or immunizing components of microorganisms intended for use in the diagnosis, treatment, or prevention of diseases of animals.

Breeder stock. Female livestock whose offspring may be incorporated into an organic operation at the time of their birth.

Buffer zone. An area located between a certified production operation or portion of a production operation and an adjacent land area that is not maintained under organic management. A buffer zone must be sufficient in size or other features (e.g., windbreaks or a diversion ditch) to prevent the possibility of unintended contact by prohibited substances applied to adjacent land areas with an area that is part of a certified operation.

Bulk. The presentation to consumers at retail sale of an agricultural product in unpackaged, loose form, enabling the consumer to determine the individual pieces, amount, or volume of the product purchased.

Caponization. Castration of chickens, turkeys, pheasants, and other avian species.

Cattle wattling. The surgical separation of two layers of the skin from the connective tissue along a 2-to-4-inch path on the dewlap, neck, or shoulders used for ownership identification.

Certification activity. Any business conducted by a certifying agent, or by a person acting on behalf of a certifying agent, including but not limited to: certification management; administration; application review; inspection planning; inspections; sampling; inspection report review; material review; label review; records retention; compliance review; investigating complaints and taking adverse actions; certification decisions; and issuing transaction certificates.

Certification office. Any site or facility where certification activities are conducted, except for certification activities that occur at certified operations or applicants for certification, such as inspections and sampling.

Certification or certified. A determination made by a certifying agent that a production or handling operation is in compliance with the Act and the regulations in this part, which is documented by a certificate of organic operation.

Certification review. The act of reviewing and evaluating a certified operation or applicant for certification and determining compliance or ability to comply with the USDA organic regulations. This does not include performing an inspection.

Certified operation. A crop or livestock production, wild-crop harvesting or handling operation, or portion of such operation that is certified by an accredited certifying agent as utilizing a system of organic production or handling as described by the Act and the regulations in this part.

Certifying agent. Any entity accredited by the Secretary as a certifying agent for the purpose of certifying a production or handling operation as a certified production or handling operation.

Certifying agent's operation. All sites, facilities, personnel, and records used by a certifying agent to conduct certification activities under the Act and the regulations in this part.

Claims. Oral, written, implied, or symbolic representations, statements, or advertising or other forms of communication presented to the public or buyers of agricultural products that relate to the organic certification process or the term, “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)),” or, in the case of agricultural products containing less than 70 percent organic ingredients, the term, “organic,” on the ingredients panel.

Class of animal. A group of livestock that shares a similar stage of life or production. The classes of animals are those that are commonly listed on feed labels.

Commercially available. The ability to obtain a production input in an appropriate form, quality, or quantity to fulfill an essential function in a system of organic production or handling, as determined by the certifying agent in the course of reviewing the organic plan.

Commingling. Physical contact between unpackaged organically produced and nonorganically produced agricultural products during production, processing, transportation, storage or handling, other than during the manufacture of a multiingredient product containing both types of ingredients.

Compost. The product of a managed process through which microorganisms break down plant and animal materials into more available forms suitable for application to the soil. Compost must be produced through a process that combines plant and animal materials with an initial C:N ratio of between 25:1 and 40:1. Producers using an in-vessel or static aerated pile system must maintain the composting materials at a temperature between 131 °F and 170 °F for 3 days. Producers using a windrow system must maintain the composting materials at a temperature between 131 °F and 170 °F for 15 days, during which time, the materials must be turned a minimum of five times.

Conformity assessment system. All activities, including oversight, accreditation, compliance review, and enforcement, undertaken by a government to ensure that the applicable technical requirements for the production and handling of organic agricultural products are fully and consistently applied.

Control. Any method that reduces or limits damage by populations of pests, weeds, or diseases to levels that do not significantly reduce productivity.

Crop. Pastures, cover crops, green manure crops, catch crops, or any plant or part of a plant intended to be marketed as an agricultural product, fed to livestock, or used in the field to manage nutrients and soil fertility.

Crop residues. The plant parts remaining in a field after the harvest of a crop, which include stalks, stems, leaves, roots, and weeds.

Crop rotation. The practice of alternating the annual crops grown on a specific field in a planned pattern or sequence in successive crop years so that crops of the same species or family are not grown repeatedly without interruption on the same field. Perennial cropping systems employ means such as alley cropping, intercropping, and hedgerows to introduce biological diversity in lieu of crop rotation.

Crop year. That normal growing season for a crop as determined by the Secretary.

Cultivation. Digging up or cutting the soil to prepare a seed bed; control weeds; aerate the soil; or work organic matter, crop residues, or fertilizers into the soil.

Cultural methods. Methods used to enhance crop health and prevent weed, pest, or disease problems without the use of substances; examples include the selection of appropriate varieties and planting sites; proper timing and density of plantings; irrigation; and extending a growing season by manipulating the microclimate with green houses, cold frames, or wind breaks.

De-beaking. The removal of more than one-third of the upper beak or removal of more than one-third of both the upper and lower beaks of a bird.

De-snooding. The removal of the turkey snood (a fleshy protuberance on the forehead of male turkeys).

Detectable residue. The amount or presence of chemical residue or sample component that can be reliably observed or found in the sample matrix by current approved analytical methodology.

Disease vectors. Plants or animals that harbor or transmit disease organisms or pathogens which may attack crops or livestock.

Drift. The physical movement of prohibited substances from the intended target site onto an organic operation or portion thereof.

Dry lot. A fenced area that may be covered with concrete, but that has little or no vegetative cover.

Dry matter. The amount of a feedstuff remaining after all the free moisture is evaporated out.

Dry matter demand. The expected dry matter intake for a class of animal.

Dry matter intake. Total pounds of all feed, devoid of all moisture, consumed by a class of animals over a given period of time.

Dubbing. The removal of poultry combs and wattles.

Emergency pest or disease treatment program. A mandatory program authorized by a Federal, State, or local agency for the purpose of controlling or eradicating a pest or disease.

Employee. Any person providing paid or volunteer services for a certifying agent.

Excipients. Any ingredients that are intentionally added to livestock medications but do not exert therapeutic or diagnostic effects at the intended dosage, although they may act to improve product delivery (e.g., enhancing absorption or controlling release of the drug substance). Examples of such ingredients include fillers, extenders, diluents, wetting agents, solvents, emulsifiers, preservatives, flavors, absorption enhancers, sustained-release matrices, and coloring agents.

Excluded methods. A variety of methods used to genetically modify organisms or influence their growth and development by means that are not possible under natural conditions or processes and are not considered compatible with organic production. Such methods include cell fusion, microencapsulation and macroencapsulation, and recombinant DNA technology (including gene deletion, gene doubling, introducing a foreign gene, and changing the positions of genes when achieved by recombinant DNA technology). Such methods do not include the use of traditional breeding, conjugation, fermentation, hybridization, in vitro fertilization, or tissue culture.

Feed. Edible materials which are consumed by livestock for their nutritional value. Feed may be concentrates (grains) or roughages (hay, silage, fodder). The term, "feed," encompasses all agricultural commodities, including pasture ingested by livestock for nutritional purposes.

Feed additive. A substance added to feed in micro quantities to fulfill a specific nutritional need; i.e., essential nutrients in the form of amino acids, vitamins, and minerals.

Feedlot. A dry lot for the controlled feeding of livestock.

Feed supplement. A combination of feed nutrients added to livestock feed to improve the nutrient balance or performance of the total ration and intended to be:

(1) Diluted with other feeds when fed to livestock;

(2) Offered free choice with other parts of the ration if separately available; or

(3) Further diluted and mixed to produce a complete feed.

Fertilizer. A single or blended substance containing one or more recognized plant nutrient(s) which is used primarily for its plant nutrient content and which is designed for use or claimed to have value in promoting plant growth.

Field. An area of land identified as a discrete unit within a production operation.

Forage. Vegetative material in a fresh, dried, or ensiled state (pasture, hay, or silage), which is fed to livestock.

Governmental entity. Any domestic government, tribal government, or foreign governmental subdivision providing certification services.

Graze.

(1) The consumption of standing or residual forage by livestock.

(2) To put livestock to feed on standing or residual forage.

Grazing. To graze.

Grazing season. The period of time when pasture is available for grazing, due to natural precipitation or irrigation. Grazing season dates may vary because of mid-summer heat/humidity, significant precipitation events, floods, hurricanes, droughts or winter weather events. Grazing season may be extended by the grazing of residual forage as agreed in the operation's organic system plan. Due to weather, season, or climate, the grazing season may or may not be continuous. Grazing season may range from 120 days to 365 days, but not less than 120 days per year.

Handle. To sell, process, or package agricultural products, including but not limited to trading, facilitating sale or trade on behalf of a seller or oneself, importing to the United States, exporting for sale in the United States, combining, aggregating, culling, conditioning, treating, packing, containerizing, repackaging, labeling, storing, receiving, or loading.

Handler. Any person that handles agricultural products, except final retailers of agricultural products that do not process agricultural products.

Handling operation. Any operation that handles agricultural products, except final retailers of agricultural products that do not process agricultural products.

Immediate family. The spouse, minor children, or blood relatives who reside in the immediate household of a certifying agent or an employee, inspector, contractor, or other personnel of the certifying agent. For the purpose of this part, the interest of a spouse, minor child, or blood relative who is a resident of the immediate household of a certifying agent or an employee, inspector, contractor, or other personnel of the certifying agent shall be considered to be an interest of the certifying agent or an employee, inspector, contractor, or other personnel of the certifying agent.

Inclement weather. Weather that is violent, or characterized by temperatures (high or low), or characterized by excessive precipitation that can cause physical harm to a given species of livestock. Production yields or growth rates of livestock lower than the maximum achievable do not qualify as physical harm.

Indoors or indoor space. The space inside of an enclosed building or housing structure available to livestock. Indoor space for avian species includes, but is not limited to:

(1) ***Mobile housing.*** A mobile structure for avian species with solid or perforated flooring that is moved regularly and allows birds to continuously access areas outside the structure during daytime hours.

(2) ***Aviary housing.*** A fixed structure for avian species that has multiple tiers or levels.

(3) ***Slatted/mesh floor housing.*** A fixed structure for avian species that has both: a slatted floor where perches, feed, and water are provided over a pit or belt for manure collection; and litter covering the remaining solid floor.

(4) ***Floor litter housing.*** A fixed structure for avian species that has absorbent litter covering the entire floor.

Induced molting. Molting that is artificially initiated.

Inert ingredient. Any substance (or group of substances with similar chemical structures if designated by the Environmental Protection Agency) other than an active ingredient which is intentionally included in any pesticide product (40 CFR 152.3(m)).

Information panel. That part of the label of a packaged product that is immediately contiguous to and to the right of the principal display panel as observed by an individual facing the principal display panel, unless another section of the label is designated as the information panel because of package size or other package attributes (e.g., irregular shape with one usable surface).

Ingredient. Any substance used in the preparation of an agricultural product that is still present in the final commercial product as consumed.

Ingredients statement. The list of ingredients contained in a product shown in their common and usual names in the descending order of predominance.

Inspection. The act of examining and evaluating the production or handling operation of an applicant for certification or certified operation to determine compliance with the Act and the regulations in this part.

Inspector. Any person retained or used by a certifying agent to conduct inspections of certification applicants or certified production or handling operations.

Internal control system. An internal quality management system that establishes and governs the review, monitoring, training, and inspection of the producer group operation, and the procurement and distribution of shared production and handling inputs and resources, to maintain compliance with the USDA organic regulations.

Label. A display of written, printed, or graphic material on the immediate container of an agricultural product or any such material affixed to any agricultural product or affixed to a bulk container containing an agricultural product, except for package liners or a display of written, printed, or graphic material which contains only information about the weight of the product.

Labeling. All written, printed, or graphic material accompanying an agricultural product at any time or written, printed, or graphic material about the agricultural product displayed at retail stores about the product.

Livestock. Any cattle, sheep, goats, swine, poultry, or equine animals used for food or in the production of food, fiber, feed, or other agricultural-based consumer products; wild or domesticated game; or other nonplant life, except such term shall not include aquatic animals for the production of food, fiber, feed, or other agricultural-based consumer products.

Lot. Any number of containers which contain an agricultural product of the same kind located in the same conveyance, warehouse, or packing house and which are available for inspection at the same time.

Manure. Feces, urine, other excrement, and bedding produced by livestock that has not been composted.

Market information. Any written, printed, audiovisual, or graphic information, including advertising, pamphlets, flyers, catalogues, posters, and signs, distributed, broadcast, or made available outside of retail outlets that are used to assist in the sale or promotion of a product.

Mulch. Any nonsynthetic material, such as wood chips, leaves, or straw, or any synthetic material included on the National List for such use, such as newspaper or plastic that serves to suppress weed growth, moderate soil temperature, or conserve soil moisture.

Mulesing. The removal of skin from the buttocks of sheep, approximately 2 to 4 inches wide and running away from the anus to the hock to prevent fly strike.

Narrow range oils. Petroleum derivatives, predominately of paraffinic and napthenic fractions with 50 percent boiling point (10 mm Hg) between 415 °F and 440 °F.

National List. A list of allowed and prohibited substances as provided for in the Act.

National Organic Program (NOP). The program authorized by the Act for the purpose of implementing its provisions.

National Organic Standards Board (NOSB). A board established by the Secretary under 7 U.S.C. 6518 to assist in the development of standards for substances to be used in organic production and to advise the Secretary on any other aspects of the implementation of the National Organic Program.

Natural resources of the operation. The physical, hydrological, and biological features of a production operation, including soil, water, wetlands, woodlands, and wildlife.

Nonagricultural substance. A substance that is not a product of agriculture, such as a mineral or a bacterial culture, that is used as an ingredient in an agricultural product. For the purposes of this part, a nonagricultural ingredient also includes any substance, such as gums, citric acid, or pectin, that is extracted from, isolated from, or a fraction of an agricultural product so that the identity of the agricultural product is unrecognizable in the extract, isolate, or fraction.

Non-ambulatory. As defined in 9 CFR 309.2(b).

Nonsynthetic (natural). A substance that is derived from mineral, plant, or animal matter and does not undergo a synthetic process as defined in section 6502(21) of the Act (7 U.S.C. 6502(21)). For the purposes of this part, nonsynthetic is used as a synonym for natural as the term is used in the Act.

Nonretail container. Any container used for shipping or storage of an agricultural product that is not used in the retail display or sale of the product.

Nontoxic. Not known to cause any adverse physiological effects in animals, plants, humans, or the environment.

Organic. A labeling term that refers to an agricultural product produced in accordance with the Act and the regulations in this part.

Organic exporter. The final certified exporter of the organic agricultural product, who facilitates the trade of, consigns, or arranges for the transport/shipping of the organic agricultural product from a foreign country to the United States.

Organic fraud. Deceptive representation, sale, or labeling of nonorganic agricultural products or ingredients as “100 percent organic,” “organic,” or “made with organic (specified ingredients or food group(s)).”

Organic importer. The operation responsible for accepting imported organic agricultural products within the United States and ensuring NOP Import Certificate data are entered into the U.S. Customs and Border Protection import system of record.

Organic Integrity Database. The National Organic Program's electronic, web-based reporting tool for the submission of data, completion of certificates of organic operation, and other information, or the tool's successors.

Organic management. Management of a production or handling operation in compliance with all applicable provisions under this part.

Organic matter. The remains, residues, or waste products of any organism.

Organic production. A production system that is managed in accordance with the Act and regulations in this part to respond to site-specific conditions by integrating cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity.

Organic system plan. A plan of management of an organic production or handling operation that has been agreed to by the producer or handler and the certifying agent and that includes written plans concerning all aspects of agricultural production or handling described in the Act and the regulations in subpart C of this part.

Outdoors or outdoor space. Any area outside an enclosed building or enclosed housing structure. Enclosed housing structures with open sides (e.g., open-sided freestall barns) are not to be considered outdoors or outdoor space. Outdoor space for avian species includes, but is not limited to:

(1) Pasture pens (avian). Floorless pens, with full or partial roofing, that are moved regularly, provide direct access to soil and vegetation, and allow birds to express natural behaviors.

(2) Shade structures that are not enclosed.

Paper-based crop planting aid. A material that is comprised of at least 60% cellulose-based fiber by weight, including, but not limited to, pots, seed tape, and collars that are placed in or on the soil and later incorporated into the soil, excluding biodegradable mulch film. Up to 40% of the ingredients can be nonsynthetic, other permitted synthetic ingredients in § 205.601(j), or synthetic strengthening fibers, adhesives, or resins. Contains no less than 80% biobased content as verified by a qualified third-party assessment (e.g., laboratory test using ASTM D6866 or composition review by qualified personnel).

Pasture. Land used for livestock grazing that is managed to provide feed value and maintain or improve soil, water, and vegetative resources.

Peer review panel. A panel of individuals who have expertise in organic production and handling methods and certification procedures and who are appointed by the Administrator to assist in evaluating applicants for accreditation as certifying agents.

Perch. A rod- or branch-type structure above the floor or ground that accommodates roosting and allows birds to utilize vertical space.

Person. An individual, partnership, corporation, association, cooperative, or other entity.

Pesticide. Any substance which alone, in chemical combination, or in any formulation with one or more substances is defined as a pesticide in section 2(u) of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136(u) *et seq*).

Petition. A request to amend the National List that is submitted by any person in accordance with this part.

Planting stock. Any plant or plant tissue other than annual seedlings but including rhizomes, shoots, leaf or stem cuttings, roots, or tubers, used in plant production or propagation.

Practice standard. The guidelines and requirements through which a production or handling operation implements a required component of its production or handling organic system plan. A practice standard includes a series of allowed and prohibited actions, materials, and conditions to establish a minimum level performance for planning, conducting, and maintaining a function, such as livestock health care or facility pest management, essential to an organic operation.

Principal display panel. That part of a label that is most likely to be displayed, presented, shown, or examined under customary conditions of display for sale.

Private entity. Any domestic or foreign nongovernmental for-profit or not-for-profit organization providing certification services.

Processing. Cooking, baking, curing, heating, drying, mixing, grinding, churning, separating, extracting, slaughtering, cutting, fermenting, distilling, eviscerating, preserving, dehydrating, freezing, chilling, or otherwise manufacturing and includes the packaging, canning, jarring, or otherwise enclosing food in a container.

Processing aid.

(1) Substance that is added to a food during the processing of such food but is removed in some manner from the food before it is packaged in its finished form;

(2) a substance that is added to a food during processing, is converted into constituents normally present in the food, and does not significantly increase the amount of the constituents naturally found in the food; and

(3) a substance that is added to a food for its technical or functional effect in the processing but is present in the finished food at insignificant levels and does not have any technical or functional effect in that food.

Producer. A person who engages in the business of growing or producing food, fiber, feed, and other agricultural-based consumer products.

Producer group member. An individual engaged in the activity of producing or harvesting agricultural products as a member of a producer group operation.

Producer group operation. A producer, organized as a person, consisting of producer group members and production units in geographic proximity governed by an internal control system under one organic system plan and certification.

Producer group production unit. A defined subgroup of producer group members in geographic proximity within a single producer group operation that use shared practices and resources to produce similar agricultural products.

Production lot number/identifier. Identification of a product based on the production sequence of the product showing the date, time, and place of production used for quality control purposes.

Prohibited substance. A substance the use of which in any aspect of organic production or handling is prohibited or not provided for in the Act or the regulations of this part.

Pullets. Female chickens or other avian species being raised for egg production that have not yet started to lay eggs.

Records. Any information in written, visual, or electronic form that documents the activities undertaken by a producer, handler, or certifying agent to comply with the Act and regulations in this part.

Religious (or ritual) slaughter. Slaughtering in accordance with the ritual requirements of any religious faith that prescribes a method of slaughter whereby the animal suffers loss of consciousness by anemia of the brain caused by the simultaneous and instantaneous severance of the carotid arteries with a sharp instrument and handling in connection with such slaughtering.

Residual forage. Forage cut and left to lie, or windrowed and left to lie, in place in the pasture.

Residue testing. An official or validated analytical procedure that detects, identifies, and measures the presence of chemical substances, their metabolites, or degradation products in or on raw or processed agricultural products.

Responsibly connected. Any person who is a partner, officer, director, holder, manager, or owner of 10 percent or more of the voting stock of an applicant or a recipient of certification or accreditation.

Retail establishment. Restaurants, delicatessens, bakeries, grocery stores, or any retail business with a restaurant, delicatessen, bakery, salad bar, bulk food self-service station, or other eat-in, carry-out, mail-order, or delivery service of raw or processed agricultural products.

Routine use of parasiticide. The regular, planned, or periodic use of parasiticides.

Secretary. The Secretary of Agriculture or a representative to whom authority has been delegated to act in the Secretary's stead.

Sewage sludge. A solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes but is not limited to: domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

Shelter. Structures such as barns, sheds, or windbreaks; or natural areas such as woods, tree lines, large hedge rows, or geographic land features, that are designed or selected to provide physical protection or housing to all animals.

Slaughter stock. Any animal that is intended to be slaughtered for consumption by humans or other animals.

Soil and water quality. Observable indicators of the physical, chemical, or biological condition of soil and water, including the presence of environmental contaminants.

Split operation. An operation that produces or handles both organic and nonorganic agricultural products.

Stage of life. A discrete time period in an animal's life which requires specific management practices different than during other periods (e.g., poultry during feathering). Breeding, freshening, lactation and other recurring events are not a stage of life.

State. Any of the several States of the United States of America, its territories, the District of Columbia, and the Commonwealth of Puerto Rico.

State certifying agent. A certifying agent accredited by the Secretary under the National Organic Program and operated by the State for the purposes of certifying organic production and handling operations in the State.

State organic program (SOP). A State program that meets the requirements of section 6506 of the Act, is approved by the Secretary, and is designed to ensure that a product that is sold or labeled as organically produced under the Act is produced and handled using organic methods.

State organic program's governing State official. The chief executive official of a State or, in the case of a State that provides for the statewide election of an official to be responsible solely for the administration of the agricultural operations of the State, such official who administers a State organic certification program.

Stocking density. The liveweight or number of animals on a given area or unit of land.

Supply chain traceability audit. The process of identifying and tracking the movement, sale, custody, handling, and organic status of an agricultural product along a supply chain to verify the agricultural product's compliance with this part.

Synthetic. A substance that is formulated or manufactured by a chemical process or by a process that chemically changes a substance extracted from naturally occurring plant, animal, or mineral sources, except that such term shall not apply to substances created by naturally occurring biological processes.

Technical requirements. A system of relevant laws, regulations, regulatory practices, standards, policies, and procedures that address the certification, production, and handling of organic agricultural products.

Temporary and Temporarily. Occurring for a limited time only (e.g., overnight, throughout a storm, during a period of illness, the period of time specified by the Administrator when granting a temporary variance), not permanent or lasting.

Third-year transitional crop. Crops and forage from land included in the organic system plan of a producer's operation that is not certified organic but is in the third year of organic management and is eligible for organic certification in one year or less.

Toe clipping. The removal of the nail and distal joint of the back two toes of a bird.

Tolerance. The maximum legal level of a pesticide chemical residue in or on a raw or processed agricultural commodity or processed food.

Transitioned animal. A dairy animal converted to organic milk production in accordance with § 205.236(a)(2) that has not been under continuous organic management from the last third of gestation; offspring born to a transitioned animal that, during its last third of gestation, consumes third-year transitional crops; and offspring born during the one-time transition exception that themselves consume third-year transitional crops.

Transplant. A seedling which has been removed from its original place of production, transported, and replanted.

Unannounced inspection. The act of examining and evaluating all or a portion of the production or handling activities of a certified operation without advance notice to determine compliance with the Act and the regulations in this part.

Unavoidable residual environmental contamination (UREC). Background levels of naturally occurring or synthetic chemicals that are present in the soil or present in organically produced agricultural products that are below established tolerances.

Vegetation. Living plant matter that is anchored in the soil by roots and provides ground cover.

Wild crop. Any plant or portion of a plant that is collected or harvested from a site that is not maintained under cultivation or other agricultural management.

Yards/Feeding pad. An area for feeding, exercising, and outdoor access for livestock during the non-grazing season and a high traffic area where animals may receive supplemental feeding during the grazing season.

[65 FR 80637, Dec. 21, 2000, as amended at 72 FR 70484, Dec. 12, 2007; 75 FR 7192, Feb. 17, 2010; 79 FR 58662, Sept. 30, 2014; 80 FR 6429, Feb. 5, 2015; 87 FR 19772, Apr. 5, 2022; 87 FR 68027, Nov. 14, 2022; 88 FR 3620, Jan. 19, 2023; 88 FR 75444, Nov. 2, 2023; 88 FR 86259, Dec. 13, 2023; 88 FR 89539, Dec. 28, 2023]

§ 205.3 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, we must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the USDA Agricultural Marketing Service, National Organic Program, 1400 Independence Avenue SW., Washington, DC 20250; (202) 720–3252, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741–6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html*.

(b) ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428; phone 1–877–909–2786; *http://www.astm.org/*.

(1) ASTM D5988–12 ("ASTM D5988"), "Standard Test Method for Determining Aerobic Biodegradation of Plastic Materials in Soil," approved May 1, 2012, IBR approved for § 205.2.

(2) ASTM D6400–12 ("ASTM D6400"), "Standard Specification for Labeling of Plastics Designed to be Aerobically Composted in Municipal or Industrial Facilities," approved May 15, 2012, IBR approved for § 205.2.

(3) ASTM D6866–12 ("ASTM D6866"), "Standard Test Methods for Determining the Biobased Content of Solid, Liquid, and Gaseous Samples Using Radiocarbon Analysis," approved April 1, 2012, IBR approved for § 205.2.

(4) ASTM D6868–11 ("ASTM D6868"), "Standard Specification for Labeling of End Items that Incorporate Plastics and Polymers as Coatings or Additives with Paper and Other Substrates Designed to be Aerobically Composted in Municipal or Industrial Facilities," approved February 1, 2011, IBR approved for § 205.2.

(c) European Committee for Standardization; Avenue Marnix, 17–B–1000 Brussels; phone 32 2 550 08 11; *www.cen.eu*.

(1) EN 13432:2000:E ("EN 13432"), September, 2000, "Requirements for packaging recoverable through composting and biodegradation—Test scheme and evaluation criteria for the final acceptance of packaging," IBR approved for § 205.2.

(2) EN 14995:2006:E ("EN 14995"), December, 2006, "Plastics—Evaluation of compostability—Test scheme and specifications," IBR approved for § 205.2.

(d) International Organization for Standardization, 1, ch. de la Voie-Creuse, CP 56, CH–1211 Geneva 20, Switzerland; phone 41 22 749 01 11; *www.iso.org*.

(1) ISO 17088:2012(E), ("ISO 17088"), "Specifications for compostable plastics," June 1, 2012, IBR approved for § 205.2.

(2) ISO 17556:2012(E) ("ISO 17556"), "Plastics—Determination of the ultimate aerobic biodegradability of plastic materials in soil by measuring the oxygen demand in a respirometer or the amount of carbon dioxide evolved," August 15, 2012, IBR approved for § 205.2.

[79 FR 58662, Sept. 30, 2014]

Subpart B—Applicability

§ 205.100 What has to be certified.

(a) Except for the exempt operations described in § 205.101, each operation or portion of an operation that produces or handles agricultural products intended to be sold, labeled, or represented as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" must be certified according to the provisions of subpart E of this part and must meet all other applicable requirements of this part.

(b) Any production or handling operation or specified portion of a production or handling operation that has been already certified by a certifying agent on the date that the certifying agent receives its accreditation under this part shall be deemed to be certified under the Act until the operation's next anniversary date of certification. Such recognition shall only be available to those operations certified by a certifying agent that receives its accreditation within 18 months from February 20, 2001.

(c) Any person or responsibly connected person that:

(1) Knowingly sells or labels a product as organic, except in accordance with the Act, shall be subject to a civil penalty of not more than the amount specified in § 3.91(b)(1) of this title per violation.

(2) Makes a false statement under the Act to the Secretary, a governing State official, or an accredited certifying agent shall be subject to the provisions of section 1001 of title 18, United States Code.

[65 FR 80637, Dec. 21, 2000, as amended at 70 FR 29579, May 24, 2005; 80 FR 6429, Feb. 5, 2015; 88 FR 3621, Jan. 19, 2023]

§ 205.101 Exemptions from certification.

The following operations in paragraphs (a) through (h) of this section are exempt from certification under subpart E of this part and from submitting an organic system plan for acceptance or approval under § 205.201 but must comply with the applicable organic production and handling requirements of subpart C of this part, the applicable labeling requirements of subpart D of this part, and any requirements described in paragraphs (a) through (i) of this section.

(a) A production or handling operation that sells agricultural products as "organic" but whose gross agricultural income from organic sales totals $5,000 or less annually.

(b) A retail establishment that does not process organically produced agricultural products.

(c) A retail establishment that processes, at the point of final sale, agricultural products certified under this part as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))."

(d) A handling operation that only handles agricultural products that contain less than 70 percent organic ingredients (as described in § 205.301(d)) or that only identifies organic ingredients on the information panel.

(e) An operation that only receives, stores, and/or prepares for shipment, but does not otherwise handle, organic agricultural products that:

(1) Are enclosed in sealed, tamper-evident packages or containers prior to being received or acquired by the operation; and

(2) Remain in the same sealed, tamper-evident packages or containers and are not otherwise handled while in the control of the operation.

(f) An operation that only buys, sells, receives, stores, and/or prepares for shipment, but does not otherwise handle, organic agricultural products already labeled for retail sale that:

(1) Are enclosed in sealed, tamper-evident packages or containers that are labeled for retail sale prior to being received or acquired by the operation; and

(2) Remain in the same sealed, tamper-evident packages or containers that are labeled for retail sale and are not otherwise handled while in the control of the operation.

(g) A Customs broker (per 19 CFR 111.1) that only conducts customs business but does not otherwise handle organic agricultural products.

(h) An operation that only arranges for the shipping, storing, transport, or movement of organic agricultural products but does not otherwise handle organic products.

(i) Recordkeeping by exempt operations.

(1) Exempt operations described in paragraphs (a) and (c) through (f) of this section must make available to representatives of the Secretary, upon request, records that:

(i) Demonstrate that agricultural products identified as organic were organically produced and handled; and

(ii) Verify quantities of organic agricultural products received and shipped or sold

(2) All records described in this section must be maintained for no less than 3 years beyond their creation, and the operations must allow representatives of the Secretary and the applicable State organic programs' governing State official access to these records for inspection and copying during normal business hours to determine compliance with the applicable regulations set forth in this part.

[88 FR 3621, Jan. 19, 2023]

§ 205.102 Use of the term, "organic."

Any agricultural product that is sold, labeled, or represented as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" must be:

(a) Produced in accordance with the requirements specified in § 205.101 or §§ 205.202 through 205.207 or §§ 205.236 through 205.240 and all other applicable requirements of part 205; and

(b) Handled in accordance with the requirements specified in § 205.101 or §§ 205.270 through 205.272 and all other applicable requirements of this part 205.

[65 FR 80637, Dec. 21, 2000, as amended at 75 FR 7193, Feb. 17, 2010]

§ 205.103 Recordkeeping by certified operations.

(a) A certified operation must maintain records concerning the production, harvesting, and handling of agricultural products that are or that are intended to be sold, labeled, or represented as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))."

(b) Such records must:

(1) Be adapted to the particular business that the certified operation is conducting;

(2) Fully disclose all activities and transactions of the certified operation, in sufficient detail as to be readily understood and audited; records must span the time of purchase or acquisition, through production, to sale or transport and be traceable back to the last certified operation;

(3) Include audit trail documentation for agricultural products handled or produced by the certified operation and identify agricultural products on these records as "100% organic," "organic," or "made with organic (specified ingredients or food group(s))," or similar terms, as applicable;

(4) Be maintained for not less than 5 years beyond their creation; and

(5) Be sufficient to demonstrate compliance with the Act and the regulations in this part.

(c) The certified operation must make such records available for inspection and copying during normal business hours by authorized representatives of the Secretary, the applicable State program's governing State official, and the certifying agent.

[65 FR 80637, Dec. 21, 2000, as amended at 88 FR 3621, Jan. 19, 2023]

§ 205.104 [Reserved]

§ 205.105 Allowed and prohibited substances, methods, and ingredients in organic production and handling.

To be sold or labeled as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))," the product must be produced and handled without the use of:

(a) Synthetic substances and ingredients, except as provided in § 205.601 or § 205.603;

(b) Nonsynthetic substances prohibited in § 205.602 or § 205.604;

(c) Nonagricultural substances used in or on processed products, except as otherwise provided in § 205.605;

(d) Nonorganic agricultural substances used in or on processed products, except as otherwise provided in § 205.606;

(e) Excluded methods, except for vaccines: *Provided,* That, the vaccines are approved in accordance with § 205.600(a);

(f) Ionizing radiation, as described in Food and Drug Administration regulation, 21 CFR 179.26; and

(g) Sewage sludge.

§§ 205.106-205.199 [Reserved]

Subpart C—Organic Production and Handling Requirements

§ 205.200 General.

The producer or handler of a production or handling operation intending to sell, label, or represent agricultural products as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" must comply with the applicable provisions of this subpart. Production practices implemented in accordance with this subpart must maintain or improve the natural resources of the operation, including soil and water quality.

§ 205.201 Organic production and handling system plan.

(a) The producer or handler of a production or handling operation, except as exempt under § 205.101, intending to sell, label, or represent agricultural products as "100 percent organic," "organic," or "made with organic (specified ingredients or food group(s))" must develop an organic production or handling system plan that is agreed to by the producer or handler and an accredited certifying agent. An organic system plan must meet the requirements set forth in this section for organic production or handling. An organic production or handling system plan must include:

(1) A description of practices and procedures to be performed and maintained, including the frequency with which they will be performed;

(2) A list of each substance to be used as a production or handling input, indicating its composition, source, location(s) where it will be used, and documentation of commercial availability, as applicable;

(3) A description of the monitoring practices and procedures to be performed and maintained, including the frequency with which they will be performed, to verify that the plan is effectively implemented. This must include a description of the monitoring practices and procedures to verify suppliers in the supply chain and organic status of agricultural products received, and to prevent organic fraud, as appropriate to the certified operation's activities, scope, and complexity;

(4) A description of the recordkeeping system implemented to comply with the requirements established in § 205.103;

(5) A description of the management practices and physical barriers established to prevent commingling of organic and nonorganic products on a split operation and to prevent contact of organic production and handling operations and products with prohibited substances; and

(6) Additional information deemed necessary by the certifying agent to evaluate compliance with the regulations.

(b) A producer may substitute a plan prepared to meet the requirements of another Federal, State, or local government regulatory program for the organic system plan: *Provided,* That, the submitted plan meets all the requirements of this subpart.

(c) In addition to paragraph (a) of this section, a producer group operation's organic system plan must describe its internal control system. The description of the internal control system must:

(1) Define the organizational structure, roles, and responsibilities of all personnel;

(2) Identify producer group production units and locations;

(3) Describe measures to protect against potential conflicts of interest and protect internal control system personnel from retribution;

(4) Define geographic proximity criteria for producer group members and producer group production units;

(5) Describe procedures for accepting new members into the producer group operation, including initial inspection and compliance determination;

(6) Describe characteristics of high-risk producer group members and producer group production units;

(7) Describe how shared resources, including production practices and inputs, are procured and provided to all producer group members and personnel;

(8) Describe how training, education, and technical assistance is provided to producer group members and internal control system personnel;

(9) Describe the system of records used to demonstrate compliance with this part, including traceability and mass-balance audits; and

(10) Describe how internal monitoring, surveillance, inspection, sanctions, and auditing are used to assess the compliance of all producer group members.

[65 FR 80637, Dec. 21, 2000, as amended at 88 FR 3622, Jan. 19, 2023]

§ 205.202 Land requirements.

Any field or farm parcel from which harvested crops are intended to be sold, labeled, or represented as "organic," must:

(a) Have been managed in accordance with the provisions of §§ 205.203 through 205.206;

(b) Have had no prohibited substances, as listed in § 205.105, applied to it for a period of 3 years immediately preceding harvest of the crop; and

(c) Have distinct, defined boundaries and buffer zones such as runoff diversions to prevent the unintended application of a prohibited substance to the crop or contact with a prohibited substance applied to adjoining land that is not under organic management.

§ 205.203 Soil fertility and crop nutrient management practice standard.

(a) The producer must select and implement tillage and cultivation practices that maintain or improve the physical, chemical, and biological condition of soil and minimize soil erosion.

(b) The producer must manage crop nutrients and soil fertility through rotations, cover crops, and the application of plant and animal materials.

(c) The producer must manage plant and animal materials to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances. Animal and plant materials include:

(1) Raw animal manure, which must be composted unless it is:

(i) Applied to land used for a crop not intended for human consumption;

(ii) Incorporated into the soil not less than 120 days prior to the harvest of a product whose edible portion has direct contact with the soil surface or soil particles; or

(iii) Incorporated into the soil not less than 90 days prior to the harvest of a product whose edible portion does not have direct contact with the soil surface or soil particles;

(2) Composted plant and animal materials produced though a process that:

(i) Established an initial C:N ratio of between 25:1 and 40:1; and

(ii) Maintained a temperature of between 131 °F and 170 °F for 3 days using an in-vessel or static aerated pile system; or

(iii) Maintained a temperature of between 131 °F and 170 °F for 15 days using a windrow composting system, during which period, the materials must be turned a minimum of five times.

(3) Uncomposted plant materials.

(d) A producer may manage crop nutrients and soil fertility to maintain or improve soil organic matter content in a manner that does not contribute to contamination of crops, soil, or water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances by applying:

(1) A crop nutrient or soil amendment included on the National List of synthetic substances allowed for use in organic crop production;

(2) A mined substance of low solubility;

(3) A mined substance of high solubility: *Provided,* That, the substance is used in compliance with the conditions established on the National List of nonsynthetic materials prohibited for crop production;

(4) Ash obtained from the burning of a plant or animal material, except as prohibited in paragraph (e) of this section: *Provided,* That, the material burned has not been treated or combined with a prohibited substance or the ash is not included on the National List of nonsynthetic substances prohibited for use in organic crop production; and

(5) A plant or animal material that has been chemically altered by a manufacturing process: *Provided,* That, the material is included on the National List of synthetic substances allowed for use in organic crop production established in § 205.601.

(e) The producer must not use:

(1) Any fertilizer or composted plant and animal material that contains a synthetic substance not included on the National List of synthetic substances allowed for use in organic crop production;

(2) Sewage sludge (biosolids) as defined in 40 CFR part 503; and

(3) Burning as a means of disposal for crop residues produced on the operation: *Except,* That, burning may be used to suppress the spread of disease or to stimulate seed germination.

§ 205.204 Seeds and planting stock practice standard.

(a) The producer must use organically grown seeds, annual seedlings, and planting stock: *Except,* That,

(1) Nonorganically produced, untreated seeds and planting stock may be used to produce an organic crop when an equivalent organically produced variety is not commercially available: *Except,* That, organically produced seed must be used for the production of edible sprouts;

(2) Nonorganically produced seeds and planting stock that have been treated with a substance included on the National List of synthetic substances allowed for use in organic crop production may be used to produce an organic crop when an equivalent organically produced or untreated variety is not commercially available;

(3) Nonorganically produced annual seedlings may be used to produce an organic crop when a temporary variance has been granted in accordance with § 205.290(a)(2);

(4) Nonorganically produced planting stock to be used to produce a perennial crop may be sold, labeled, or represented as organically produced only after the planting stock has been maintained under a system of organic management for a period of no less than 1 year; and

(5) Seeds, annual seedlings, and planting stock treated with prohibited substances may be used to produce an organic crop when the application of the materials is a requirement of Federal or State phytosanitary regulations.

(b) [Reserved]

§ 205.205 Crop rotation practice standard.

The producer must implement a crop rotation including but not limited to sod, cover crops, green manure crops, and catch crops that provide the following functions that are applicable to the operation:

(a) Maintain or improve soil organic matter content;

(b) Provide for pest management in annual and perennial crops;

(c) Manage deficient or excess plant nutrients; and

(d) Provide erosion control.

§ 205.206 Crop pest, weed, and disease management practice standard.

(a) The producer must use management practices to prevent crop pests, weeds, and diseases including but not limited to:

(1) Crop rotation and soil and crop nutrient management practices, as provided for in §§ 205.203 and 205.205;

(2) Sanitation measures to remove disease vectors, weed seeds, and habitat for pest organisms; and

(3) Cultural practices that enhance crop health, including selection of plant species and varieties with regard to suitability to site-specific conditions and resistance to prevalent pests, weeds, and diseases.

(b) Pest problems may be controlled through mechanical or physical methods including but not limited to:

(1) Augmentation or introduction of predators or parasites of the pest species;

(2) Development of habitat for natural enemies of pests;

(3) Nonsynthetic controls such as lures, traps, and repellents.

(c) Weed problems may be controlled through:

(1) Mulching with fully biodegradable materials;

(2) Mowing;

(3) Livestock grazing;

(4) Hand weeding and mechanical cultivation;

(5) Flame, heat, or electrical means; or

(6) Plastic or other synthetic mulches: *Provided,* That, they are removed from the field at the end of the growing or harvest season.

(d) Disease problems may be controlled through:

(1) Management practices which suppress the spread of disease organisms; or

(2) Application of nonsynthetic biological, botanical, or mineral inputs.

(e) When the practices provided for in paragraphs (a) through (d) of this section are insufficient to prevent or control crop pests, weeds, and diseases, a biological or botanical substance or a substance included on the National List of synthetic substances allowed for use in organic crop production may be applied to prevent, suppress, or control pests, weeds, or diseases: *Provided,* That, the conditions for using the substance are documented in the organic system plan.

(f) The producer must not use lumber treated with arsenate or other prohibited materials for new installations or replacement purposes in contact with soil or livestock.

§ 205.300 Use of the term, "organic."

(a) The term, "organic," may only be used on labels and in labeling of raw or processed agricultural products, including ingredients, that have been produced and handled in accordance with the regulations in this part. The term, "organic," may not be used in a product name to modify a nonorganic ingredient in the product.

(b) Products for export, produced and certified to foreign national organic standards or foreign contract buyer requirements, may be labeled in accordance with the organic labeling requirements of the receiving country or contract buyer: *Provided,* That, the shipping containers and shipping documents meet the labeling requirements specified in § 205.307(c).

(c) Products produced in a foreign country and exported for sale in the United States must be certified pursuant to subpart E of this part, labeled pursuant to this subpart D, and must comply with the requirements in § 205.273.

(d) Livestock feeds produced in accordance with the requirements of this part must be labeled in accordance with the requirements of § 205.306.

[65 FR 80637, Dec. 21, 2000, as amended at 88 FR 3622, Jan. 19, 2023]

§ 205.301 Product composition.

(a) ***Products sold, labeled, or represented as "100 percent organic."*** A raw or processed agricultural product sold, labeled, or represented as "100 percent organic" must contain (by weight or fluid volume, excluding water and salt) 100 percent organically produced ingredients. If labeled as organically produced, such product must be labeled pursuant to § 205.303.

(b) ***Products sold, labeled, or represented as "organic."*** A raw or processed agricultural product sold, labeled, or represented as "organic" must contain (by weight or fluid volume, excluding water and salt) not less than 95 percent organically produced raw or processed agricultural products. Any remaining product ingredients must be organically produced, unless not commercially available in organic form, or must be nonagricultural substances or nonorganically produced agricultural products produced consistent with the National List in subpart G of this part. If labeled as organically produced, such product must be labeled pursuant to § 205.303.

(c) ***Products sold, labeled, or represented as "made with organic (specified ingredients or food group(s))."*** Multiingredient agricultural product sold, labeled, or represented as "made with organic (specified ingredients or food group(s))" must contain (by weight or fluid volume, excluding water and salt) at least 70 percent organically produced ingredients which are produced and handled pursuant to requirements in subpart C of this part. No ingredients may be produced using prohibited practices specified in paragraphs (f)(1), (2), and (3) of § 205.301. Nonorganic ingredients may be produced without regard to paragraphs (f)(4), (5), (6), and (7) of § 205.301. If labeled as containing organically produced ingredients or food groups, such product must be labeled pursuant to § 205.304.

(d) ***Products with less than 70 percent organically produced ingredients.*** The organic ingredients in multiingredient agricultural product containing less than 70 percent organically produced ingredients (by weight or fluid volume, excluding water and salt) must be produced and handled pursuant to requirements in subpart C of this part. The nonorganic ingredients may be produced and handled without regard to the requirements of this part. Multiingredient agricultural product containing less than 70 percent organically produced ingredients may represent the organic nature of the product only as provided in § 205.305.

assessment system, the results of previous reviews and re-assessments, instances of suspected or verified noncompliance issues, the volume of trade, and other factors contributing to the risk level of the equivalence determination.

(e) The U.S. Government may terminate an equivalence determination if the terms or conditions established under the equivalence determination are not met; if AMS determines that the country's technical requirements and/or conformity assessment program are no longer equivalent; if AMS determines that the foreign government's organic control system is inadequate to ensure that the country's organic certification program is fully meeting the terms and conditions under the equivalence determination; or for other good cause.

[88 FR 3625, Jan. 19, 2023]

§§ 205.512-205.599 [Reserved]

Subpart G—Administrative

THE NATIONAL LIST OF ALLOWED AND PROHIBITED SUBSTANCES

§ 205.600 Evaluation criteria for allowed and prohibited substances, methods, and ingredients.

The following criteria will be utilized in the evaluation of substances or ingredients for the organic production and handling sections of the National List:

(a) Synthetic and nonsynthetic substances considered for inclusion on or deletion from the National List of allowed and prohibited substances will be evaluated using the criteria specified in the Act (7 U.S.C. 6517 and 6518).

(b) In addition to the criteria set forth in the Act, any synthetic substance used as a processing aid or adjuvant will be evaluated against the following criteria:

(1) The substance cannot be produced from a natural source and there are no organic substitutes;

(2) The substance's manufacture, use, and disposal do not have adverse effects on the environment and are done in a manner compatible with organic handling;

(3) The nutritional quality of the food is maintained when the substance is used, and the substance, itself, or its breakdown products do not have an adverse effect on human health as defined by applicable Federal regulations;

(4) The substance's primary use is not as a preservative or to recreate or improve flavors, colors, textures, or nutritive value lost during processing, except where the replacement of nutrients is required by law;

(5) The substance is listed as generally recognized as safe (GRAS) by Food and Drug Administration (FDA) when used in accordance with FDA's good manufacturing practices (GMP) and contains no residues of heavy metals or other contaminants in excess of tolerances set by FDA; and

(6) The substance is essential for the handling of organically produced agricultural products.

(c) Nonsynthetics used in organic processing will be evaluated using the criteria specified in the Act (7 U.S.C. 6517 and 6518).

§ 205.601 Synthetic substances allowed for use in organic crop production.

In accordance with restrictions specified in this section, the following synthetic substances may be used in organic crop production: *Provided,* That, use of such substances do not contribute to contamination of crops, soil, or water. Substances allowed by this section, except disinfectants and sanitizers in paragraph (a) and those substances in paragraphs (c), (j), (k), (l), and (o) of this section, may only be used when the provisions set forth in § 205.206(a) through (d) prove insufficient to prevent or control the target pest.

(a) As algicide, disinfectants, and sanitizer, including irrigation system cleaning systems.

(1) Alcohols.

(i) Ethanol.

(ii) Isopropanol.

(2) Chlorine materials—For pre-harvest use, residual chlorine levels in the water in direct crop contact or as water from cleaning irrigation systems applied to soil must not exceed the maximum residual disinfectant limit under the Safe Drinking Water Act, except that chlorine products may be used in edible sprout production according to EPA label directions.

(i) Calcium hypochlorite.

(ii) Chlorine dioxide.

(iii) Hypochlorous acid—generated from electrolyzed water.

(iv) Potassium hypochlorite—for use in water for irrigation purposes.

(v) Sodium hypochlorite.

(3) Copper sulfate—for use as an algicide in aquatic rice systems, is limited to one application per field during any 24-month period. Application rates are limited to those which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.

(4) Hydrogen peroxide.

(5) Ozone gas—for use as an irrigation system cleaner only.

(6) Peracetic acid—for use in disinfecting equipment, seed, and asexually propagated planting material. Also permitted in hydrogen peroxide formulations as allowed in § 205.601(a) at concentration of no more than 6% as indicated on the pesticide product label.

(7) Soap-based algicide/demossers.

(8) Sodium carbonate peroxyhydrate (CAS #–15630–89–4)—Federal law restricts the use of this substance in food crop production to approved food uses identified on the product label.

(b) As herbicides, weed barriers, as applicable.

(1) Herbicides, soap-based—for use in farmstead maintenance (roadways, ditches, right of ways, building perimeters) and ornamental crops.

(2) Mulches.

(i) Newspaper or other recycled paper, without glossy or colored inks.

(ii) Plastic mulch and covers (petroleum-based other than polyvinyl chloride (PVC)).

(iii) Biodegradable biobased mulch film as defined in § 205.2. Must be produced without organisms or feedstock derived from excluded methods.

(c) As compost feedstocks—Newspapers or other recycled paper, without glossy or colored inks.

(d) As animal repellents—Soaps, ammonium—for use as a large animal repellant only, no contact with soil or edible portion of crop.

(e) As insecticides (including acaricides or mite control).

(1) Ammonium carbonate—for use as bait in insect traps only, no direct contact with crop or soil.

(2) Aqueous potassium silicate (CAS #–1312–76–1)—the silica, used in the manufacture of potassium silicate, must be sourced from naturally occurring sand.

(3) Boric acid—structural pest control, no direct contact with organic food or crops.

(4) Copper sulfate—for use as tadpole shrimp control in aquatic rice production, is limited to one application per field during any 24-month period. Application rates are limited to levels which do not increase baseline soil test values for copper over a timeframe agreed upon by the producer and accredited certifying agent.

(5) Elemental sulfur.

(6) Lime sulfur—including calcium polysulfide.

(7) Oils, horticultural—narrow range oils as dormant, suffocating, and summer oils.

(8) Soaps, insecticidal.

(9) Sticky traps/barriers.

(10) Sucrose octanoate esters (CAS #s—42922–74–7; 58064–47–4)—in accordance with approved labeling.

(f) As insect management. Pheromones.

(g) As rodenticides. Vitamin D_3.

(h) As slug or snail bait.

(1) Ferric phosphate (CAS # 10045–86–0).

(2) Elemental sulfur.

(i) As plant disease control.

(1) Aqueous potassium silicate (CAS #–1312–76–1)—the silica, used in the manufacture of potassium silicate, must be sourced from naturally occurring sand.

(2) Coppers, fixed—copper hydroxide, copper oxide, copper oxychloride, includes products exempted from EPA tolerance, *Provided,* That, copper-based materials must be used in a manner that minimizes accumulation in the soil and shall not be used as herbicides.

(3) Copper sulfate—Substance must be used in a manner that minimizes accumulation of copper in the soil.

(4) Hydrated lime.

(5) Hydrogen peroxide.

(6) Lime sulfur.

(7) Oils, horticultural, narrow range oils as dormant, suffocating, and summer oils.

(8) Peracetic acid—for use to control fire blight bacteria. Also permitted in hydrogen peroxide formulations as allowed in § 205.601(i) at concentration of no more than 6% as indicated on the pesticide product label.

(9) Potassium bicarbonate.

(10) Elemental sulfur.

(11) Polyoxin D zinc salt.

(j) As plant or soil amendments.

(1) Aquatic plant extracts (other than hydrolyzed)—Extraction process is limited to the use of potassium hydroxide or sodium hydroxide; solvent amount used is limited to that amount necessary for extraction.

(2) Elemental sulfur.

(3) Humic acids—naturally occurring deposits, water and alkali extracts only.

(4) Lignin sulfonate—chelating agent, dust suppressant.

(5) Magnesium oxide (CAS # 1309–48–4)—for use only to control the viscosity of a clay suspension agent for humates.

(6) Magnesium sulfate—allowed with a documented soil deficiency.

(7) Micronutrients—not to be used as a defoliant, herbicide, or desiccant. Those made from nitrates or chlorides are not allowed. Micronutrient deficiency must be documented by soil or tissue testing or other documented and verifiable method as approved by the certifying agent.

(i) Soluble boron products.

(ii) Sulfates, carbonates, oxides, or silicates of zinc, copper, iron, manganese, molybdenum, selenium, and cobalt.

(8) Liquid fish products—can be pH adjusted with sulfuric, citric or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5.

(9) Vitamins, C and E.

(10) Squid byproducts—from food waste processing only. Can be pH adjusted with sulfuric, citric, or phosphoric acid. The amount of acid used shall not exceed the minimum needed to lower the pH to 3.5.

(11) Sulfurous acid (CAS # 7782–99–2) for on-farm generation of substance utilizing 99% purity elemental sulfur per paragraph (j)(2) of this section.

(k) As plant growth regulators.

(1) Ethylene gas—for regulation of pineapple flowering.

(2) Fatty alcohols (C6, C8, C10, and/or C12)—for sucker control in organic tobacco production.

(l) As floating agents in postharvest handling. Sodium silicate—for tree fruit and fiber processing.

(m) As synthetic inert ingredients as classified by the Environmental Protection Agency (EPA), for use with nonsynthetic substances or synthetic substances listed in this section and used as an active pesticide ingredient in accordance with any limitations on the use of such substances.

(1) EPA List 4—Inerts of Minimal Concern.

(2) EPA List 3—Inerts of unknown toxicity—for use only in passive pheromone dispensers.

(n) Seed preparations. Hydrogen chloride (CAS # 7647–01–0)—for delinting cotton seed for planting.

(o) Production aids.

(1) Microcrystalline cheesewax (CAS #'s 64742–42–3, 8009–03–08, and 8002–74–2)—for use in log grown mushroom production. Must be made without either ethylene-propylene co-polymer or synthetic colors.

(2) Paper-based crop planting aids as defined in § 205.2. Virgin or recycled paper without glossy paper or colored inks.

(p)–(z) [Reserved]

[65 FR 80637, Dec. 21, 2000, as amended at 68 FR 61992, Oct. 31, 2003; 71 FR 53302 Sept. 11, 2006; 72 FR 69572, Dec. 10, 2007; 75 FR 38696, July 6, 2010; 75 FR 77524, Dec. 13, 2010; 77 FR 8092, Feb. 14, 2012; 77 FR 33298, June 6, 2012; 77 FR 45907, Aug. 2, 2012; 78 FR 31821, May 28, 2013; 79 FR 58663, Sept. 30, 2014; 80 FR 77234, Dec. 14, 2015; 82 FR 31243, July 6, 2017; 83 FR 66571, Dec. 27, 2018; 84 FR 56677, Oct. 23, 2019; 87 FR 10938, Feb. 28, 2022; 87 FR 16375, Mar. 23, 2022; 87 FR 68027, Nov. 14, 2022]

§ 205.602 Nonsynthetic substances prohibited for use in organic crop production.

The following nonsynthetic substances may not be used in organic crop production:

(a) Ash from manure burning.

(b) Arsenic.

(c) Calcium chloride, brine process is natural and prohibited for use except as a foliar spray to treat a physiological disorder associated with calcium uptake.

(d) Lead salts.

(e) Potassium chloride—unless derived from a mined source and applied in a manner that minimizes chloride accumulation in the soil.

(f) Rotenone (CAS # 83–79–4).

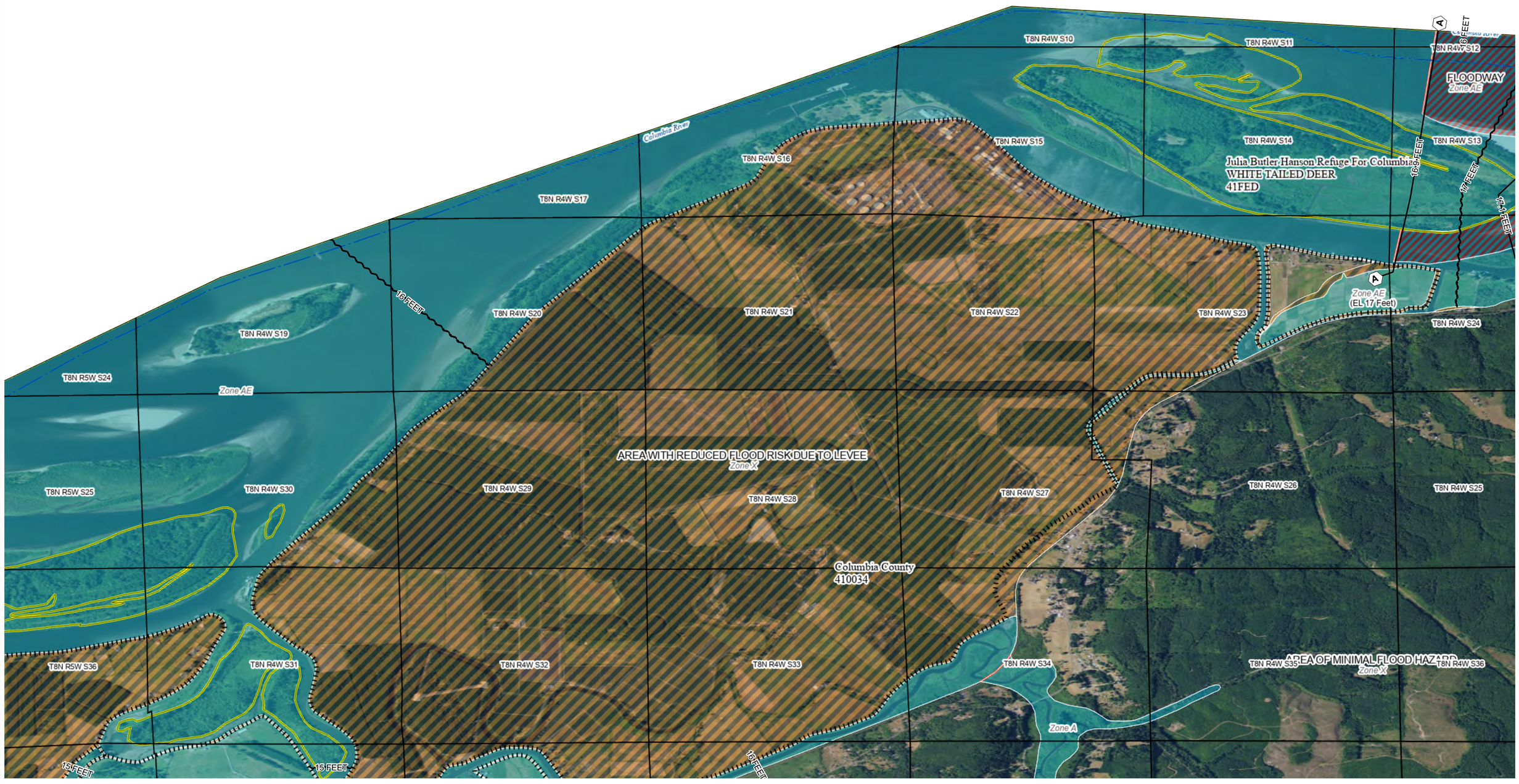
(g) Sodium fluoaluminate (mined).

(h) Sodium nitrate—unless use is restricted to no more than 20% of the crop's total nitrogen requirement; use in spirulina production is unrestricted until October 21, 2005.

(i) Strychnine.

(j) Tobacco dust (nicotine sulfate).

123°15'1.76"W 46°13'36.47"N



123°7'28.34"W 46°5'13.76"N

FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR DRAFT FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at https://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates, refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM was provided in digital format by USDA, Farm Service Agency (FSA). This information was derived from NAIP, dated April 11, 2018.

This map was exported from FEMA's National Flood Hazard Layer (NFHL) on **2/7/2024 2:08 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time. For additional information, please see the Flood Hazard Mapping Updates Overview Fact Sheet at https://www.fema.gov/media-library/assets/documents/118418

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards. This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date.

ATTENTION: The levee, dike, or other structure that impacts flood hazards inside this boundary has not been shown to comply with Section 65.10 of the NFIP Regulations. As such, this FIRM panel will be revised at a later date to update the flood hazard information associated with this structure. The flood hazard data inside this boundary on the FIRM panel has been republished from the previous effective (historic) FIRM for this area, after being converted from NGVD 29 to NAVD 88.

SCALE

Map Projection:
GCS, Geodetic Reference System 1980;
Vertical Datum: NAVD88

For information about the specific vertical datum for elevation features, datum conversions, or vertical monuments used to create this map, please see the Flood Insurance Study (FIS) Report for your community at https://msc.fema.gov

N

1 inch = 2,000 feet 1:24,000

0 1,000 2,000 4,000 6,000 8,000 Feet

0 210 420 840 1,260 1,680 Meters

National Flood Insurance Program

FEMA

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

PANEL **50** OF **510**

COMMUNITY	NUMBER	PANEL
JULIA BUTLER HANSON REFUGE FOR COLUMBIAN WHITE-TAILED DEER	41FED	0050
COLUMBIA COUNTY	410034	0050
COWLITZ COUNTY	530032	0050

MAP NUMBER
41009C0050D
EFFECTIVE DATE
November 26, 20