Registering Seaweed-Derived Agricultural Inputs in the United States

50-State Strategy Guide · Current as of October 8, 2026

Prepared by Kuhn Sustainability Solutions LLC for Southeast Conference and the Alaska Mariculture Cluster under EDA Project 07-79-07901. An Alaska-based liquid kelp extract guaranteeing 0-0-1 serves as the worked example throughout.

Foreword. Each state was researched from its statutes, administrative codes, agency fee schedules and public forms. Agencies change fees and interpretations without notice, and several state agency websites lag their own statutes. Figures are current as of the date above; confirm with the agency before filing. This document is regulatory guidance, not legal advice.

Contents

Executive Summary 1
Regulatory Context 2
Federal Framework 3
Category Determination 4
Registration Classes 4
Labeling and Claims 7
Registration Costs and Administrative Requirements 8
State-by-State Recommendations 11
Appendix A: State at a Glance 15
Appendix B: Method and Sources 17

Executive Summary

A liquid seaweed extract guaranteeing 0-0-1 (1% soluble potash) registers as a fertilizer in 44 states, under another class in four (beneficial substance in California and Nebraska; soil or plant amendment in Arkansas and Mississippi), and requires no state registration in Alaska or Hawaii. Registering one product in all 50 states costs approximately $5,600 to $8,800 in direct state fees in the first year, excluding staff time, consulting and legal review. The principal difficulty is classification rather than cost: states draw the line between fertilizer, soil amendment and beneficial substance differently, and a label accepted in one state may be rejected in another.

Principal findings:

1. **Fertilizer is the primary registration route.** A low-analysis potash guarantee is accepted as a fertilizer in 44 states. No efficacy data is required, and claims remain nutritional.

2. **Nutrient minimums apply in four states.** Nebraska (20% $N+P_2O_5+K_2O$ for farm fertilizer), Arkansas (20% floor) and Mississippi (3% to guarantee potash) do not accept a 0-0-1 as fertilizer and register it under another class. Wisconsin's 1.0% K_2O minimum is met exactly and requires a $25 low-analysis permit. All other states accept the guarantee.
3. **Two states provide a beneficial substance category.** California and Nebraska register seaweed extract as a beneficial substance, the category that includes plant biostimulants, with no nutrient guarantee. Seaweed and kelp extract are named examples in the AAPFCO model definitions on which these laws are based.
4. **Label claims, not ingredients, determine federal treatment.** EPA's 2020 draft guidance states that seaweed extracts have documented plant regulator activity. A label claiming root stimulation or growth regulation brings the product under FIFRA as a pesticide. Nutrient and abiotic-stress claims do not.
5. **Two labels cover all 50 states.** A nutrient-only 0-0-1 fertilizer label is accepted in the 44 fertilizer states. A label with no nutrient guarantee covers the four beneficial substance and amendment states.

Regulatory Context

Seaweed-derived inputs do not fit readily within the categories of state fertilizer law. Most state laws derive from the AAPFCO Uniform State Fertilizer Bill, which was written for products sold on their nitrogen, phosphate and potash content. The agronomic value of a kelp extract lies largely outside those nutrients. Four features of the regulatory framework follow from this.

- **Low nutrient content.** A typical liquid kelp extract guarantees approximately 1% soluble potash. Three states set minimum nutrient totals for fertilizer (Nebraska 20% $N+P_2O_5+K_2O$ for farm use, Arkansas 20 units) or per guaranteed nutrient (Mississippi 3% K_2O). A product below these minimums registers under another class in those states.
- **Beneficial substance categories.** Most of the agronomic value of a seaweed product derives from non-nutrient constituents: alginates, laminarin, mannitol, betaines and trace plant hormones. AAPFCO adopted model definitions for beneficial substances and plant biostimulants in 2024. Approximately a dozen states have adopted some version, each with different registration and labeling requirements.
- **The FIFRA boundary.** Seaweed extracts can affect plant growth. EPA treats growth-regulation claims as pesticide claims, so the same product is a fertilizer or a pesticide depending on its label.
- **Administrative volume.** Each state sets its own fees, renewal dates, package-size thresholds, tonnage reports and label wording. A company selling one product in three package sizes in 40 states holds more than 100 registrations or listings and files periodic tonnage reports in most of those states, some monthly or quarterly, often in periods with no sales.

Federal Framework

No federal definition of plant biostimulant is in force, and pending federal legislation would not replace state registration. Federal rules determine which claims bring a seaweed product under FIFRA as a pesticide.

Federal element	Status (Oct 2026)	Implication for seaweed inputs
EPA plant regulator and biostimulant guidance	November 2020 draft; not finalized	States that seaweed extracts are "well documented to have plant regulator activity." Products remain outside FIFRA only with nutritional, soil-improvement or abiotic-stress claims.
EPA pesticide determination (PRIA code M009)	Available	$3,559 fee and approximately six months for a formal determination on a specific label.
Plant Biostimulant Act (farm bill)	House passed H.R. 7567 on April 30, 2026. Senate Agriculture Committee advanced its version 12–11 on September 16, 2026.	Would exclude biostimulants from the FIFRA plant regulator definition. Does not preempt state fertilizer registration.
AAPFCO model law	Beneficial substance and plant biostimulant definitions and the Uniform Beneficial Substances Bill official since February 2024. Seaweed and kelp extract recognized.	Establishes one label heading, "CONTAINS BENEFICIAL SUBSTANCE(S)." Adoption is state by state.
USDA National Organic Program	7 CFR 205.601 and 205.602	Alkali extraction is permitted only with potassium or sodium hydroxide. Arsenic is prohibited; kelp accumulates arsenic.
OMRI and state organic programs	Private listing plus state programs	California (OIM) and Washington operate separate organic input registrations in addition to fertilizer registration.

Claims that remain outside FIFRA:

- supplies potassium or other nutrients
- improves soil or nutrient conditions
- improves tolerance to drought, heat, cold or salt stress

Claims that bring the product under FIFRA:

- unqualified "stimulates root or shoot growth"
- "enhances plant growth" without a nutrient basis
- promotes cell division, flowering or fruit set, or regulates growth
- controls or suppresses disease or pests

Laminarin from *Laminaria digitata* illustrates the distinction. Sold with plant-defense claims, it is an EPA-registered fungicide (Vacciplant, EPA Reg. No. 83941-2, with additional registrations in November 2025 and February 2026). Kelp extracts with nutrient claims are sold as fertilizers.

Bulk and ingredient sales. Under the uniform fertilizer bill, registration follows the name on the label. A supplier selling bulk extract to a manufacturer that registers the finished product generally does not register separately. Oregon (a $50 bulk distributor license) and Indiana (which exempts only manufacturer-to-manufacturer transfers) are exceptions.

Category Determination

For a liquid extract, three questions determine the registration class in each state: what the label claims, whether the state registers fertilizer, and whether a 1% potash guarantee meets the state's nutrient minimum.

A 1% potash guarantee decides the route in most states

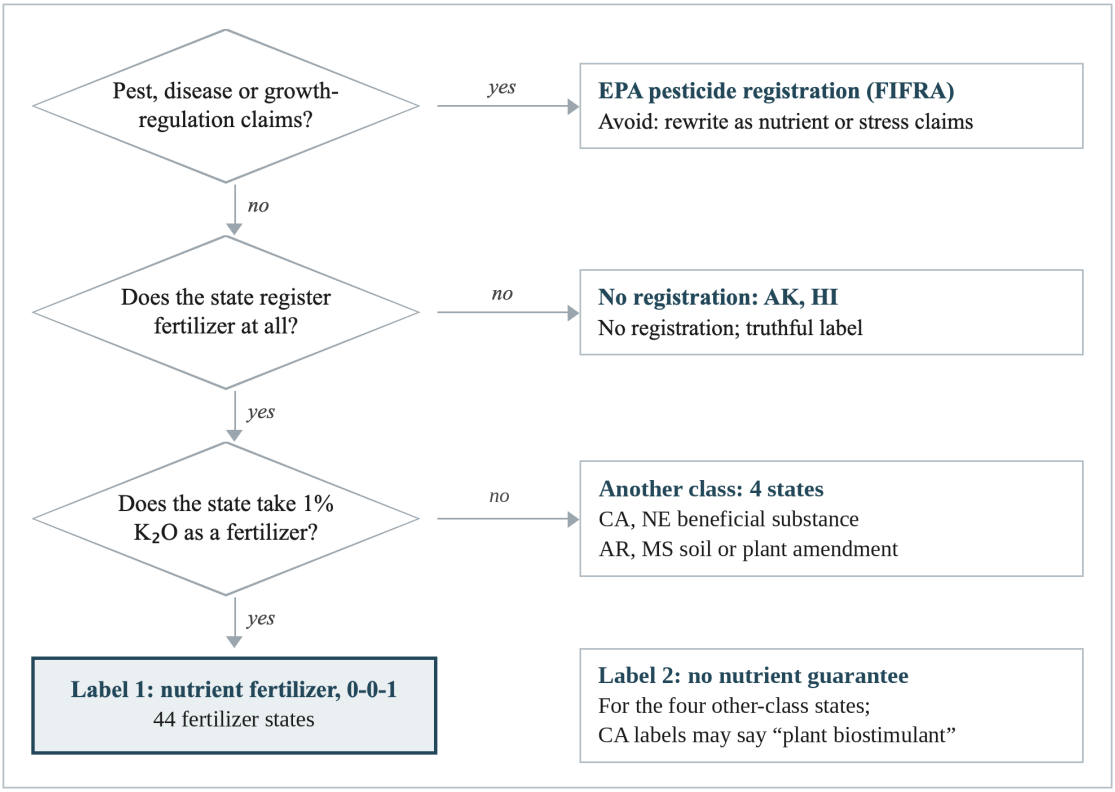


Figure 1. Category decision for a liquid seaweed extract guaranteeing at most 0-0-1.

Dry kelp meal or soluble powder follows the same sequence with two differences. Meal typically guarantees more potash and therefore meets more nutrient minimums. AAPFCO's model definitions name seaweed and kelp *extract* as beneficial substances, not meal, so the beneficial substance route is less certain for meal. Most states treat meal as a fertilizer material or a soil amendment.

Registration Classes

For a liquid extract guaranteeing no more than 0-0-1, the 50 states fall into five registration classes. The class is the legal category under which a product is filed; it determines the form, the

fee structure and the claims a label may carry. Costs are first-year direct state fees for one product at low volume, excluding optional laboratory work unless the state requires it.

Class	States	First-year cost, one product	Filing
Fertilizer, license only	AL, AZ, FL, GA, MA, MI, MO, NJ, NY, OH, PA, SC, SD, TN (14)	$35–$410	One company license; farm-channel product needs no product registration. Small or home-and-garden packages add a specialty fee.
Fertilizer, per-product registration	CO, CT, DE, ID, IL, IN, IA, KS, KY, LA, ME, MD, MN, MT, NV, NH, NM, NC, ND, OK, OR, RI, TX, UT, VT, VA, WA, WV, WI, WY (30)	$0–$850	Brand and grade registration with a 1% K_2O guarantee. Some add a license or tonnage minimum.
Beneficial substance	CA, NE (2)	$75–$1,900	Registration with no nutrient guarantee under the "CONTAINS BENEFICIAL SUBSTANCE(S)" heading.
Soil or plant amendment	AR, MS (2)	$25–$104	Amendment registration with no nutrient guarantee.
No registration required	AK, HI (2)	$0	An accurate label. In Hawaii, confirm plant quarantine clearance before shipping.

Heavy metals testing is a requirement applied within a class, not a class of its own. California and Washington each require their own heavy metals analysis. Every other state, including Oregon and Minnesota, accepts those results.

Fertilizer, License Only

These 14 states license the company named on the label rather than each product, at least for farm-channel fertilizer. New York licenses distributors for $150 every two years with no product fee. Tennessee, Missouri, Michigan, Florida (packages over 49 lb), Arizona, Massachusetts (farm sales) and Pennsylvania (farm use) operate on the same basis. Lawn, garden, nursery and turf sales, and small packages (10 lb or less in Georgia, 49 lb or less in Florida), generally require a per-product specialty registration in addition to the license. Tonnage reporting is the principal administrative obligation: Georgia requires quarterly reports regardless of sales, and Alabama requires monthly reports.

Fertilizer, Per-Product Registration

Thirty states register each brand and grade and accept a 1% K_2O guarantee. Fees are modest and the requirements are administrative.

- Lowest fees: Kentucky and Texas charge no registration fee (Texas requires a $100 prepaid inspection minimum), followed by Kansas ($5 per product), Delaware ($1.15 per product sold in bulk, $40 in packages of 10 lb or less) and Maryland ($15).
- Highest fees: Washington ($150 per product for a two-year cycle, plus a nine-metal analysis and a $50 bulk license for tote sales), Maine ($125) and Minnesota ($100

specialty registration; the California or Washington analysis satisfies its arsenic reporting requirement).

- Two states require a label adjustment: Wisconsin's minimum is exactly 1.0% K_2O, so a 0-0-1 requires a $25 low-analysis permit; West Virginia does not permit printed zero guarantees, so the label lists K_2O only.
- Recent changes not reflected on agency pages: New Mexico raised its fee from $5 to $50 on July 1, 2026 (SB 143); Idaho repealed tonnage fees in 2022; Vermont's statute sets $85, not the $20 per nutrient shown on its web pages.
- North Dakota, Utah and Vermont also register beneficial substances. In Vermont that route costs the same $85 and carries no tonnage fee.

Oregon and Nevada

Oregon and Nevada register a 0-0-1 kelp extract as a fertilizer on the same label. State-specific requirements:

- Oregon: $35 per product per year. Oregon accepts the California or Washington metals analysis, enforces limits of 54 ppm arsenic, 45 ppm cadmium and 258 ppm lead, and its program guide prohibits "stimulant" and "health" wording. Out-of-state bulk sellers require a $50 Manufacturer-Bulk Distributor license.
- Nevada: $80 per product through a single online portal, with quarterly tonnage reports. A 0-0-1 kelp extract is currently registered in Nevada as a fertilizer.

Beneficial Substance

California and Nebraska register a seaweed extract as a beneficial substance with no nutrient guarantee. In both states, plant biostimulants fall within the beneficial substance category: the registration is for a beneficial substance, and "plant biostimulant" is label wording permitted where the state allows it.

- California permits the broadest claims of any state, and two routes are available to a 0-0-1 extract at the same $200 label fee. As a Packaged Agricultural Mineral (under 5% $N+P_2O_5+K_2O$), the product registers on its potash guarantee, and the label is limited to nutrient claims with, at most, an "also contains beneficial substance(s)" statement. As a beneficial substance, the product carries no nutrient guarantee and may use the phrase "plant biostimulant," which California currently permits only for seaweed extract, kelp extract and humic acid (FAC 14555.5, under the rule effective November 14, 2025, with a new label format phasing in through 2028). The beneficial substance route is recommended because it permits the claims associated with the non-nutrient constituents of seaweed products. If the label will make nutrient claims only, the agricultural mineral route is available at the same cost.
- Under either route, the base first-year cost is $800 to $900: a $100 license (two years), $200 per label for a four-year cycle, and a nine-metal analysis at approximately $500 to $600. A mill assessment of approximately 0.25% of California sales is paid quarterly. Labels claiming suitability for organic production also require Organic Input Material (OIM) registration, an optional $1,000 per label.

- Nebraska registers a 0-0-1 kelp extract as a beneficial substance. LB 948 renamed the statute the Commercial Fertilizer and Beneficial Substances Act and placed plant biostimulants within that definition. From January 1, 2027, every beneficial substance must be registered with the Nebraska Department of Agriculture before sale. The registrant requires a firm license ($25) and pays $50 per product, filed with a copy of the label. Fertilizer registration is not available for a 0-0-1 because Nebraska farm fertilizer must total at least 20% $N+P_2O_5+K_2O$ (§81-2,162.08).

Soil or Plant Amendment

Nutrient minimums exclude a 0-0-1 from fertilizer registration in these two states; each provides an amendment category.

- Arkansas: a 0-0-1 is below the 20-unit minimum (§2-19-202(d)). A soil amendment registers at $25 per product plus $0.375 per ton, approximately one-sixth of the fertilizer tonnage rate.
- Mississippi: Rule 102.02 requires 3% to guarantee potash. A plant amendment registers at $25 ($75 for packages of 1 gal or less); the category now includes beneficial substances and plant biostimulants (SB 2025).

No Registration Required

Alaska's Division of Agriculture states that it has no registration requirements for fertilizer, plant food or soil amendments. No fertilizer registration requirement was identified in Hawaii; its Department of Agriculture regulates only fertilizers containing pesticides or live microorganisms. Kelp products shipped to Hawaii are subject to port-of-entry inspection, and whether dried meal or extract requires a plant quarantine permit is unconfirmed. Labels in both states must be accurate and must not make pesticide claims.

Labeling and Claims

Two core labels, with a small set of state-specific statements, cover all 50 states. Each additional label variant requires a separate registration, renewal and tonnage report in every state where it is sold.

Label	Content	Where it applies
1. Nutrient fertilizer label	Guaranteed analysis: Soluble Potash (K_2O) 1.0%, derived from seaweed (*Macrocystis pyrifera*) extract. AAPFCO metals statement. Nutrient and use-direction claims only. No trace-mineral list, no "stimulant" words.	All 44 fertilizer states
2. Beneficial substance or amendment label	No nutrient guarantee. "CONTAINS BENEFICIAL SUBSTANCE(S): Seaweed extract (*Macrocystis pyrifera*) __%" where adopted, or the state's amendment or conditioner statement. Plant biostimulant claims where allowed, backed by data.	The beneficial substance class (California, where the label may say "plant biostimulant," and Nebraska) and the amendment class (Arkansas, Mississippi)

State-specific statements, added to a core label rather than as separate labels:

- **West Virginia:** list K_2O only; zero guarantees may not be printed.
- **Washington:** organic sales require the WSDA organic registration mark in addition to OMRI listing.
- **Oregon:** "stimulant," "health" and "balanced" are not permitted on the label or in marketing.
- **Massachusetts, Kentucky, Colorado, Montana, Virginia, South Dakota:** a beneficial substance guarantee requires the director's or commissioner's approval.

Claims

Claim	Fertilizer label (1)	Beneficial substance label (2)	Risk
Supplies soluble potash	Yes	No (no nutrient guarantee)	None
Derived from Alaskan giant kelp, cold-processed	Yes	Yes	None if accurate
Improves tolerance to drought, heat or salt stress	No in most states	Yes where adopted; data may be required	Low under EPA draft guidance
Improves nutrient uptake or use efficiency	No	Yes where adopted	Low
"Plant biostimulant"	No	California: only seaweed, kelp or humic extract, exact phrase	Low where adopted; prohibited wording in Oregon
Stimulates root or shoot growth	No	Only tied to nutrient or soil conditions	High: EPA treats unqualified versions as plant regulator claims
Regulates growth, flowering, fruit set or cell division	No	No	High: pesticide claim
Suppresses disease or pests	No	No	Pesticide registration required
"Contains 60+ trace minerals"	No	No	Each mineral named must be guaranteed at state minimums in WA, KS, OH, KY and others

Three practices reduce label rejections: guarantee only what laboratory results support, keep marketing copy within the scope of the label, and use one ingredient statement in all materials.

Registration Costs and Administrative Requirements

Registering one product in every state costs approximately $5,600 in direct state fees in the first year at low volume, and approximately $8,800 with home-and-garden package sizes and organic listings. These figures cover direct state fees for one product and one label; staff time, consulting, legal review and product changes are excluded. California and Washington account for more than one quarter of the low estimate because each requires its own heavy metals analysis.

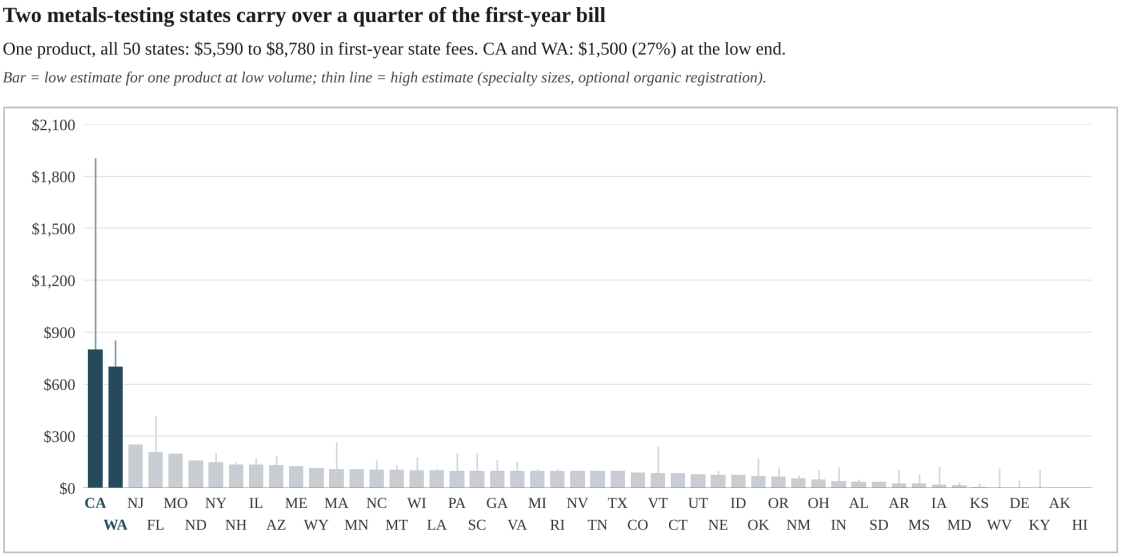


Figure 2. First-year direct state fees for one product. Source: KSS 50-state dataset, October 2026.

Administrative requirements, rather than fees, represent the larger cost, and they increase with each label and package size:

- **Renewal dates.** Registrations renew on approximately a dozen different schedules: June 30, December 31, January 31, July 1, September 30, biennial cycles in even or odd years, and permanent registrations.
- **Tonnage reports.** Reports are due monthly, quarterly, semiannually or annually, in many states regardless of sales; late penalties range from 10% to 50%.
- **Package size.** Package size can change the category. A quart container is a specialty fertilizer in Georgia (10 lb or less), Florida (49 lb or less), Indiana (12 lb or less) and Mississippi (1 gal or less), each with a separate fee.
- **Agency pages.** In New Mexico, Vermont, Idaho, Nebraska and Massachusetts the fee on the agency page differs from the statute or a recent amendment.

A company selling one product in three sizes nationally should plan for more than 100 registrations or listings and several hundred report filings per year.

Observations and Recommendations

Observations for regulators. Four differences among state rules account for most of the added cost and administrative burden for seaweed inputs:

- Adoption of the AAPFCO beneficial substance and plant biostimulant definitions, with the single "CONTAINS BENEFICIAL SUBSTANCE(S)" heading, varies by state.
- Total-nutrient minimums written for mixed fertilizer apply in some states to single-nutrient materials; Iowa exempts foliar and specialty products.

- Heavy metals analyses are accepted across states except in California and Washington, which each require their own.
- Tonnage reports are required in many states for periods with no sales.

Recommendations for industry.

- Maintain two core labels rather than state-specific variants.
- Keep the California and Washington heavy metals analyses current; every other state accepts them.
- Maintain a single calendar of all renewal and reporting dates.

State-by-State Recommendations

The recommended registration class for each state, for a liquid seaweed extract guaranteeing no more than 0-0-1; whether filing is digital (online) or analog (mail); the form to file or, where the state publishes none, the agency page describing registration; and the renewal date. Confirm with the agency before filing.

State	Registration classification	Why	Format / Form & website	Renewal date
Alabama	Fertilizer, license only	No per-product fee; license tiered by tonnage, $37.50 under 100 t, plus $0.75/t.	**Digital** License form (agi.alabama.gov)	September 30
Alaska	No registration required	Division of Agriculture has no registration for fertilizer, plant food or soil amendments.	**None** Program info (dnr.alaska.gov)	None
Arizona	Fertilizer, license only	$125 license covers farm sales; specialty registration adds $50 for non-farm.	**Analog** Program info (agriculture.az.gov)	June 30
Arkansas	Soil or plant amendment	0-0-1 is below the 20-unit fertilizer minimum; amendment is $25 plus $0.375/t.	**Analog** Form 1081 (agriculture.arkansas.gov)	June 30
California	Beneficial substance	Only state allowing "plant biostimulant" on kelp labels; $200 label and metals analysis; OIM only for organic labels.	**Digital** Form 513-023 (cdfa.ca.gov)	December 31 (license, every 2 years); label every 4 years
Colorado	Fertilizer, per-product registration	$40 per product plus $50 minimum; beneficial substance heading by permission.	**Digital** Program info (ag.colorado.gov)	January 31
Connecticut	Fertilizer, per-product registration	$75 per brand and grade plus $10 minimum; no license.	**Analog** Registration info (portal.ct.gov)	June 30
Delaware	Fertilizer, per-product registration	$1.15 per grade bulk, $40 for 10 lb or less; soil conditioner covers biostimulants.	**Digital** Applications (agriculture.delaware.gov)	December 31
Florida	Fertilizer, license only	$200 license, no product registration over 49 lb; specialty $200 for smaller packs.	**Digital** Form 13222 (fdacs.gov)	June 30
Georgia	Fertilizer, license only	$100 license for farm sales; $60 specialty registration for 10 lb or less.	**Digital** Online application (kellysolutions.com, for GDA)	June 30
Hawaii	No registration required	No fertilizer registration found; confirm plant quarantine clearance before shipping.	**None** HDOA FAQ (dab.hawaii.gov)	None
Idaho	Fertilizer, per-product registration	$75 per product; tonnage fees and reports repealed in 2022.	**Digital** Program info (agri.idaho.gov)	December 31

State	Registration classification	Why	Format / Form & website	Renewal date
Illinois	Fertilizer, per-product registration	$100 license plus $20 per grade.	**Analog** Registration form (agr.illinois.gov)	December 31
Indiana	Fertilizer, per-product registration	$20 per grade on Form B-10, $50 for 12 lb or less; whole-number grades.	**Analog** Form B-10 (oisc.purdue.edu)	June 30
Iowa	Fertilizer, per-product registration	Register with a foliar or non-farm label; $20 license, $100 for 25 lb or less.	**Digital** Registration guide (iowaagriculture.gov)	July 1, even years (license); product registration is permanent
Kansas	Fertilizer, per-product registration	$5 per product plus $1.67/t; no license for registrants.	**Digital** Forms (agriculture.ks.gov)	June 30
Kentucky	Fertilizer, per-product registration	Form 1 with no registration fee; $0.50/t with quarterly reports.	**Digital** Forms (rs.uky.edu)	December 31
Louisiana	Fertilizer, per-product registration	$100 small-package route; quarterly tonnage reports.	**Digital** Program info (ldaf.la.gov)	December 31
Maine	Fertilizer, per-product registration	$125 per product, no tonnage fee; plant amendment at $25 is the alternative.	**Analog** Program info (maine.gov/dacf)	December 31
Maryland	Fertilizer, per-product registration	$15 bulk, $30 for 10 lb or less; registrations expire January 31.	**Analog** Form FertReg-2 (mda.maryland.gov)	January 31
Massachusetts	Fertilizer, license only	$250 ag license or $100 specialty registration at current agency rates.	**Digital** Registration info (mass.gov)	December 31
Michigan	Fertilizer, license only	$100 license; agricultural fertilizer needs no product registration.	**Analog** Requirements (michigan.gov/mdard)	December 31
Minnesota	Fertilizer, per-product registration	Specialty fertilizer at $100 per grade; the CA or WA metals analysis covers the arsenic report.	**Analog** Arsenic rules (mda.state.mn.us)	December 31
Mississippi	Soil or plant amendment	Fertilizer needs 3% to guarantee potash; amendment is $25 and covers biostimulants.	**Digital** Program info (mdac.ms.gov)	June 30
Missouri	Fertilizer, license only	$100 permit, no product registration; 60¢/t with a $50 minimum per period.	**Analog** Program info (mofcb.com)	June 30
Montana	Fertilizer, per-product registration	$75 license plus $30 per product; $1/t; renews every December 31.	**Digital** Registration form (agr.mt.gov)	December 31
Nebraska	Beneficial substance	20% N+P+K floor blocks farm fertilizer; LB 948 route is $50 per product.	**Digital** Program info (nda.nebraska.gov)	December 31
Nevada	Fertilizer, per-product registration	$80 per product online; quarterly tonnage reports.	**Digital** Online portal (agri.nv.gov)	December 31

State	Registration classification	Why	Format / Form & website	Renewal date
New Hampshire	Fertilizer, per-product registration	$128 per grade plus a $9 inspection minimum.	**Analog** Product registration (agriculture.nh.gov)	December 31
New Jersey	Fertilizer, license only	$250 firm license with no product fee; no biostimulant category.	**Analog** License form (nj.gov)	June 30
New Mexico	Fertilizer, per-product registration	$50 per product since July 2026 (SB 143); agency pages still show $5.	**Analog** Registration form (nmdeptag.nmsu.edu)	December 31
New York	Fertilizer, license only	$150 two-year license lists every product; $50 annual tonnage minimum.	**Analog** Program info (agriculture.ny.gov)	December 31, even years
North Carolina	Fertilizer, per-product registration	$100 license plus $5 per grade at the whole-number grade 0-0-1; soil additive ($100) only with no nutrient claims.	**Analog** Registration package (ncagr.gov)	June 30
North Dakota	Fertilizer, per-product registration	$100 license plus $50 per product; new biostimulant chapter at the same fees.	**Digital** Guidelines (ndda.nd.gov)	June 30, even years
Ohio	Fertilizer, license only	$50 license for farm sales; $50 specialty registration for non-farm.	**Analog** License form (agri.ohio.gov)	November 30
Oklahoma	Fertilizer, per-product registration	$50 license; permanent registration over 30 lb; $100 specialty under 30 lb.	**Digital** Registration form (ag.ok.gov)	December 31 (license); registration is permanent
Oregon	Fertilizer, per-product registration	$35 per product; accepts the CA or WA metals analysis; no "stimulant" wording.	**Analog** Form MPR (oregon.gov/oda)	December 31
Pennsylvania	Fertilizer, license only	$50 license for farm sales; plant amendment at $25 allows growth claims.	**Digital** License form (pa.gov)	June 30
Rhode Island	Fertilizer, per-product registration	$100 per grade, no license; expires December 31.	**Digital** Portal guide (dem.ri.gov)	December 31
South Carolina	Fertilizer, license only	$100 license plus $1.50/t; $30 specialty registration.	**Digital** Program info (clemson.edu)	June 30
South Dakota	Fertilizer, license only	$25 license with no product registration; $0.90/t.	**Digital** Program info (danr.sd.gov)	December 31, every 2 years
Tennessee	Fertilizer, license only	$100 minimum license, no product registration; keep claims nutritional.	**Analog** Forms (tn.gov/agriculture)	July 1 (annual license statement)
Texas	Fertilizer, per-product registration	Permanent no-fee registration; $100 prepaid inspection minimum.	**Digital** Forms (otsc.tamu.edu)	None; registration is permanent
Utah	Fertilizer, per-product registration	$60 per product; the 2025 Plant Food Act also registers biostimulants.	**Digital** Registration form (ag.utah.gov)	December 31

State	Registration classification	Why	Format / Form & website	Renewal date
Vermont	Fertilizer, per-product registration	$85 per product either way; the beneficial substance route skips the $150 tonnage minimum.	**Analog** Program info (agriculture.vermont.gov)	December 31
Virginia	Fertilizer, per-product registration	Specialty fertilizer at $50 license plus $50 per grade.	**Analog** Registration info (vdacs.virginia.gov)	June 30
Washington	Fertilizer, per-product registration	$150 for two years; metals analysis; $50 bulk license for tote sales.	**Digital** Registration info (agr.wa.gov)	June 30, every 2 years
West Virginia	Fertilizer, per-product registration	$4 per grade; zero guarantees may not print, so list K_2O alone.	**Analog** Registration form (agriculture.wv.gov)	June 30
Wisconsin	Fertilizer, per-product registration	1% K_2O meets the floor exactly, so a $25 low-analysis permit applies; soil additive route is $125.	**Analog** License instructions (datcp.wi.gov)	September 30
Wyoming	Fertilizer, per-product registration	$115 per product; no license or tonnage fee.	**Digital** Registration form (agriculture.wy.gov)	December 31

Appendix A: State at a Glance

First-year direct state fees for one liquid product guaranteeing 0-0-1, at low volume. Ranges cover home-and-garden package sizes and optional registrations such as organic listings. California and Washington include their required heavy metals analysis (approximately $500 to $600 each). Full state profiles, with statute citations, contacts, forms and source quotations, are in the companion dataset.

State	0-0-1 as fertilizer	First-year cost	Basis
Alabama	Yes	$38–$45	$37.50 license (<100 t) + $0.75/t
Alaska	Yes	$0	No state registration (Division of Agriculture)
Arizona	Yes	$133–$183	$125 license + $8 min tonnage; +$50 specialty
Arkansas	No: soil amendment	$25–$104	Below 20-unit min: soil amendment $25 + $0.375/t
California	Yes	$800–$1,900	$100 license + $200 label + ~$500–600 metals; optional OIM +$1,000; 0.25% of sales
Colorado	Yes	$90	$40 reg + $50 minimum
Connecticut	Yes	$85	$75 reg + $10 minimum
Delaware	Yes	$1–$40	$1.15 per product in bulk; $40 for 10 lb or less
Florida	Yes	$210–$410	$200 license + $1/t; +$200 specialty if 49 lb or less
Georgia	Yes	$100–$160	$100 license; +$60 specialty if 10 lb or less
Hawaii	Quarantine check	$0	No fertilizer registration found; confirm plant quarantine clearance before shipping
Idaho	Yes	$75	$75 reg; tonnage fees repealed 2022
Illinois	Yes	$135–$170	$100 license + $20 grade + $15 min
Indiana	Yes	$40–$115	$20 reg + $10 min x2; +$45 distributor; $50 for 12 lb or less
Iowa	Yes	$20–$120	Foliar or non-farm label; $20 license, $100 for 25 lb or less
Kansas	Yes	$5–$22	$5 reg + $1.67/t
Kentucky	Yes	$0–$100	Farm Form 1 $0 + $0.50/t; specialty 10 lb or less $100
Louisiana	Yes	$103–$110	$100 small-package route
Maine	Yes	$125	$125 reg; no tonnage fee
Maryland	Yes	$15–$30	$15 bulk / $30 for 10 lb or less + $0.25/t
Massachusetts	Yes	$110–$260	$100 specialty reg or $250 ag license (agency rates)
Michigan	Yes	$100–$105	$100 license; no product reg for ag fertilizer
Minnesota	Yes	$110	$100 specialty reg + $10 min; CA/WA analysis covers arsenic report
Mississippi	No: plant amendment	$25–$75	3% K_2O guarantee floor; plant amendment $25 (+$50 for 1 gal or less)
Missouri	Yes	$200	$100 permit + $50 minimum x2 periods
Montana	Yes	$105–$130	$75 license + $30 reg + $1/t
Nebraska	No: beneficial substance	$75–$95	20% N+P+K floor (farm); beneficial substance $50 + $25 license

State	0-0-1 as fertilizer	First-year cost	Basis
Nevada	Yes	$100	$80 reg + $5/quarter minimum
New Hampshire	Yes	$137–$146	$128 grade + $9 min
New Jersey	Yes	$250	$250 firm license, no product fee
New Mexico	Yes	$55–$70	$50 reg (SB 143, 2026) + $5 min/quarter
New York	Yes	$150–$200	$150 two-year license + $50 tonnage minimum
North Carolina	Yes	$105–$155	$100 license + $5 reg; whole-number 0-0-1
North Dakota	Yes	$160	$100 license + $50 reg + $10 min
Ohio	Yes	$50–$100	$50 license; +$50 specialty
Oklahoma	Yes	$70–$170	$50 license + $10 min x2; +$100 specialty under 30 lb
Oregon	Yes	$65–$115	$35 reg + $15 min x2; +$50 bulk license; uses CA/WA metals analysis
Pennsylvania	Yes	$100–$200	$50 license + $25 minimum x2; specialty $100
Rhode Island	Yes	$100–$105	$100 reg + up to 5% processing
South Carolina	Yes	$100–$200	$100 license + $1.50/t; specialty $30
South Dakota	Yes	$35	$25 license + $10 minimum
Tennessee	Yes	$100	$100 minimum license, no product reg
Texas	Yes	$100	Permit + no-fee registration; $100 prepaid inspection minimum
Utah	Yes	$80	$60 reg + $20 min tonnage
Vermont	Yes	$85–$235	$85 beneficial substance (no tonnage) or $85 + $150 min as fertilizer
Virginia	Yes	$100–$150	$50 license + $50 specialty
Washington	Yes	$700–$850	$150 reg (2-yr) + $50 min inspection + ~$500–600 metals; +$50 bulk license
West Virginia	Yes, K_2O only	$4–$110	$4 reg; zero guarantees can't print; permit fee set by rule
Wisconsin	Yes, with permit	$104–$175	1% K_2O floor + $25 low-analysis permit; additive $25 + $100
Wyoming	Yes	$115	$115 reg; no license or tonnage fee

Appendix B: Method and Sources

- **Sources.** Each state was researched from primary sources: state statutes, administrative codes, agency fee schedules, registration forms and program pages. Secondary sources were used principally to locate primary ones; a fact resting on a secondary source alone is rated low confidence in the dataset.
- **Verification.**
    - Nineteen states received two independent research passes, reconciled field by field. Agreement between the passes ranged from 75% to 93%.
    - The remaining 31 states received one research pass and a targeted re-verification of the eight facts that determine the registration class.
    - A separate fact-check re-confirmed 176 of 238 sampled facts against primary text and corrected the remainder.
- **Firsthand experience.** The example product's existing registrations served as a reference check where available.
- **Known limits.**
    - Several agency websites were unreachable or out of date. Where an agency page and the statute disagree, both values are recorded in the dataset.
    - Agency contact names change frequently.
    - The federal Plant Biostimulant Act is pending in the Senate; its status should be re-checked before publication.

The full dataset holds every state's record with source URLs and verbatim quotations. It is maintained with the KSS project files and is available from Kuhn Sustainability Solutions on request.