



Whole Shellfish Farm Evaluation Tool

To be used in conjunction with the relevant Food Alliance shellfish inspection tool.

Operation Name:	
Address:	
Evaluation Date:	
Evaluator/Inspector:	

To become Food Alliance Certified and market shellfish products with Food Alliance’s certification seal, an operation must:

1. Comply with all fixed criteria for Food Alliance Certified shellfish
2. Score an average of 3.0 out of 4 overall in each of the six scored criteria areas.

Fixed Criteria for Food Alliance Certified shellfish

1. No genetically modified organism (GMO) breeds are used and no cloned animals are used. (Triplod animals are not considered GMO, as no genes are introduced.)
2. No prohibited pesticides are used.
3. No growth-promoting hormones or other growth promotants are used.
4. No antibiotics are used.
5. Shellfish intended for further grow-out, hardening or relay may be moved from one farm to another if both operations are Food Alliance certified.

Scored Criteria

1. Fish and Wildlife Habitat Conservation

Continuing Education for Fish and Wildlife
 Habitat Conservation
 Habitat Conservation Improvements
 Invasive Species Management
 Nuisance Species Management
 Threatened and Endangered Species
 Management

Genetic Integrity of Native Shellfish
 Fish and Wildlife Food, Cover, Habitat Structure
 and Water
 Linking Together Individual Wildlife Habitat
 Conservation Activities

2. Healthy and Humane Care for Shellstock

Planting and Production Plan
 Carrying Capacity Management
 Disease Prevention and Management

Transportation (Nursery and Growout)
 Hazard Reduction and Sanitation (Growout)

3. Shared Resource Management

User Relations
 Farm-site Boundaries
 Marine Operations and Navigation

Farm Equipment Maintenance and Material
 Reduction

4. Soil and Water Conservation

Continuing Education for Soil and Water
 Resource Conservation

Buffer Strips/Sensitive Habitats
 Upland/Near-Shore Resource Management

5. Integrated Pest, Disease and Weed Management, and Pesticide Risk Reduction

Continuing Education for Reducing
Pesticide/Herbicide Usage (Upland and
Aquatic)
IPM Planning (Upland)
Site Monitoring/Field Scouting (Upland)
Weather Monitoring
Lowest Effective Application
Rates/Reducing Application Rates
(Upland)

Pesticide Selection and Justification
Pesticide Record Keeping
Calibration of Application Equipment and
Pesticide Drift
Hazardous Material Storage (Upland)
Food Alliance Prohibited Pesticide List

6. Safe and Fair Working Conditions

Minors, Children and Family Members in
the Workplace
Grievance Procedures and Policies
Recognizing and Supporting Employee
Input for Workplace Improvement
Farm Worker Support Services
Discipline Process
Nondiscrimination Policy
Hiring Practices and Communication of
Expectations and Policies

Work Force Development and New Skills Training
Compensation Practices
Employee Benefits
Worker Housing and Family Support Services
Pesticide Handler/Applicator Safety
Hazardous Materials Emergency Management
Sanitation
General Safety

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Instructions for Use

1. Production practices are evaluated according to Food Alliance criteria (listed on the next page of this document) and then ranked in a 4-step process from Level 1 to Level 4. Points are only earned for the highest level achieved.
2. Scoring partial points is allowed. Example: Half of a farm operation has its sensitive habitats plotted yearly using detailed maps that are accompanied with site photography and qualitative sampling, a Level 4 practice. You may score 3.5 points or half the increase between Level 3 and Level 4 as a result.
3. No points are earned for a criterion that is not applicable (N/A) to the operation or region.
4. For producers/managers reviewing this evaluation tool: The scorecard at the end of this document identifies the minimum number of points required for consideration of certification. This is only a guideline for your use and does not guarantee acceptance of your application.
5. Inspectors should make notes on each criterion describing how they arrived at decisions, including means used to verify all specific producer/manager claims. These notes will provide important background that will be carefully considered in the final certification decision. A section for notes is also included at the end of this document. Please make note of any criterion that were deemed not applicable and the reason for that decision. Also include any effective management practices implemented by the producer/manager that are not listed in this inspection tool.

Note: Recordkeeping is an important facet of Food Alliance certification. Individual recordkeeping needs to work for an operator and their situation. Inspectors must feel confident that the method in which a producer/manager keeps records is adequate for Food Alliance certification. Food Alliance requires producers/managers to commit to specific improvement goals based on the site inspector's scores of the certification standards.

Fixed Criteria

No GMO breeds or cloned animals used

Check the following as applicable:

- There are no GMO breeds or cloned animals produced on the farm.
- GMO breeds and/or cloned animals are produced on the farm, but they are not produced or sold as a Food Alliance-Approved product.
- If GMO or cloned animals are produced on the farm, please list them here:

Check the verification method used:

- Records show the breeds produced. These are non-GMO or cloned varieties/breeds.
- There are currently no GMO and/or cloned varieties for the breeds produced.
- Producer/manager describes GMO and/or clone use (if any) and labeling/marketing during interview.
- Other (please specify):

Criteria met.

Criteria not met.

Comments:

No prohibited pesticides used

Check the following as applicable:

- Pesticide records indicate that none of the pesticides listed in the Reducing Pesticide Usage section are used on this operation.
- Other (please specify):

Check the verification method used:

- Visual inspection of hazardous material storage confirms no presence of prohibited pesticides.
- Other (please specify):

Criteria met.

Criteria not met.

Comments:

No growth-promoting hormones or other growth promotants used

Note: Hormones are not currently used in shellfish production.

Check the following as applicable:

- Growth-promoting hormones or other growth promotants are not used in shellfish production on the farm.
- Growth-promoting hormones or other growth promotants are used on the farm.

Check the verification method used:

- Veterinary and/or production records are complete and show no use of hormone implants or use of other growth promotants.
- Visual inspection of storage area/buildings and animals confirms no use of hormone implants.
- Other (please specify):

Criteria met.

Criteria not met.

Comments:

No antibiotics are used¹

Note: Antibiotics are not currently used in shellfish production. Probiotics are not considered antibiotics and their use is allowed.

Check the following as applicable:

- Antibiotics are not used in shellfish production on the farm.
- Antibiotics are used on the farm. If checked, please list antibiotics here and how they are administered:

Check the verification method used:

- Production records demonstrate no antibiotics used.
- Visual inspection of storage area/buildings confirms no feed additive (sub-therapeutic) antibiotics used.
- Producer/manager attests to production without antibiotics during interview.
- Other (please specify):

Criteria met.

Criteria not met.

Comments:

Moving Shellfish

Note: Shellfish intended for further grow out, hardening or relay may be moved from one farm to another if both operations are Food Alliance Certified.

Check the following as applicable:

- Shellfish are not moved between farms.
- Shellfish are moved between farms, and both farms are Food Alliance Certified.
- Shellfish are moved between farms and not all farms are Food Alliance Certified.

Check the verification method used:

- Production records indicate shellfish are moved between farms.
- Production records indicate shellfish are not moved between farms.
- Copies of letters of certification for all farms are on hand.
- Other (please specify):

Criteria met.

Criteria not met.

Comments:

Continual improvement

Check the improvement goals (for renewal applications only).

- Producer/manager has completely implemented improvement goals.
- Producer/manager demonstrates significant progress towards meeting goals.
- Producer/manager attempted to implement goal but concluded it was unattainable or impractical.
Producer/manager must provide supporting documentation for this conclusion.
- Producer/manager has made no significant progress towards meeting goals.
- Producer/manager has not attempted to meet goals.
- Other (please specify):

Criteria met

Criteria not met

Comments:

Scored Criteria

Fish and Wildlife Habitat Conservation

Continuing Education for Fish and Wildlife Habitat Conservation

Note: Wildlife habitat includes both terrestrial and aquatic areas. The intent of this section is to raise awareness with operators, looking at the farm owner as a land steward.

Level 1: Manager demonstrates little or no knowledge about fish and wildlife habitat or threatened/endangered species conservation. Current operation reflects this knowledge gap with no special planning or action considered to prevent activities from interfering with non-farmed aquatic species, wildlife, or natural areas (if present).

Level 2: Manager relies on general interest publications (newspapers and general newsletters, etc.) to learn about fish and wildlife and habitat issues. During the certification process, manager demonstrates a basic understanding of the issue area. Actions are limited to preventing farming activities from interfering with natural areas.

Level 3: Manager uses technical, subject matter-specific information sources or participates in seminars for habitat management, identification of habitat types or native vegetation, fish or wildlife management, etc. The manager can discuss fish and wildlife and habitat issues and communicates knowledge of: (At least 4 of the following apply.)

- General habitat management
- Native plants
- Native animals
- Invasive or exotic plants and animals
- Sensitive, priority habitat
- Endangered or at-risk species
- Migratory species
- SAV habitat
- Aquatic ecosystems
- Other (please specify):

Level 4: As per level 3 and a total of 5 options from Level 3 apply. Manager documents direct participation (or has participated in the last 5 years) in on-farm studies/testing of environmental interactions, and wildlife and aquatic habitat conservation strategies or concepts to evaluate their performance.

Score:

Verification methods and notes:

Habitat Conservation Improvements

Level 1: Upon inspection, the farm manager has made no apparent improvements related to fish and wildlife habitat or gives no special consideration to the natural areas under his/her control.

Level 2: Upon inspection, the farm has made at least one improvement on the uplands or aquatic lands. Check below as appropriate (i.e., small farms may not be able to invest in habitat or may not have

uplands). At least 1 of the following applies:

- Leaves standing deadwood as bird habitat.
- Established native vegetation along unused upland areas.
- Addressed terrestrial and aquatic habitat in a comprehensive farm plan.
- Uses native plants to landscape around buildings.
- Engages in practices that reduce or limit the impact of farm operations on native eelgrass.
- Engages in practices that reduce or limit sediment transport (e.g., For manila clams, low profile mechanical harvest limits impacts to first 8" of sediment).
- Limits disturbances to fish and wildlife breeding areas especially during reproductive periods.
- Other (please specify):

Level 3: As per Level 2, and a total of 2 options from Level 2 apply. In addition, at least one of the following apply (allowance given for investments on small farms less than 35 acres with no natural areas).

- Participates in set-aside programs similar to the Conservation Reserve Program (CRP) or other, and manages this area for habitat potential (e.g., Native oyster restoration).
- Participates in programs such as the Wildlife Habitat Incentives Program (WHIP) or Environmental Quality Incentives Program (EQIP) to conserve wildlife habitat.
- Has set aside and not converted priority habitat and manages to protect the habitat value of this area. This area accounts for at least 5% of their total uplands and or aquatic lands.
- Established a new natural area in the last 10 years.
- Increased habitat values of upland, tidelands and/or their interface for mobile species (e.g., salmon, surf smelt).
- Established habitat corridors between SAV areas (e.g., native eelgrass).
- Linked habitat conservation activities to other landowners, possibly as a part of a regional conservation plan.
- Other (please specify):

Level 4: As per Level 3, with a total of 4 items checked from Level 2, and a total of 2 or more checked from Level 3.

Score:

Verification methods and notes:

Invasive Species Management

Note: Naturalized and accepted species by federal and state/provincial governments (e.g., pacific oyster, manila clam, Japanese scallop) are not considered invasive for the purposes of this evaluation criteria.

Level 1: Manager can show they rely on state or federal regulations for movement controls of shellfish for invasive species prevention and control. Purchased seed only comes from nurseries or hatcheries that have all required state/provincial and federal certification records. Otherwise, manager neither prevents establishment of, nor systematically controls, invasive species, and is not informed about the issue. Check as applicable:

- Manager deals with crop production problems stemming from invasive species as they are encountered and/or as time permits.
- State/provincial and/or federal transfer permits are obtained where applicable.
- Manager has no invasive species management plan or systematic inventory of invasive species.
- Manager does not have or communicate knowledge of invasive species or how to identify them.

- Farm records, if records are kept, do not refer to invasive species and are not used for improvement of invasive species problems.
- Other (please specify):

Level 2: Manager communicates some knowledge of potential invasive species and can identify most common species. Manager also complies with federal and state/provincial transfer rules. Control of invasive species involves the following limited prevention strategies. Three of the following apply:

- Manager not only abides by, but can describe the following state/provincial and federal laws and management practices:
 - State/provincial and/or federal transfer permits requirements.
 - New and/or existing species source or new species importation requirements.
- All materials used (bags, shell, etc.) in the aquatic environment are sterilized/sanitized (e.g., dried and/or cleaned on an upland site) prior to transfer to a new invasive species control area.
- Manager can describe their invasive species management system, detailing some knowledge of existing problems.
- Manager communicates understanding of the existing problem extends beyond the production system and into upland and buffer areas.
- Manager has and communicates some knowledge of invasive species life history and vulnerabilities to avoid introduction.
- Other (please specify):

Level 3: As per Level 2, and actively prevents introduction and spread of invasive species. At least 3 of the following apply):

- Manager has a written policy or protocol for invasive species management, with inventory of existing problems.
- Steps are taken to eradicate invasive species while not harming the habitat and populations of natural species by employing tactics such as fresh or saline water dipping, spraying or rinsing, and/or hand harvest.
- Manager communicates knowledge base of invasive species in the area and demonstrates the ability to identify with some life history knowledge.
- Manager keeps long-term control-efficacy records to improve avoidance or control program.
- Manager seeks additional knowledge to assist with control program effectiveness.
- When applicable, manager works with state/provincial and federal agencies (e.g., Dept. of Natural Resources, Dept. of Agriculture, Dept. of Fish and Wildlife, Dept. of Fisheries and Oceans) to develop and implement control plans.
- Manager discusses problems with neighbors to increase effectiveness of the control effort.
- Other (please specify):

Level 4: As per Level 3, and manager has an advanced understanding of IPM principles and application, including bio-control and transfer limitations, and clearly manages the operation to prevent the establishment of invasive species, **or**, no invasive species are on the farm. At least 4 of the following apply:

- Manager has systematic inventory of invasive species occurrences.
- Invasive species are a high priority in overall operation as reflected in farm plans and records.
- Manager has advanced knowledge of life cycles and control is performed at the most effective time.
- With noxious plants, manager has planned re-vegetation with desirable plants to gain control of uplands.
- Manager uses only local broodstock triploid shellfish or harvests shellfish prior to known reproduction periods when growing native species in proximity to wild populations.
- Manager uses predators of invasive species and other bio-control methods sanctioned by state/provincial and federal agencies.
- Manager evaluates program each year for effectiveness using his/her own comprehensive control efficacy records.
- Farm areas clearly show results of this comprehensive invasive species management program.

- Manager actively tries to coordinate with neighbors in control efforts that have an impact on the wider general area by developing a written coordinated plan.
- Other (please specify):

Score:

Verification methods and notes:

Nuisance Species Management

Note: These include native aquatic species, such as sea stars, starfish, and moon snails, wildlife such as scoter ducks and seals, and fouling organisms such as barnacles.

Level 1: Producer/manager controls nuisance species with no regard to other adverse effects. Producer/manager can show compliance with federal and state/provincial harvest/take rules but otherwise is not informed about the issue. Check as applicable:

- Manager deals with crop production problems stemming from nuisance species as they are encountered and/or as time permits.
- Manager has no nuisance species management plan or systematic inventory of nuisance species.
- Manager controls nuisance species via widespread eradication.
- Other (please specify):

Level 2: Producer/manager communicates some knowledge of potential nuisance species. Control of nuisance species involves the following limited prevention strategies. At least 1 of the following applies:

- Producer/manager can describe their nuisance species management system, detailing some knowledge of existing problems.
- All materials used in the aquatic environment (bags, shell, etc.) are sterilized/sanitized (e.g., dried and/or cleaned on an upland site) prior to transfer to a new nuisance species control area.
- Inventory of nuisance species problem extends beyond the production system and into upland and/or buffer areas.
- Producer/manager has knowledge of nuisance species life history and vulnerabilities to avoid infestation.
- Other (please specify):

Level 3: As per Level 2 and producer/manager actively prevents introduction and spread of invasive species. At least 2 of the following apply:

- Producer/manager establishes a written policy or protocol for nuisance species management with inventory of existing problems.
- Steps are taken to deal with nuisance species by employing devices to lessen their effect (predator protection devices, fencing, etc.).
- Steps are taken to deal with nuisance species by employing tactics such as fresh or saline water dipping, spraying, or rinsing.
- Producer/manager communicates knowledge of nuisance species in the area and demonstrates the ability to identify with some life history knowledge.
- Producer/manager keeps long-term control efficacy records to improve avoidance or control program.
- Producer/manager seeks additional knowledge (through seminars, publications, conferences, etc.) to assist with avoidance or control program effectiveness.

- Producer/manager works with state/provincial and federal agencies (e.g., Dept. of Natural Resources, Dept. of Agriculture, Dept. of Fish and Wildlife, Dept. of Fisheries and Oceans) to develop and implement avoidance or control plans.
- Producer/manager discusses problems with neighbors to increase effectiveness of the control or avoidance effort.
- Other (please specify):

Level 4: As per Level 3 and a total of at least 3 options from Level 3 apply. Producer/manager (or outside interest) harvests the nuisance species for profit, recreation, or food source.

or

As per Level 3 and a total of at least 3 options from Level 3 apply. Producer/manager has an advanced understanding of IPM principles and application, including bio-control and clearly manages the operation to lessen the effects of nuisance species. At least 3 of the following apply:

- Producer/manager has systematic yearly inventory of nuisance species occurrences.
- Producer/manager has advanced knowledge of life cycles and control/avoidance is performed at most effective time.
- Producer/manager adjusts farm operations to avoid interactions with nuisance species.
- Producer/manager uses predators of nuisance species and other bio-control methods sanctioned by state/provincial and federal agencies.
- Producer/manager evaluates program each year for effectiveness using his or her own comprehensive control efficacy records.
- Farm areas clearly show results of this comprehensive nuisance species management program.
- Producer/manager actively tries to coordinate control efforts with neighbors that have an impact on the wider general area by developing a written coordinated plan.
- Other (please specify):

Score:

Verification methods and notes:

Threatened and Endangered Species Protection (upland and aquatic)

Level 1: Producer/manager exhibits no knowledge of threatened and endangered species (locally found species listed in state/provincial or federal record) and possesses no ability to identify them in the field. Current operation reflects this knowledge gap, with no special planning or action considered in management of the habitat/natural areas under his/her control beyond what is required by law.

Level 2: Producer/manager communicates some knowledge of habitat on farm or in nearby areas from general interest publications (newspaper, newsletter, etc.). At least 2 of the following apply:

- Producer/manager discusses major threatened and endangered species issues, identifying those species found in the locality with depth of knowledge consistent with general interest publications.
- Producer/manager identifies people, organizations, and information sources available to increase knowledge base of threatened and endangered species issues.
- Management in place for the protection of threatened and endangered species/habitat is limited to leaving it alone and keeping agricultural production from interfering.

- Management has plan in place to notify local NMFS and USFW offices if/when any injury or death (“take”) of endangered or threatened species (e.g., marbled murrelets, bull trout, southern distinct population segment green sturgeon) occurs.
- Other (please specify):

Level 3: As per Level 2 and a total of at least 3 options from Level 2 apply. Producer/manager can identify natural areas/habitat on the farm suitable for locally listed threatened and endangered species and protects the habitat. Producer/manager has written copies of applicable permits and other documents relating to listed species from the U.S. Army Corps of Engineers and other regulatory agencies and tribal entities. Producer/manager communicates some technical knowledge of threatened and endangered species and critical habitat. At least 2 of the following apply:

- Threatened and endangered species conservation is addressed in general management plan and specific actions are taken to maintain their presence on the land.
- Farm work is designed not to impact threatened and endangered species habitat areas. Habitat appears healthy.
- Producer/manager can identify and/or locate habitat where threatened and endangered species occur on the farm.
- Producer/manager works with state/provincial and federal agencies (e.g., Dept. of Natural Resources, Dept. of Agriculture, Dept. of Fisheries and Oceans) to protect threatened and endangered species habitat.
- Other (please specify):

Level 4: As per Level 3 and a total of at least 3 options from Level 3 apply. Producer/manager has obtained subject matter specific technical information about how to judge the threatened and endangered species/critical habitat health and/or quality. At least 3 of the following apply:

- Producer/manager has attended seminars or lectures on threatened and endangered species protection.
- Producer/manager knows both why and when threatened and endangered animals are present on the farm.
- Producer/manager has determined how threatened and endangered species welfare might be improved.
- Farm management plans consider reproductive and migration times of threatened and endangered species.
- Producer/manager establishes threatened and endangered species on habitat under their control.
- Participates in regional/state/provincial-wide effort to recover endangered species on/off farm.
- Producer/manager has engaged directly in actions on the farm or upland areas to provide or improve rearing, migratory, and/or spawning habitat(s) for threatened and endangered species.
- Other (please specify):

Score:

Verification methods and notes:

Fish and Wildlife Food, Cover, Habitat Structure, and Water

Level 1: Producer/manager communicates little or no knowledge about fish and wildlife on/around the farm, and no steps are taken to minimize adverse effects on cover, habitat structure, and water or food resources for fish and wildlife.

Level 2: Actions are taken to minimize adverse effects on wildlife food, habitat structure, cover, and water resources. At least 2 of the following apply:

- Producer/managers are knowledgeable of and follow all laws and permit requirements needed for their growing region.
- Vehicle traffic and farm activities around in documented reproductive areas are limited during migration and spawning times (e.g., Sand Lance and Surf Smelt).
- Beach driving is kept to a minimum and is only done on established singular routes and a plan is in place for when breakdowns occur.
- Beaching of vessels/water craft is kept to a minimum and is only done on established sites. Where beaching is repetitious such as off-loading, mooring, and haul-out sites, sites are established and used.
- Marine mammal interactions are limited only to necessary farm operations.
- Producer/manager communicates some knowledge of key regional and local species mostly from general interest publications (newspaper, etc.).
- Other (please specify):

Level 3: A total of at least 4 apply from Level 2, and cultivated and non-cultivated areas are actively managed for the benefit of wildlife on a yearly calendar. At least 2 low-impact and at least 2 high-impact management practices apply:

Low impact:

- Producer/manager can identify wildlife and plant species.
- Mesh opening on blanket netting is kept at maximum size to increase sediment access while still protecting the cultured product and reducing entanglement of wildlife.
- Netting is evaluated and maintained/repared on a regular schedule.
- Producer/manager communicates an understanding of wildlife corridors.
- Standing deadwood is left for birds to use.
- Native upland vegetation is preserved and promoted.
- Designated paths are used when repeatedly traversing through SAV habitats.

High impact:

- Floating or raised blanket nets are not utilized so increased sediment access is provided to mobile species.
- Field borders/buffer strips are maintained for diverse habitat (SAV, shellfish, mudflat).
- Only non-lethal predator control methods are promoted and utilized.
- Submerged aquatic vegetation (SAV) is not disturbed during migration or reproductive times (e.g., herring) in documented spawning areas.
- Invasive non-native weeds are removed.
- Eelgrass buffer strips or patches/areas are left or promoted to connect wildlife corridors and to potentially increase spawning areas.
- Wildlife crops for food are planted (unprotected clams/oysters).
- Incidental take of non-target species is reduced by selective harvesting.
- A written marine mammal interaction plan is in place.
- Other (please specify):

Level 4: As per Level 3, and a total of at least 3 high-impact options from Level 3 and a total of at least 3 low-impact options from Level 3 are used. Indicator species population information is tracked year-to-year to evaluate wildlife management strategies.

Score:

Verification methods and notes:

Linking Individual Wildlife Habitat Conservation Activities Together

Note: Government projects are included in this criterion. Individual landowners may be leading the way for other producers without working with other landowners.

Level 1: Producer/manager is not involved with other landowners or state/provincial/federal agencies to link individual on-farm actions to larger landscape activities.

Level 2: Producer/manager participates in watershed councils, conservation, soil and water districts, or other landscape activities promoted by state/provincial/federal agencies, shellfish organizations, non-profits, or similar groups.

Level 3: Producer/manager has made habitat improvements in concert with nearby landowners or on their own to create large and/or connected patches of upland or tideland habitat.

Level 4: Producer/manager has made habitat improvements as a part of a regional plan that includes other landowners. At least 2 of the following apply:

- Watershed council plan
- Eco-regional plan (like those created by groups like The Nature Conservancy, etc.)
- Coordinated resource management plans
- Soil, conservation, and water district plans
- State/provincial-wide habitat/biodiversity plans
- Other (please specify):

Score:

Verification methods and notes:

Healthy and Humane Care for Shellstock

Planting and Production Plan

Level 1: No written or otherwise describable plan is in place to document farm density goals.

Level 2: Producer/manager has a very basic written production plan or can give a verbal description of the production plan. All the following apply:

- Plan describes planting densities and desired harvest densities.

- Plan mentions animal growth and health but does not elaborate on aspects of predator protection or preferred planting weather/seasons.
- Most detailed discussions in the plan deal with shellstock production and not resource management.
- Plan calls for little monitoring of conditions (mortalities/natural recruitment), and such monitoring is done at irregular times.

Level 3: Producer/manager has a written production plan with considerable detail and has general knowledge of food utilization and water quality requirements of shellfish. The production plan deals only with the current year. All the following apply:

- The plan contains a discussion of the production goals and the short-term objectives needed to reach these goals.
- The plan discusses density evaluations during harvest and how that information relates to future seeding activities.
- Water quality conditions and resources are considered, and management is aware of the issue.
- Essential Fish Habitat (EFH) conditions and resources are considered and management is aware of the issue.
- Biotxin issues are considered and management is aware of the issue.

Level 4: As per Level 3 and farm operates from a written production plan that addresses most culture and land management issues and covers 3 years or longer with provisions for reviewing specific issues no less than annually. At least 4 of the following apply:

- The plan contains a discussion of the long-term production goals and the objectives needed to reach these goals.
- Nutrients inputs and outputs are quantified for each production area.
- Upland erosion conditions and resources are considered, and management is aware of the issue.
- Food community (detritus/phytoplankton/zooplankton) health and production issues are considered, and management is aware of the issue.
- Wildlife habitat conditions and resources are considered, and management is aware of the issue.
- Adding certifiable growing areas or upgrading a current growing area is considered, and management is aware of the issue (e.g., lowering fecal coliform contamination from uplands/watersheds).
- Precision monitoring occurs at least once a year and information obtained is used to address problems and improve the existing management plan.

Score:

Verification methods and notes:

Carrying Capacity Management

Note: This applies only for raft or long-line culture systems where shellfish extend horizontally more than 3 feet into the water column.

Level 1: Possible localized carrying capacity effects are not monitored.

Level 2: On farm carrying capacity is considered a factor in farm management. Producer/ manager can verbally describe their seeding efforts, stocking densities, and growth averages and compare them with

regional or historical trends.

Level 3: As per Level 2 and growth, seeding, and density records are kept and evaluated to increase yield while addressing possible on-farm and adjacent farm carrying capacity issues raised by neighboring farm producer/managers. Producer/manager has documentation that their farm does not adversely affect neighboring wild or managed shellfish beds. This documentation needs to be location specific and must include one of the following: neighboring upstream and downstream phytoplankton levels, neighboring production/growth levels, and/or historical and current shellfish growth information for their water body.

Level 4: As per Level 3 and precision seeding is employed. After reviewing historical seeding, harvest records and yearly growth surveys proper stocking densities are used. Floating farm sites are selected, and layouts are modified to provide increased flow in and out of the farm site. Producer/managers encourage, evaluate, and/or participate in studies of carrying capacity effects, nutrient cycling, and/or modern precision aquaculture practices. The results of these efforts are translated to farm practices that minimize off farm carrying capacity decreases.

Score:

Verification methods and notes:

Disease Prevention and Management

Level 1: Producer/manager relies only on state or federal regulations for movement controls of shellfish for shellfish infectious disease prevention and control. Producer/manager does not have any farm-specific requirements or programs for disease prevention or response. Producer/ manager is not informed about infectious shellfish disease risks. Check as applicable:

- Producer/manager deals with crop production problems stemming from shellfish infectious diseases as they are encountered and/or as time permits.
- Producer/manager has no response plan for disease outbreaks, or systematic inventory of shellfish infectious diseases.
- Producer/manager does not have, or cannot communicate, knowledge of disease signs or identification of moribund shellfish.
- Farm records, if records kept, do not refer to shellfish infectious diseases.
- Other (please specify):

Level 2: Producer/manager communicates some knowledge of potential diseases and can identify most common disease signs visually. Producer/manager also complies with federal and state/provincial transfer rules. Purchased seed only comes from nursery or hatcheries that have all required state/provincial and federal certification records. Control of disease involves the limited prevention strategies below. At least 2 of the following apply:

- Producer/manager not only abides by but also can describe the following state/provincial and federal laws and management practices. All the following apply:
 - State/provincial and/or federal transfer permits requirements.
 - New existing species source or new species importation requirements.
 - Brood stocks or seed stocks, as applicable, are examined for state/provincial or federal reportable diseases on a regular basis in compliance with applicable regulations.
- All materials used in the aquatic environment (bags, shell, etc.) are properly dried and cleaned on an upland site prior to transfer to a different disease control area or disposal site.
- Producer/manager has unwritten plans for response to infectious shellfish disease outbreaks.

- Producer/manager has knowledge of the presence or absence of federal and state/provincial reportable shellfish infectious diseases in the region, their risks and ways to reduce those risks.
- Other (please specify):

Level 3: As per Level 2 and a total of at least 4 options from Level 2 apply and actively prevents introduction and spread of invasive species and disease. At least 3 of the following apply:

- Producer/manager establishes a written policy or protocol designed to prevent establishment of applicable state/provincial and federal reportable shellfish diseases.
- Producer/manager and/or key staff participate in training, seminars or certification courses that deal with disease prevention and management.
- Producer/manager communicates knowledge base of infectious shellfish diseases in the area and can identify disease signs that are recognizable by visual examination, with some knowledge of disease risk factors.
- Producer/manager maintains stock certification and mortality records indefinitely.
- Producer/manager utilizes veterinary or other applicable shellfish health management professional service to support shellfish infectious disease control program.
- Producer/manager discusses problems with neighbors to increase effectiveness of the control effort.
- Other (please specify):

Level 4: As per Level 3, and producer/manager has an advanced understanding of, and clearly manages the operation to prevent the establishment of disease. At least 3 of the following apply:

- Producer/manager has systematic inventory of state or federal reportable shellfish infectious disease occurrences and observable unexplained mortality events.
- Infectious disease prevention is a high priority in overall operation as reflected in farm plans and records, including a Shellfish High Health Plan (SHHP) customized to farm operations. The SHHP is reviewed annually.
- Producer/manager actively tries to coordinate with neighbors in control efforts that have an impact on the wider general area by developing a written coordinated plan.
- When appropriate, producer/manager works with state/provincial/federal/tribal agencies (e.g., Dept. of Natural Resources, Dept. of Agriculture, Dept. of Fish and Wildlife, Dept. of Fisheries and Oceans) to develop and implement shellfish infectious disease control plans.

Purchased seed only comes from nursery or hatcheries that have a professional assistance program and site records on hand aiming at identifying causes of unexplained mortality. These operations help ensure that sick seed are not sold, even if the disease condition is not regulated, such as is the case with vibriosis.

- Other (please specify):

Score:

Verification methods and notes:

Transportation (nursery and growout)

Note: This covers on-farm and farm to market transport.

Level 1: Transportation equipment is in good repair to prevent injury and comply with regulations. Loading/transport equipment is managed to prevent injury. All the following apply:

- Loads are secure to prevent shellfish and fouling organisms from falling onto the roadway.
- Overloading that will injure animals is prevented.
- Time to temperature requirements are followed and documented.

Level 2: As per Level 1 and temperature and weather conditions are factored into transportation to reduce thermal stress. Producer/manager can describe industry norms for transportation conditions.

Level 3: As per Level 2, and loading densities are closely managed so shellfish are not contained in densities that cause stresses (e.g., shell gape, mortality). Transportation temperatures are monitored (e.g., temperature logger/exposure tag in shipment) and noted/recorded.

Level 4: As per Level 3 and producer/manager has written records of animal transportation to processing facilities including dates, numbers of animals transported, and conditions. Impacts of transportation on animals and the environment are minimized. At least 2 of the following apply:

- Transportation records are kept on site.
- On-farm production and direct marketing is promoted.
- Animal transport coordinated with other regional producers.
- Transport vehicles use sustainable bio-based fuels. Use is documented by transportation provider.
- Other (please specify):

Score:

Verification methods and notes:

Hazard Reduction and Sanitation (growout)

Note: This criterion covers Interstate Shellfish Sanitation Conference (ISSC) and subsequent National Shellfish Sanitation Program (NSSP) issues such as rainfall and biotoxin closures along with other health and sanitation issues.

Level 1: All legal requirements are met for food safety and bio-security, including hygiene, sanitation, fuel and pesticide storage, and harvest restrictions due to health-based regulatory closures. Access to facilities and shellstock is controlled. All the following apply:

- Producer/manager is aware of all legal requirements.
- Producer/manager can explain how operation meets those requirements.

Level 2: As per Level 1 and a policy addressing procedures, materials for cleaning and disinfecting facilities and equipment, personal protective gear, and limiting risks from contamination and disease spread is in place. All the following apply: (where applicable):

- HACCP and farm safety plans are in place and available for review.
- Signage listing procedures and precautions is present where appropriate, e.g., fuel, pesticide storages, and toilet facilities.
- Cleaning and disinfecting products are used properly, i.e., anti-microbial disinfectants are not used where cleaning products are appropriate, and training is provided.
- Handlers use clean and appropriate personal protective gear (such as ear protection, gloves, boots), where appropriate.
- Other (please specify):

Level 3: As per Level 2 and access to some facilities (where appropriate), equipment, medicine, fuel, and

pesticide stores is limited to appropriate persons. All the following apply (where applicable):

- Pesticide and fuel storage is locked.
- Entrances to farm and facilities are appropriately marked and patrolled to discourage/prevent unauthorized entry and/or movement of disease or contaminants into sensitive areas. (This information is available in the HAACP plan.)
- Pesticide and/or fuel use is tracked in such a manner to ensure unauthorized use or spillage is detected.
- Biosecurity measures are in place to prevent diseases from being transferred between farm holding facilities or to other farms and is available for review.
- Other (please specify):

Level 4: As per Level 3 and on-farm storage of hazardous materials is minimal or non-existent. At least 2 of the following apply:

- Animal health and preventative pest management is exceptional and very little pesticides are used.
- Producer/manager is involved in the ISSC program (attends meetings, reviews updates, is a committee member, etc.).
- Producer/manager actively participates in bacterial, biotoxin, or other forms of water quality and animal health sampling.
- Other (please specify):

Score:

Verification methods and notes:

Shared Resource Management

Note: These criteria are written to further improve cooperation and relations between upland owners (private, public and tribal) and aquatic farm managers, in addition to providing a clean and safe farm environment.

User Relations

Level 1: No effort is made to improve relations with other upland and water users.

Level 2: Producer/manager follows all treaty settlements and cooperates with local tribal agencies. Adjacent landowners and local Tribal agencies are notified of significant farming activities and relations are improved by following at least one low-impact and at least 3 high-impact management practices. Check all that apply:

Low Impact:

- Farm materials are of a color neutral or matching the environment unless these colors pose a risk to navigational safety.
- Vessel speeds are reduced while near residences to reduce noise levels.
- Headlamps are employed at a level to reduce unneeded illumination while navigational light levels are maintained at a level and direction to ensure safety.
- Other (please specify):

High Impact:

- Farm sites are monitored for excessive debris and debris is removed on a minimum quarterly basis.
- Large farm materials are marked to denote owner.
- Farm materials are de-fouled at remote locations to reduce the risk of odors affecting other users.
- Verbal communication and recreational radios are limited near residences. Farms display an appearance of being clean and orderly at upland, inter-tidal, and water-based areas.
- Upland parking of farm/employee vehicles is restricted to owned or owner-approved sites.
- Other (please specify):

Level 3: As per Level 3 a plan is in place to clear debris from abandoned farm sites in a legally allowable manner, and producer/manager can describe plan and/or show documentation of plan. A total of 4 high-impact and 2 low-impact practices are used from Level 2. Additionally, plans are in place that include at least 2 of the following:

- Debris cleanup activities are organized on an annual to biannual basis.
- Adjacent properties are monitored for farm debris, and, where entry permission is granted, debris is removed in a timely manner.
- Farm tours are created for neighbors and the nearby community.
- Producer/managers allow upland neighbors direct beach/water access.
- Producer/managers allow neighbors to harvest managed/unmanaged stocks for consumption.
- Equipment noise reduction plans/procedures are put into place (sound suppression devices)
- Producer/manager contact information is easily accessible to the local community by farm signage or increased visibility at community events/meetings.
- Local agencies are notified that farm employees/vessels are available for assistance in times of marine emergencies.
- Crew-user relations training is provided via in-house or outside seminars, classes or workshops.
- Other (please specify):

Level 4: A total of 5 high impact and 3 low-impact practices from Level 2 apply. Additionally, a total of 4 practices are used from Level 3, and producer/managers attend and/or organize neighborhood/local meetings/events to address local concerns. Producer/managers can describe meeting objectives and results.

Score:

Verification methods and notes:

Farm-site Boundaries

Level 1: Little is done to assure farms are inside legal boundaries.

Level 2: Copies of lease or ownership records of farm properties are held on site, and producer/manager consults those records to define farm boundaries.

Level 3: As per level 2 and farm boundaries are set using the most current and detailed descriptions/maps.

Level 4: As per Level 3 and modern survey methods such as GPS are employed to assess farm boundary locations.

Score:

Verification methods and notes:

Marine Operations and Navigation

Level 1: Producer/manager can show they comply with federal (Coast Guard) and state/provincial navigational standards/rules.

Level 2: As per Level 1, additional measures are employed to ensure safe navigation. Check all that apply:

- Plans are in place to provide rapid assistance for when vessels/watercraft breakdown.
- Anchors are properly sized and set to decrease movement of floating structures during normal and adverse weather conditions.
- Raised bottom culture activities are clearly marked to prevent crop, vessel, and personal injuries.
- Floating structures and shallow submerged items are clearly marked and maintained in an orderly and grouped fashion to reduce accidents during normal and adverse visibility conditions.
- Storm damaged structures are secured and remedied as quickly and safe as possible.
- Ground culture protection devices are properly secured to prevent loss and potential entanglement.
- Farm crews observe speed limits and reduce speeds near shores, other vessels, and users to avoid dangerous wave/wake conditions.
- Anchor lines are clearly marked or submerged.
- Other (please specify):

Level 3: A total of at least 3 apply from Level 2, and one or more of the following apply (if applicable):

- Speed limits are posted around floating facilities.
- Local/National safety agencies (that provide liability coverage) are notified that farm employees/vessels are available for assistance in times of marine emergencies.

Level 4: As per Level 3, and both options from Level 3 apply.

Score:

Verification methods and notes:

Farm Equipment Maintenance and Material Reduction

Level 1: Maintenance of farm equipment is done as problems occur, and material reduction is not a priority.

Level 2: Farm equipment is maintained on a regular basis and equipment and materials are managed by the following methods. At least 4 of the following apply:

- Materials are selected for their ease of reuse and durability.
- Prompt removal and proper upland disposal of unused and derelict culture materials.
- Equipment/Materials are secured to withstand severe weather events.

- Equipment is maintained to prevent spills and leaks and to improve efficiency.
- Materials/structures do not contain substances identified by the EPA as containing materials that can readily enter and harm the marine environment. (Pre-existing structures such as creosote pilings/dikes are exempt if put into place before 2008.)
- Treated lumber is not used in the construction of farm grow out or harvest structures.
- Plans are in place to provide rapid assistance for when vehicles/vessels/watercraft breakdown.
- Synthetic materials are collected during the harvest process and not left to re-enter the marine environment.

Level 3: As per Level 2 and a total of at least 5 options from Level 2 apply, and at least 3 of following apply:

- Equipment is purchased based on its high efficiency, low emissions, and ease of maintenance.
- Plans are in place to address non-farm related spills to reduce the risk of adverse farm and environmental interactions.
- Biodegradable or food grade oils are used whenever possible/feasible.
- Composting of suitable wastes is employed whenever possible/feasible.
- Rechargeable battery use is encouraged in electronic devices and headlamps.
- Recycling programs are in place to reduce landfill waste.
- If antifouling paints are used, they do not contain marine toxins such as copper or organotin compounds.

Level 4: As per Level 3 with a total of at least 4 options from Level 3 apply. Farm efficiency is tracked to reduce the amount of resources and energy needed for production.

Score:

Verification methods and notes:

Soil and Water Conservation

Note: For the purposes of this evaluation criteria, the term “soil” is broadly defined as all aquatic sediments and tidelands as well as upland soils.

Continuing Education for Soil and Water Resource Conservation

Level 1: Producer/manager demonstrates little or no knowledge about soil and water resource conservation. Current operation reflects this knowledge gap, with no special planning or action considered to address carrying capacity, conserve uplands, protect water quality, and increase positive relations with other user groups.

Level 2: Producer/manager relies on general interest shellfish publications (newspapers and general newsletters, etc.) to learn resource conservation. Producer/manager demonstrates a basic understanding of soil and water resource conservation.

Level 3: Producer/manager uses technical, subject matter-specific information sources to aid in resource conservation. Producer/manager has a written farm plan or can verbally communicate technical knowledge of the following resource conservation issues. At least seven of the following apply:

- Bulkhead and pile type and methods to mitigate
- Carrying capacity and farm production

- Precision seeding/stock densities
- Water quality and environmental health
- Submerged aquatic vegetation (SAV) habitat and buffer zones

- Nutrient uptake and sequestration in soils and shellfish
- Upland and riparian vegetation conservation
- Benthic and pelagic ecology
- Benthic and pelagic biota in the farm area
- TSS/turbidity/siltation reduction measures
- Farm materials reduction and recycling
- Understanding/knowledge of applicable regulations and permits
- Other (please specify):

Level 4: As per Level 3, and producer/manager participates (or has participated in the last 5 years) in either on-farm testing of resource conservation strategies to evaluate their usefulness, and/or participates in local or regional water quality or resource enhancement/management council or organization. Producer/manager also documents performance of on-farm resource conservation practices.

Score:

Verification methods and notes:

Buffer Strips/Sensitive Habitats

Note: SAV avoidance/buffers may not be practical for established farms in certain growing regions (e.g., Willapa Bay); practices may be developed to avoid major impacts (e.g., reducing high impact practices such as intensive dredging on SAV during SAV growth seasons).

Level 1: Buffer strips between sensitive habitats are not utilized or documented.

Level 2: Buffer strips of 10 feet (3m) or more are put in place between newly positioned farm operations and sensitive habitats (e.g., SAV, surf smelt and sand lance spawning grounds). As documented by a pre-installation underwater survey, new floating aquaculture systems are not located above existing SAV. (Survey information can be provided by previous federal, state/provincial, private or contracted studies.)

Level 3: As per level 2, and sensitive habitats are photographed, mapped or tracked at least every 2 years to determine localized increases or decreases adjacent to or within the farm site. Level 3 requires producer/manager to document buffers, not necessarily move buffers. These surveys could be used to locate buffer strips of newly positioned farms.

Level 4: As per Level 3, and sensitive habitats are plotted yearly via detailed maps and accompanied with site photography and qualitative sampling.

Score:

Verification methods and notes:

Upland/Near-Shore Resource Management

Level 1: Producer/manager can show that all local, state/provincial, and federal laws and regulations are followed in regards to near-shore and upland uses where applicable permits and documentation can support.

Level 2: As per Level 1, and producer/managers that have control over the uplands reduce the reliance of hardened bulkhead structures at farm sites, and maintain upland vegetation that interacts with the near-shore environment in areas that they own/manage.

Level 3: As per Level 2, and producer/managers actively seek alternatives to upland and near-shore modifications. Modifications are limited to high traffic access points. Native upland vegetation is promoted to increase stability of the uplands and shading of the near-shore.

Level 4: As per Level 3, and producer/managers participate in local/regional community events/ projects to protect upland vegetation and reduce bulkhead/impermeable surface/development effects.

Score:

Verification methods and notes:

Integrated Pest, Disease and Weed Management, and Pesticide Risk Reduction²

Note: This section applies to the use of herbicides for both land-based and aquatic applications, and other pesticides for land-based operations only.

Herbicides have been widely used for the eradication of *Spartina* on the west coast of the United States and will be used for spot treatments in the foreseeable future. Eradication of *Spartina* is mandatory and is strictly monitored by State and Federal permitting agencies. County and state agencies have primary responsibility for applying herbicides to eradicate *Spartina*; this includes private and public shellfish lands.

Aquatic applications are restricted to burrowing shrimp control and eradication of *Spartina* (an invasive grass). Criteria for aquatic pesticide use (e.g. burrowing shrimp control) are housed in the Oyster Inspection Tool as other aquatic pesticides (non-herbicides) are prohibited in all other forms of shellfish aquaculture.

N/A: This farm uses no pesticides on upland or aquatic areas.

Continuing Education for Reducing Pesticide/Herbicide Usage (upland and aquatic)

Level 1: No continuing education occurs.

Level 2: Crop-specific or pesticide-specific publications are purchased or accessed by web site to aid in management decisions.

Level 3: As per Level 2, and where operation uses restricted materials, producer/manager or contractor is a licensed private applicator and meets all continuing education requirements for licensed private applicators. (Producer/manager need not be a licensed private applicator if the only herbicide use is for controlling *Spartina* and a county or state agency is the herbicide applicator.) Producer/manager consults

crop advisors, extension agents, pest control consultants/coordinators and/or other agricultural specialists as needed. Producer/manager attends education seminars on the following subject matters. At least 2 of the following apply:

- Biological pest control
- Low-risk pesticides
- Pesticide application safety
- Techniques to reduce amount of pesticides applied
- Pest and disease management
- Other (please specify):

Level 4: A total of at least 3 options apply from level 3.

Score:

Verification methods and notes:

IPM Planning (upland)

Note: Allow for flexibility in recordkeeping with larger vs. smaller operations. Employed managers or tenant farmers need to have written documentation. Upland IPM planning may not deal directly with crops, pest management can occur at many levels (e.g., invasive weeds in landscaping, nuisance insects near processing facilities). Not all farms will use pesticides/herbicides on upland areas and not all farms own or control the upland areas. If so, this criterion is to be scored as N/A.

Level 1: Upland plantings are established without regard to environmental impact. Planning to prevent pests is rare. For ongoing pest control, corrective measures are emphasized rather than prevention, i.e., herbicides are applied to the same weeds year after year in the same place.

Level 2: Pests are reduced by the planned use of preventive measures. Producer/managers/ contractors may have a written farm plan detailing the following provisions and/or can communicate the methods they use for monitoring pests and their phenology, weather, and can identify pest management decisions based on this monitoring. Phenology is described as how seasonal and inter-annual climate can influence animal and plant life cycles. At least 2 of the following apply:

- Pest and disease resistant plant varieties used.
- Field scouting is practiced.
- Site selection is a criterion for upland vegetation establishment.
- Insect phenology/degree day modeling informs pest management.
- Competitive plant species are intentionally seeded.
- Constant monitoring for problems or plant species of concern.
- Weed species are removed by hand or mechanically.
- Control methods are applied based on plant phenology, so they have the most impact on target weed.
- Natural or mechanical re-vegetation with desirable species to maximize site usefulness and weed competition is used, thus limiting potential re-invasion.
- Other (please specify):

Level 3. As per Level 2, and the plan is written. A total of 3 options from Level 2 apply.

Level 4. As per Level 3, and a total of 4 options from Level 2 apply.

Score:

Verification methods and notes:

Site Monitoring / Field Scouting (upland)

Level 1: Upland areas are not monitored for nuisance species (weeds, rodents etc.).

Level 2: Records are maintained of pesticide use around and inside the upland staging areas and facilities.

Level 3: As per Level 2 and problem areas are scouted at least twice per year. All the following apply:

- Scouting records are collected and maintained.
- Scouting records include GPS-based maps or other detailed maps of problem areas with precise locations of differing pest densities.
- Records are reviewed and used to inform and improve pest management strategies and scouting methods in subsequent seasons.

Level 4: As per Level 3, plus yearly monitoring is conducted for recently recruited pests inside and near upland staging areas and facilities.

Score:

Verification methods and notes:

Weather Monitoring

Level 1: Weather is not monitored.

Level 2: Important weather parameters are monitored on site or a site-specific weather service is employed. Pesticides are not applied when weather conditions are not appropriate (e.g., wind or precipitation episodes are expected.).

Level 3: As per Level 2, and weather data is used to schedule pesticide applications for weather-dependent pests (phenology or degree-day models).

Level 4: As per Level 3, efficacy and weather data are collected and available to outside entities (e.g., researchers).

Score:

Verification methods and notes:

Lowest Effective Application Rates/Reducing Application Rates (upland)

Level 1: Pesticide application rates are selected according to manufacturer's label.

Level 2: As per Level 1 and reduced dosage strategies are employed when the target pest does not require complete coverage.

Level 3: As per Level 2, and applications are chosen with a goal of reducing pesticide usage by: (at least 3 of the following apply.)

- Matching density and severity of the pest problem.
- Preserving beneficial organisms.
- Border spraying.
- Tracking the number/frequency of applications made.
- Using novel spray technology.
- Using spot applications.
- Using GPS-based and/or surveyed and detailed maps of beds and associated pest population.
- Other (please specify):

Level 4: As per Level 3 and a total of at least 4 from Level 3 apply. Synthetic pesticides are not used. All pesticide (synthetic and organic) toxicity rankings are maintained with pesticide records and tabulated annually to indicate progress in reducing overall use of high toxicity pesticides.

Score:

Verification methods and notes:

Pesticide Selection and Justification (upland)

Level 1: All the following apply:

- Producer/manager/contactor can show that only pesticides registered in the state/province as approved for target pests and crop are used.
- Pesticide mixtures prohibited by the label are not used.

Level 2: For applications covering larger areas are made using equipment, i.e., aerial applications, pesticide selections and recommendations are made by licensed applicators and/or licensed consultants. (N/A for spot applications of non-RU pesticides.)

Level 3: As per Level 2, and the timing of applications and selection of pesticide materials correspond with scouting records or monitoring. No materials labeled "Danger" are used to control pests.

Level 4: When a control measure is deemed necessary, every effort is made to use beneficial organisms, and/or cultural controls. Where pesticides are used, reduced toxicity pesticides (i.e., no materials labeled "Danger or "Warning") are used.

Score:

Verification methods and notes:

Pesticide Record Keeping

Note: Pesticide records are a key element of the inspection process and are the only way inspectors can verify activities of the past. Certain products will not be able to be calibrated (e.g., upland applications of Roundup).

Level 1: Producer/manager/contractor can show that all legal requirements for pesticide record-keeping are met. (USDA requires, and states enforce, the following records for all applications of restricted use pesticides: name of applicator, date, field location or area, area treated including GPS based maps of bed location, pesticide name and EPA registration number, total amount applied, and crop.)

Level 2: As per Level 1, and copies of pesticide application records taken by a commercial company, government agency or the owner-producer/manager are maintained on site and include all the following:

- Crop growth stage.
- Pest growth stage including densities.
- Purpose of the pesticide treatment, i.e., target pest.
- Threshold used to guide pesticide treatment.
- Current weather data, e.g., weather conditions on day of application.
- Effectiveness of pesticide treatment.
- Current weather data during treatment.
- Calibration records are maintained for upland applications and are available from the commercial applicator.
- If commercial companies or government agencies apply pesticides on this operation, copies of those records are requested and maintained on site.

Level 3: As per Level 2, and pesticide records are kept for longer than 3 years. Producer/manager/contractor can demonstrate how records are used year-to-year to examine trends and aid management decisions.

Level 4: As per Level 3, and pesticide records include detailed GPS-based maps of all beds in cultivation, as described under crop monitoring. Producer/manager/contractor can relate any changes or trials in pesticide use, such as reduction, elimination, alternative pesticide or alternative application techniques.

Score:

Verification methods and notes:

Calibration of Application Equipment and Pesticide Drift

Level 1: Application equipment that can be calibrated (insecticide, fungicide, herbicide application equipment) is calibrated less than once per year. Applications are made only with equipment designed for that use. Nozzles are checked and replaced when necessary.

Level 2: As per Level 1 and all the following apply:

- Products are mixed according to label directions.
- Application equipment is calibrated at the start of each season, if designed to be calibrated.
- Surfactants are used to minimize drift when recommended by the label.
- Applications are made only under weather conditions that minimize off-site movement (e.g., low wind speed, not raining).

Level 3: As per Level 2, and the method of calibration is communicated to the inspector via written calibration records **or** verbal description. Spot applications are used exclusively, or all the following apply:

- Buffer areas are established around fields to help reduce drift.
- Commercial application companies are hired on this operation and records are obtained by the producer/manager.

Note: Inspectors must feel confident that the method of calibration is adequate. Provide notation as to calibration methods used.

Level 4: As per Level 3, and at least one of the following apply:

- Application equipment is calibrated more than once per season or uses technology that continuously calibrates.
- Technology is employed to keep particle size above 150 microns depending on the type of equipment and pesticide used.
- Pesticide application equipment is selected and maintained for site-specific conditions.

Score:

Verification methods and notes:

Hazardous Material Storage (upland)

Note: Storage facilities may be operated by producer/manager or other entity (e.g., other producer/manager, applicator) and be located on the grower's facility/property or off site.

Level 1: Storage facilities for hazardous materials (pesticides, fertilizers, fuel, lubricants) meet legal requirements (where applicable). Hazardous materials are stored in original, clearly labeled containers.

Level 2: Long-term storage is at least 150 ft. away from wells and 200 ft. away from surface water or sources of flame. Four of the following apply:

- Storage size and organization is adequate to separate flammables from other materials.
- Pesticides are organized by insecticides, herbicides, etc.
- Containers are organized to prevent spillage when storing/removing materials.
- Hazardous materials are stored away from shellfish seed and other materials/inputs that may come in contact with the marine environment.
- Storage area is clearly marked on the outside with warning signs.
- Flammables are kept out of direct sunlight.
- Dry materials are stored above liquids.
- Other (please specify):

Level 3: As per Level 2 with a total of 5 items checked from Level 2, and 4 of the following apply:

- Storage area is locked.
- Storage area has a sealed floor.
- Storage area is well ventilated (no strong chemical smell).
- Inventory is managed on a first-in, first-out basis.
- A current written inventory is maintained and accessible in the event of an emergency.
- Empty hazardous material containers are triple-rinsed before return to supplier or disposal in an approved recycling program or licensed landfill.
- Tank rinsate is sprayed on labeled crops at labeled rate or less.

Level 4: Hazardous wastes are limited due to success in eliminating use of chemicals labeled “Danger” or “Warning,” **or**, as per Level 3 and storage area is “state of the art”. All the following apply:

- The storage area is located in a separate facility or building.
- The storage area is diked/curbed to contain spills.
- Capacity of the diking system is at least 125% of the largest quantity stored.
- Shelves are lipped and of an impermeable material.
- Road access is adequate for delivery and emergency vehicles.
- Lock allows free exit from within when locked.
- Valves on (large) storage tanks are locked when not in use (if applicable).
- Storage is downwind (prevailing wind) from housing, play or processing areas.
- An emergency plan is posted, directing people what to do in case of an emergency.

Score:

Verification methods and notes:

Food Alliance Prohibited Pesticide List

Class Ia and Ib pesticides registered for use by the USEPA (See: The WHO recommended classification of pesticides by hazard and guidelines to classification: 2009.)

EPA Reg No.	Product Name	WHO Mixture Class	Chemical Name
5481-448	AMVAC BIDRIN 8 WATER MISCIBLE INSECTICIDE	Ib	Dicrotophos
10163-95	AZINPHOS METHYL TECHNICAL	Ib	Azinphos-methyl
66330-233	AZINPHOSMETHYL 50W	Ib	Azinphos-methyl
5481-9032	AZTEC 3.78% GRANULAR INSECTICIDE	Ib	Phostebupirim
5481-9028	AZTEC 4.67% GRANULAR	Ib	Phostebupirim
5481-552	BIDRIN XP	Ib	Dicrotophos
100-987	BRODIFACOUM TECHNICAL	Ia	Brodifacoum
270-371	BROMADIOLONE 2.5% CONCENTRATE	Ib	Bromadiolone
270-374	BROMADIOLONE TECHNICAL	Ia	Bromadiolone
47629-9	BROMETHALIN TECHNICAL	Ia	Bromethalin
279-3060	CARBOFURAN TECHNICAL	Ib	Carbofuran
67760-43	CHEMINOVA METHYL PARATHION 4 EC	Ib	Methyl parathion
4787-33	CHEMINOVA METHYL PARATHION TECHNICAL	Ib	Methyl parathion
34704-259	CLEAN CROP PHORATE 20G	Ib	Phorate
13808-7	COMPOUND 1080 LIVESTOCK PROTECTION COLLAR	Ib	1080
56228-26	COMPOUND 1080 TECHNICAL (LPC)	Ia	1080
47000-144	CO-RAL COUMAPHOS 25% DUST BASE	Ib	Coumaphos
11556-98	CO-RAL COUMAPHOS FLOWABLE INSECTICIDE	Ib	Coumaphos
11556-123	CO-RAL PLUS INSECTICIDE CATTLE EAR TAG	Ib	Coumaphos
11556-148	CORATHON	Ib	Coumaphos
11678-53	COTNION-METHYL	Ib	Azinphos-methyl
66222-11	COTNION-METHYL AZINPHOS METHYL 50W	Ib	Azinphos-methyl
11556-11	COUMAPHOS TECHNICAL	Ib	Coumaphos
5481-545	COUNTER 15G SYSTEMIC INSECTICIDE-NEMATOCIDE	Ib	Terbufos
5481-562	COUNTER 20G	Ib	Terbufos
5481-547	COUNTER CR	Ib	Terbufos
5481-546	COUNTER TECHNICAL POISON SOIL INSECTICIDE	Ia	Terbufos
5481-447	DICROTOPHOS TECHNICAL	Ib	Dicrotophos
47629-12	DIFENACOUM TECHNICAL	Ia	Difenacoum
7173-204	DIFETHIALONE TECHNICAL	Ia	Difethialone
61282-5	DIPHACINONE, TECHNICAL GRADE FOR MANUFACTURING ONLY	Ia	Diphacinone
352-361	DU PONT METHOMYL COMPOSITION	Ib	Methomyl
5481-492	DUPONT FORTRESS TECHNICAL	Ia	Chlorethoxyphos
352-342	DUPONT LANNATE SP INSECTICIDE	Ib	Methomyl

EPA Reg No.	Product Name	WHO Mixture Class	Chemical Name
352-366	DUPONT METHOMYL TECHNICAL	lb	Methomyl
352-400	DUPONT OXAMYL TECHNICAL 42 INSECTICIDE/NEMATOCIDE	lb	Oxamyl
5481-9043	ETHOPROP TECHNICAL	lb	Ethoprop
5481-493	FORTRESS 5G GRANULAR INSECTICIDE	lb	Chlorethoxyphos
279-2876	FURADAN 4F INSECTICIDE/NEMATOCIDE	lb	Carbofuran
279-3038	FURADAN 85 DB	lb	Carbofuran
279-3310	FURADAN LFR INSECTICIDE/NEMATOCIDE	lb	Carbofuran
10163-78	GOWAN AZINPHOS-M 50 WSB	lb	Azinphos-methyl
66222-162	GUTHION SOLUPAK 50% WETTABLE POWDER INSECTICIDE	lb	Azinphos-methyl
11678-70	GUTHION TECHNICAL INSECTICIDE	lb	Azinphos-methyl
61282-38	HOPKINS COV-R-TOX ENCAPSULATED WARFARIN - 50% TECHNICAL	lb	Warfarin
61282-39	HOPKINS WARFARIN TECHNICAL RODENTICIDE	lb	Warfarin
13808-8	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
33858-2	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
35975-2	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
35978-1	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
39260-1	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
39508-1	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
56228-15	M-44 CYANIDE CAPSULES	lb	Sodium cyanide
56228-32	M-44 CYANIDE CAPSULES ARCTIC FOX	lb	Sodium cyanide
10707-10	MAGNACIDE B MICROBIOCID	lb	Acrolein
10707-9	MAGNACIDE H HERBICIDE	lb	Acrolein
7173-174	MAKI TECHNICAL	la	Bromadiolone
7946-11	MAUGET INJECT-A-CIDE B	lb	Dicrotophos
10163-252	MESUROL 75 WDG	lb	Methiocarb
10163-229	MESUROL 75% CONCENTRATE	lb	Methiocarb
56228-33	MESUROL 75% WETTABLE POWDER AVERSIVE CONDITIONING EGG TREATMENT	lb	Methiocarb
10163-231	MESUROL 75-W	lb	Methiocarb
10163-230	MESUROL TECHNICAL INSECTICIDE	lb	Methiocarb
100-530	METHIDATHION TECHNICAL	lb	Methidathion
10163-245	METHIDATHION TECHNICAL	lb	Methidathion
5481-9041	MOCAP EC NEMATOCIDE - INSECTICIDE	lb	Ethoprop
279-2862	NIAGARA FURADAN 75 BASE	lb	Carbofuran
5481-8980	PHORATE 20 G	lb	Phorate
9779-293	PHORATE 20-G	lb	Phorate
5481-8979	PHORATE TECHNICAL INSECTICIDE	la	Phorate
83100-28	ROTAM METHOMYL 90SP INSECTICIDE	lb	Methomyl
81598-9	ROTAM METHOMYL TECHNICAL	lb	Methomyl

EPA Reg No.	Product Name	WHO Mixture Class	Chemical Name
7173-75	ROZOL RODENTICIDE TECHNICAL POWDER	la	Chlorophacinone
72500-15	SLN PHARMACHEM WARFARIN	lb	Warfarin
5481-561	SMARTCHOICE 5G	lb	Chlorethoxyphos
35975-4	SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR	lb	1080
35978-8	SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR	lb	1080
39508-2	SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR	lb	1080
46779-1	SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR	lb	1080
56228-22	SODIUM FLUOROACETATE (COMPOUND 1080) LIVESTOCK PROTECTION COLLAR	lb	1080
36029-14	STRYCHNINE ALKALOID N.F.	lb	Strychnine
27995-1	STRYCHNINE ALKALOID N.F. POWDER	lb	Strychnine
37259-1	STRYCHNINE ALKALOID NFX	lb	Strychnine
5481-9031	TEBUPIRIMPHOS TECHNICAL	la	Phostebupirim
12455-88	TECHNICAL BRODIFACOUM	la	Brodifacoum
12455-70	TECHNICAL BROMADIOLONE	la	Bromadiolone
12455-92	TECHNICAL BROMETHALIN	la	Bromethalin
12455-25	TECHNICAL DIPHACINONE	la	Diphacinone
61282-1	TECHNICAL DIPHACINONE	la	Diphacinone
12455-26	TECHNICAL WARFARIN	lb	Warfarin
100-1015	TEFLUTHRIN TECHNICAL	lb	Tefluthrin
264-330	TEMIK BRAND 15G ALDICARB PESTICIDE	lb	Aldicarb
5481-526	THIMET 10-G SOIL AND SYSTEMIC INSECTICIDE	lb	Phorate
5481-527	THIMET 15-G SOIL AND SYSTEMIC INSECTICIDE	lb	Phorate
5481-530	THIMET 20-G	lb	Phorate
5481-528	THIMET MC - 85 FOR MANUFACTURING PURPOSES ONLY	la	Phorate
5481-529	THIMET TECHNICAL FOR MANUFACTURING PURPOSES ONLY	la	Phorate
352-532	VYDATE C-LV INSECTICIDE/NEMATICIDE	lb	Oxamyl
352-372	VYDATE L INSECTICIDE/NEMATICIDE	lb	Oxamyl
69826-1	WARFARIN TECHNICAL	lb	Warfarin
3282-32	WINCON WARFARIN TECHNICAL	lb	Warfarin
61282-3	ZINC PHOSPHIDE 93	lb	Zinc phosphide

NOTE: WHO classification is based on acute risks to human health.
Class la = extremely hazardous, Class lb = highly hazardous.

Safe and Fair Working Conditions

Note: All local, state, and federal employment labor laws are followed in all Food Alliance certified operations.

Minors, Children and Family Members in the Workplace

Level 1: Employer can show they comply with laws regarding employment of minors. Check if applicable:

- Employer has no policy or procedure regulating non-employees access to the workplace.

Level 2: Employer can show they comply with laws regarding employment of minors. Family members may visit the workplace, if deemed safe. Producer/manager can describe the means of providing a safe environment for children under 12.

Level 3: A written policy is in place supporting the ability of family members to visit the workplace if deemed safe; however, the policy states that children of the farm family (under age of 12) must be supervised when around the workplace area and fields. At least 2 of the following apply:

- Employer only employs legal minors during non-school hours.
- Employer has special training for minors and/or farm family's children.
- Employer communicates with parents of minors regarding the employment of their children.
- Employer provides childcare for employees' children.
- Trains supervisors on the special management needs of minors.
- Other (please specify):

Note: If the operation does not employ minors, that can count as 2 items under "Other".

Level 4: As per Level 3 and a total of 4 from Level 3 apply.

Score:

Verification methods and notes:

Grievance Procedures and Policies

Level 1: Management has no policy and makes no suggestions to employees that they may raise grievances.

Level 2: A management policy exists that allows/encourages employees to raise concerns, safety issues, or grievances without fear of termination. At least one of the following apply:

- The policy is verbally communicated to employees either at the time of hire or implementation.
- Employees are directed to a designated individual with whom to raise concerns/ grievances.
- If needed, employer can speak with employee in native language, or someone on staff is available to translate.

Level 3: As per Level 2 and at least 2 options from Level 2 apply, and the policies are communicated in writing. All the following apply:

- The policy is accompanied by a set of procedures that describes how grievances or concerns will be handled.

- Employees are given the name of the person with whom to file the grievance.

Level 4: As per Level 3, and the employer takes steps to encourage and get feedback regularly from employees. Employer schedules meetings to communicate with employees about their concerns or has an open-door policy in writing.

Score:

Verification methods and notes:

Recognizing and Supporting Employee Input for Workplace Improvement.

Note: Inspectors can give half points here if employer is encouraging employee input, but the policy is not necessarily in writing. Provide notation.

Level 1: Employer or producer/manager discourages employees from forming groups or discussing issues.

Level 2: Employer or producer/manager verbally encourages employees to discuss work place issues.

Level 3: As per Level 2, and employer or producer/manager has a policy in writing encouraging employees to develop ideas for improving the workplace.

Level 4: As per Level 3, and the operator supports group activities with space for meeting and/or time set aside during the workday for meetings.

Score:

Verification methods and notes:

Farm Worker Support Services

Level 1: When approached by employees or third-party representatives, employer is not receptive. Employer communicates this non-receptiveness to the inspector.

Level 2: Employer works with groups of employees or third-party representatives (any person representing a group or organization dedicated to welfare, safety, labor unions, legal services, etc.) to improve workplace conditions. At least 2 of the following apply:

- Employer meets with union representatives when asked to do so by the employees.
- Employer meets with community groups to discuss health and welfare.
- Employer cooperates with groups to build workplace productivity.
- Employer cooperates with groups to identify training needs.
- Employer cooperates with groups to identify safety concerns.
- Employer has addressed the recommendations of third-party representatives.
- Other

Level 3: Employer has a written policy communicating openness to working with third party representatives and/or groups of employees.

Level 4: As per Level 3, and the policy describes a timeline or process for responding to recommendations made by third party representatives.

Score:

Verification methods and notes:

Discipline Process

Level 1: There is no policy or procedure in place requiring a uniform disciplinary process that maps out the steps that may lead to termination. When terminations occur, it involves no process of coaching to improve performance.

Level 2: There is a written policy in place but is not distributed to producer/managers. Firing may take place at the will and by the terms of the producer/manager.

Level 3: As per Level 2 and written policy is distributed to new hires and given to all producer/ managers. Firing of an employee comes at the end of a stepped, progressive discipline process.

Level 4: As per Level 3, and all producers/managers are trained to implement policy uniformly. The policy must describe a process to improve performance problems.

Score:

Verification methods and notes:

Nondiscrimination Policy

Level 1: Employer has no written policy claiming non-discrimination practices consistent with the law are in effect.

Level 2: Employer has a written policy describing non-discrimination practices consistent with the law. The following items are discussed (at least 2 of the following apply):

- Age
- Race
- Third party affiliation

- Religion
- Gender
- Sexual orientation
- National origin
- Disability
- Other (please specify):

Level 3: As per Level 2 and a total of at least 4 options from Level 2 apply, and employer provides training for producer/managers for implementing non-discrimination policy.

Note: If an owner is also the producer/manager, his/her own training applies here.

Level 4: As per Level 3 and employer extends training to employees.

Score:

Verification methods and notes:

Hiring Practices and Communication of Expectations and Policies

Level 1: Employer does not communicate with employees about job expectations or workplace policies.

Level 2: Employer verbally communicates job expectations and policies at the time of hire.

Level 3: Employer gives new hires a workplace policies document. At least 3 of the following apply:

- This written document is in both English and applicable language for non-English speakers.
- New employees are given a sign-off sheet acknowledging receipt of the policies.
- New employees are given a sign-off sheet describing job expectations.
- New employees are given a sign-off sheet detailing the terms of employment (pay rate, work day, and length of employment).
- Employer gives some limited job training and orientation specific to the task.
- Employer has an orientation checklist that is kept on file to keep a record of the orientation/training activity.
- Shows educational materials such as videos, manuals, etc., for safety and/or tasks specific to the jobs.
- Employer has taken a cultural sensitivity class in order to better relate with employees.
- Other (please specify):

Level 4: As per Level 3, and a total of at least 5 options from Level 3 apply. Employer offers employees a written employee contract detailing terms and conditions of employment.

Score:

Verification methods and notes:

Work Force Development and New Skills Training

Note: For seasonal laborers doing unskilled tasks, this criterion is non-applicable. It does apply for seasonal laborers performing skilled tasks.

Level 1: Employer provides no training opportunities for employees.

Level 2: Employer allows limited unpaid leave for employees to pursue training.

Level 3: Employer encourages workplace training by providing direct pay or paid time off or tuition for job related educational activities.

Level 4: As per Level 3, and employer offers direct pay or paid leave and tuition to employees for training relevant to required tasks.

Score:

Verification methods and notes:

Compensation Practices

Level 1: Employer can show they meet federal laws for pay period at least every month and meets minimum wage laws where applicable required documentation can support. Employer has a system to track piece rate to ensure minimum wage is met. Employer keeps records on each employee.

Level 2: As per Level 1 and employer has a progressive compensation system. At least 1 of the following applies:

- Employer adjusts piece rates to reward seniority or performance, or changing crop conditions.
- Employer gives bonuses to reward productivity of the group.
- Employer shares profits.
- Employer distributes work opportunities fairly, not giving favorite workers best opportunities.
- Average wage for non-management employees is above minimum wage.
- Employer conducts regular performance evaluations, rewarding good performance with pay raises.
- If employer gives pay advances to employees, they have system to communicate the expectations to prevent confusion on the part of the employee.
- Employer gives bonus wages to reward excellent work.
- Other (please specify):

Level 3: As per Level 2, and employer uses a total of 4 options from Level 2.

Level 4: As per Level 3, and employer uses 5 or more options from Level 2.

Score:

Verification methods and notes:

Employee Benefits

Note: Non-applicable for seasonal-only labor. Seasonal-only labor must be verified.

Level 1: Employer provides unemployment and/or workers compensation insurance.

Level 2: Employer provides at least 2 of the following benefits:

- Health insurance
- Disability insurance
- Life insurance
- Subsidizes cost of or provides transportation to employees
- Arranges for community groups to provide assistance to workers
- Sick pay
- Vacation pay
- Reduced cost housing for full time employees
- Housing allowance, special compensation to cover housing costs
- Migrant worker/temporary worker housing at reduced rates
- Employer gives bonus wages to reward excellent work
- Other (please specify):

Level 3: Employer provides a total of at least 4 benefits from Level 2.

Level 4: Employer provides a total of at least 5 benefits from Level 2.

Score:

Verification methods and notes:

Family Support Services and Worker Housing

Level 1: Employer provides no referrals, services, and/or housing to employees.

Level 2: Employer provides housing **and** housing meets legal standards, and/or employer refers workers to community resources for information concerning health and welfare, housing, and/or other social services information. At least 1 of the following applies:

- Employer keeps a list of community resources to give to employees.
- Employer keeps a list of housing opportunities to give to employees.
- Employer offers childcare services or stipend.
- Employer participates at a high level (leadership, donations, etc.) in community groups dedicated to increasing housing opportunities.
- Employer donates money and other resources to local housing groups.
- Other (please specify):

Level 3: As per Level 2 and a total of 2 items from Level 2 apply, if housing not provided.

Level 4: As per Level 3 and at least 3 items from Level 2 apply, if housing not provided.

Score:

Verification methods and notes:

Pesticide Handler/Applicator Safety

Note: If pesticides and solvents are not used this criterion is scored as N/A.

Level 1: Producer/manager can show that all legal requirements are met for protection of handler/applicators and others who handle hazardous materials including pesticides, fuel, lubricants, solvents, etc., including protective equipment, re-entry and pre-harvest intervals and posting appropriate signage.

Level 2: As per Level 1 and all the following apply for pesticide applicators: (Level 2 automatically attained if no pesticides are used.)

- All workers are closely supervised by a licensed pesticide applicator.
- All workers have taken a pesticide application training course.

Level 3: As per Level 2 and at least 3 of the following apply:

- Emergency eye washing facilities are provided near storage, mixing/loading, and/or application sites.
- Showers and changing rooms are provided near storage, mixing/loading, and/or application sites.
- Spare clean clothing is provided near storage, mixing/loading, and/or application sites.
- Protective clothing is used and cared for properly (e.g., laundered as soon after use as possible, laundered separately from household wash).
- Respirator training and fitting.
- Respirators/cartridges are kept in protective packaging.
- Respirator pads/cartridges are changed regularly.
- Pesticide applicators applying highly toxic chemicals (e.g., pesticides labeled “Danger”) are equipped with powered filtered-air respirator systems and/or positive pressure caps.
- When applicable, workers handling solvents etc., with potential to cause injury, are provided appropriate safety equipment.
- Other (please specify):

Level 4: As per Level 3 and at least 4 options from Level 3 apply.

Score:

Verification methods and notes:

Hazardous Materials Emergency Management

Note: Inspectors need to know how spills are handled. Provide notation. Supplies needed include absorbents, booming materials, trash bags, rubber boots and gloves, eye protection, and/or respirators.

Level 1: Producer/manager can show that all state/provincial, federal, and local legal requirements (if applicable) are met for emergency management of spills, fires, or other emergencies related to hazardous materials.

Level 2: As per Level 1 and any spills in storage, mixing/loading, vessels, or application sites are cleaned up promptly. As an indicator, spill response kits/equipment (can be as simple as absorbent materials, i.e., kitty litter in upland areas, bilge pads, and extra absorbent pads in vessels) are readily available where hazardous materials are stored, mixed, or used. Materials used to clean up spills are disposed of properly.

Level 3: As per Level 2, and emergency washing facilities (this can include the operator's home) such as showers, eyewash, and spare clean clothing are provided near storage, mixing/loading, and application sites. Two of the following apply:

- Producer/managers have current HAZWOPER (Hazardous Waste Operations and Emergency Response Standard) certification or demonstrate similar training.
- Spill kits and plans are in place to address farm spills/leaks to prevent substances entering the environment.
- Hazardous materials are promptly and properly disposed of (e.g., materials in derelict/defunct equipment).

Level 4: As per Level 3, and a written emergency management plan (see farm safety policy) is available. Plan includes at least 5 of the following:

- Identification and phone numbers for persons who should be contacted.
- Procedures and equipment to be used.
- Copies of complete labels and MSDS sheets of hazardous materials used.
- Location of fixed storage sites.
- Policies requiring training for those who work with or around hazardous materials.
- Location of booming and other marine spill containment devices/resources.
- Other (please specify):

Score:

Verification methods and notes:

Sanitation

Note: For operations relying on boat access the following is only needed in shop areas, at company-controlled boat access points and at floating facilities where workers are expected to stay for extended periods (+3 hours). Marine portable toilets and hand sanitizers are acceptable on floating structures.

Level 1: Producer/manager can show that employees follow all state/provincial and federal upland and marine sanitation laws and regulations, and all the following apply:

- Employers provide clean drinking water and clean latrines with hand washing stations to workers.
- Hand washing stations or facilities have soap and water or hand sanitizer.
- If holding tanks are used, they are pumped out according to by law.
- Upon inspection, all facilities are clean.

Level 2: As per Level 1 and 1 of the following applies:

- Employer provides a shower facility with warm water for employees to wash and change after the workday. (This can include the operator's home.)
- Hand washing stations or facilities have *hot* water and soap.
- Employer maintains a checklist of station/facility cleaning at least weekly.
- Other (please specify):

Level 3: As per Level 2 and at least 2 options from Level 2 apply.

Level 4: As per Level 3 and at least 3 options from Level 2 apply.

Score:

Verification methods and notes:

General Safety

Level 1: Producer/manager can describe how employees follow all state/provincial and federal upland and marine safety laws (including diving) and regulations and all the following apply:

- Employers provide safety training.
- Overtime and number of days worked continuously are limited by safety considerations.
- Employees wear a personal floating device (PFD) while on floating systems or vessels.
- Vessels are properly lit during nighttime operations.
- Employees are equipped with communications devices (e.g., cell phones, VHF radios) while on vessels/floating systems that can be used at and in transit to work sites.
- At sites only accessed via vessel, a vessel is left with employees while they are at the site.
- Crews are trained to manage overboard and onboard emergencies.

Level 2: As per Level 1, PFD's are checked by owner's manual specifications, first aid kits are available, and 1 of the following applies:

- Employer contracts with professional firms to provide safety/first aid training. Training can be documented.
- Employer has developed training checklists specific to jobs to ensure each employee gets training. Training checklists can be displayed.
- Employer sets goals for safety and tracks success. Documentation is provided.
- Employer gives bonuses when safety goals are met. Documentation is provided.
- Other (please specify):

Level 3: As per Level 2 and at least 2 options from Level 2 apply.

Level 4: As per Level 3 and at least 3 options from Level 2 apply.

Score:

Verification methods and notes:

SCORECARD

Fish and Wildlife Habitat Conservation	Score/Level
Continuing education for fish and wildlife habitat conservation	
Habitat conservation improvements	
Invasive species management	
Nuisance species management	
Threatened and endangered species protection (upland and aquatic)	
Fish and wildlife food, cover, habitat structure and water	
Linking individual wildlife habitat conservation activities together	
Total points earned	
Total points available	28
Total points N/A	
Total applicable points	
Average score	

Healthy and Humane Care for Shellstock	Score/Level
Planting and production plan	
Carrying capacity management	
Disease prevention and management	
Transportation (nursery and growout)	
Hazard reduction and sanitation (growout)	
Total points earned	
Total points available	20
Total points N/A	
(Total points available) - (Total points N/A) = Total applicable points	
(Total points earned)/(Total applicable points) = Average score	

Shared Resource management	Score/Level
User relations	
Farm-site boundaries	
Marine operations and navigation	
Farm equipment maintenance and material reduction	
Total points earned	
Total points available	16
Total points N/A	
(Total points available) - (Total points N/A) = Total applicable points	
(Total points earned)/(Total applicable points) = Average score	

Soil and Water Conservation	Score/Level
Continuing education for soil and water conservation	
Buffer strips and sensitive habitats	
Upland/near-shore resource management	
Total points earned	
Total points available	12
Total points N/A	
(Total points available) - (Total points N/A) = Total applicable points	
(Total points earned)/ (Total applicable points) = Average score	

Integrated Pest, Disease and Weed Management, and Pesticide Risk Reduction	Score/Level
Continuing education for reducing pesticide usage	
IPM planning (upland)	
Site monitoring/field scouting (upland)	
Weather monitoring	
Lowest effective application rates/reducing application rates (upland)	
Pesticide selection and justification (upland)	
Pesticide recordkeeping	
Application equipment calibration and pesticide drift management	
Hazardous material storage	
Total points earned	
Total points available	36
Total points N/A	
(Total points available) - (Total points N/A) = Total applicable points	
(Total points earned)/(Total applicable points) = Average score	

Safe and Fair Working Conditions	Score/Level
Minors, children and family members in the workplace	
Grievance procedures and policies	
Recognizing and supporting employee input for workplace improvement	
Farm worker support services	
Discipline process	
Nondiscrimination policy	
Hiring practices, and communicating expectations and policies	
Workforce development and new skills training	
Compensation practices	
Employee benefits	
Worker housing and family support services	
Pesticide handler/applicator safety	
Hazardous materials emergency management	
Sanitation	
General safety	
Total points earned	
Total points available	60
Total points N/A	
(Total points available) - (Total points N/A) = Total applicable points	
(Total points earned)/(Total applicable points) = Average score	

Evaluation Summary

No GMO breeds or cloned animals are used	<input type="checkbox"/> compliance verified
No Prohibited Pesticides are used	<input type="checkbox"/> compliance verified
No hormones are used	<input type="checkbox"/> compliance verified
No sub-therapeutic antibiotics are used	<input type="checkbox"/> compliance verified
Continual improvement (re-applicants only)	<input type="checkbox"/> compliance verified
Fish and Wildlife Habitat Conservation	Score: _____
Healthy and Humane Care for Shellstock	Score: _____
Shared Resource Management	Score: _____
Soil and Water Conservation	Score: _____
Reducing Pesticide Usage	Score: _____
Safe and Fair Working Conditions	Score: _____

Acknowledgements

The evaluation criteria included in this inspection tool were developed using information from many sources, including*:

- British Columbia Ministry of Agriculture, Food and Fisheries, “BC Shellfish Aquaculture Code of Practice”, Final Submission, July 03, 2002.
- National Organic Standards Board (NOSB), Livestock Committee, “Recommendation on 205.257 Molluscan Shellfish Standards,” Sept 9, 2009.
- Pacific Coast Shellfish Grower’s Association” Environmental Codes of Practice for the Pacific Coast Shellfish Farmers”, Jan 2009.
- Sustainable Shellfish, “Recommendations for responsible aquaculture”, Heather Deal, David Suzuki Foundation, 2005.
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*Not all practices from these sources were incorporated into the final draft of these evaluation criteria, so acknowledgement of their use does not constitute an endorsement of these criteria.

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**Not all reviewer comments and suggestions were incorporated in the final draft of these evaluation criteria, so recognition of their contribution does not constitute an endorsement.

Document Review:

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