



The Equitable Food Initiative Pest Management Standards, Guidance, & Interpretations

VERSION 3.0, OCTOBER 1ST, 2023

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Responsibility for these Requirements

The EFI Standards Committee has responsibility for this document and will periodically review and update it.

Users should verify that they are using the latest version by checking on the EFI website at:

www.equitablefood.org.

Versions Issued

Version No.	Date	Description of Amendment
EFI Standard June, 2013	June, 2013	First public-facing version of the EFI Standard.
EFI Compliance Criteria_v1.0	January 24, 2014	First public-facing version of the EFI Compliance Criteria.
EFI Compliance Criteria_v1.1	June 30, 2014	Substantial Revision to Criteria Language.
		The EFI Standard June 2013 and EFI Compliance Criteria_v1.1 (both now obsolete) have been merged and new classifications applied to what constitutes the Standards, Guidance and Interpretations.
EFI Standards_v1.2	January 1, 2015	Additional guidance on the relationship between conformance with the Standards and compliance with the law has been added to the introduction. No changes to the content of the indicators or, what was formerly called, the compliance criteria have been made.
EFI Standards, Guidance, & Interpretations_v1.3	September 20 th , 2017	New language for FC 1.1 & 1.2 has been added that shifts the Fair Compensation Standard away from a wage floor in favor of a mechanism for a price premium from the sale of certified product to flow from the buyer through the Grower to Farmworkers. Copy edits were made to improve the clarity of the document. The meaning or intent of the Standards, indicators, or guidance was not changed.

Version No.	Date	Description of Amendment
EFI Pest Management Standards, Guidance, & Interpretations_v2.0	November 30 th , 2018	<p>Separated from the EFI Standards, Guidance, and Interpretations as the EFI Pest Management Standards, Guidance, and Interpretations.</p> <p>No other changes have been made.</p>
V3.0	October 1 st , 2023	<p>New language to PM 1.1, indicator and guidance on eight elements identified that addresses practices used to prevent and avoid pest problems. PM 1.3 Expanded IPM Plan requirements and added information to guidelines.</p> <p>Added PM 1.5 requirements and guidelines for documenting pest management activities.</p> <p>Added PM 1.6 requirements and guidelines for planting of hedgerows.</p> <p>Additional guidance added to PM 2.2 on risk mitigation measures taken when using highly hazardous fumigants.</p> <p>Added PM 2.5 with requirements and guidelines to ensure correct application pesticides according to Application Exclusion Zone (AEZ)</p> <p>Added SM 1.3 requirements and guidelines for equipment calibration of fertilizer and pesticide application equipment.</p> <p>Added SM 1.4 requirements and guidelines for using the Cool Farm Tool for soil health improvement and greenhouse gas emissions.</p> <p>Added WM 1.3. requirements and guidelines on monitoring and calculation of water use efficiency.</p>

About the Equitable Food Initiative (EFI)

EFI is a non-profit skill-building and certification organization that brings growers, farmworkers, retailers, and consumers together to create a safer, more equitable food system. This unique approach sets standards for labor practices, food safety and pest management while engaging workers at all levels to address issues and challenges in the produce industry.

Our Mission Statement

To bring together growers, farmworkers, retailers and consumers to transform agriculture and the lives of farmworkers.

We Believe:

- That being a farmworker is a valuable and honorable profession.
- The skills and contributions of farmworkers create a healthier work environment and produce safer food.
- The future of agriculture lies within the collaboration among growers, farmworkers, retailers and consumers.
- By transforming agriculture, we will transform lives.

Introduction

The purposes of the EFI Pest Management Standards, Guidance, and Interpretations [this document] are:

1. To provide standards and indicators that must be conformed to in order to receive and maintain EFI certification;
2. To provide guidance and interpretations for auditors, growers, and Leadership Teams (LTs) on each indicator in order to add clarity to the required performance thresholds and to increase the quality and consistency of the auditing and certifying process; and
3. To provide transparency so the EFI certification program has credibility with stakeholders.

Growers should read this document in conjunction with EFI's Certification Program Summary. Certifying Bodies (CBs) should read this document in conjunction with the EFI's Certification Program Requirements and Certification Program Summary.

Scope

This document covers the requirements of the EFI certification program that have direct impact on how conformity to the EFI Pest Management Standards are determined through the auditing and certifying process.

Guidance & Interpretations

The Guidance & Interpretations in this document are intended to set clear expectations for growers, LTs, and auditors about how conformance with an indicator can be met and measured.

EFI Requirements and Legal Compliance

The EFI standards and indicators establish and describe requirements to be carried out by participating growers, as well as other participants in the EFI system, that are in addition to those required by laws and regulations issued by governments. Neither an employer's policy stating that it will comply with laws and regulations nor actual compliance with laws and regulations will constitute proof of compliance with the EFI requirements when those requirements differ from, augment and/or exceed those in laws and regulations. Thus, under the EFI system, employers are required to comply with applicable laws and regulations regarding terms of employment, but, in addition, are required to comply with terms of employment which may augment and/or exceed what is required by laws and regulations. Consequently, for example, an audit under the EFI system may conclude that an employer complied with what is required by state or federal law, but may conclude that the employer is out of conformance with the EFI's requirements and such nonconformance must be corrected. Accordingly, the approval, implementation and verification of corrective action plans will be based on a grower's compliance with EFI requirements and not merely on compliance with, or policies that are consistent with laws and regulations.

Pest Management Standards	Guidance and Interpretations
Pest Management (PM)	
Integrated pest management, or "IPM," is the basis for all pest management decisions. IPM is a process used to solve pest problems while minimizing risks to people and the environment. IPM focuses on long-term prevention through ecosystem management. Fundamental to IPM is regular monitoring to correctly identify all potential pests and determine if they are present at levels that represent a real economic threat in terms of crop yields or quality. If warranted, the most effective management approaches involve the use of different methods (biological, cultural, physical, or, as a last resort, chemical controls) in combination rather than separately.	
Standard PM-1 Pesticide use is minimized by identifying and implementing non-pesticide measures. Pesticide risk is reduced by identifying and implementing reduced-risk pesticide options and mitigation strategies.	

PM 1.1	A current IPM plan, which through the eight elements identified in the guidance, addresses practices used to prevent and avoid pest problems and control measures for key pests that might require intervention to produce a successful crop.	<p>A document review shall verify that there are current IPM crop-specific plans, which address:</p> <ol style="list-style-type: none"> 1. Typical pest problems; 2. Preventative practices that reduce the likelihood of such problems; 3. Techniques for early identification and monitoring of pest problems; 4. Use of monitoring results and economic thresholds (where available) to inform pest management and pesticide application decisions; 5. Criteria for choosing among non-chemical and chemical pest management methods; 6. Risk analyses of potential pesticide treatments using the online PRT tool; 7. Potential mitigation strategies for any high risks that are identified in the PRT analysis; and 8. Applicable mitigation strategies are listed for any pests at risk of developing resistance to pesticides.
PM 1.2	If the Grower contracts with an outside pest control advisor (PCA) for pest management plan development and implementation, the licensed PCA is trained in IPM and economically independent from any pesticide company.	<p>A document review shall verify that outside PCAs involved in the IPM plan development and implementation are:</p> <ol style="list-style-type: none"> 1. Licensed and trained in IPM; and 2. Independent from pesticide manufacturers and retailers through a signed statement.
PM 1.3	The IPM Plan includes a risk analysis using the Pesticide Risk Tool (PRT, www.pesticiderisk.org) for all pesticides applied after the final harvest of the previous season or most recently audited period through to the audit date. The PRT is used to minimize higher risk pesticide applications.	<p>A document review shall verify that all crop protection materials used have been included in an analysis generated through the Pesticide Risk Tool (PRT).</p> <p>If a grower has a "high risk pesticide application" (HRPA) in any given year, a document review shall verify that a root cause analysis has been conducted and a correction action plan has been implemented to minimize the risk of a second consecutive HRPA.</p> <p>Management interviews and/or a document review shall verify that the grower and the PCA have reviewed the IPM plan and the specific circumstances attendant to each HRPA in the previous year(s) to develop pest management strategies that are intended to minimize their reoccurrence. A HRPA is defined as a single pesticide application that is rated "High" on 4 or more indices using the Pesticide Risk Tool.</p>
PM 1.4	A written drift management plan details practices and standards in place to minimize off-target movement of pesticides through the air.	A review of the written Drift Management Plan shall verify that it details practices to minimize off-target movement of crop protection materials through the air.
PM 1.5	The grower shall document pest management activities carried out in accordance with the current IPM plan.	<p>A document review shall verify that the pest management activities were carried out consistent with the current IPM plan and explanations given for any deviations. Information provided may include:</p> <ol style="list-style-type: none"> 1. Preventative practices for expected pests; 2. Monitoring data for potential pest (including incidence of parasitization), and natural enemy populations. 3. Decision criteria (e.g., reference to economic thresholds, if available) for taking active measures to mitigate pest problems; 4. Specific pest management methods employed in response to decision criteria; and 5. Implemented resistance management plan, if needed.

PM 1.6	Over the 3-year EFI certification cycle, the grower will progress toward achieving a minimum of 3% of total outdoor productive acreage planted in hedgerows, other perennial perimeter plantings, or other habitat used to support pollinators, natural enemy populations, or to support soil health.	A record review and visual observation shall verify that at least 3% of land the grower owns, operates and/or invests in is dedicated to habitat for pollinators and natural enemies and/or to support soil health. The grower shall report annual progress toward the 3% goal. Auditor should note that this standard can be met without taking any land out of production if the grower plants on unused land outside but adjacent to productive land. If the grower is limited due to commercial obligation from complete conformance, then case by case variances will be considered.
Standard PM-2 Conventional pesticides are applied consistent with the IPM plan.		
PM 2.1	All pesticide applications are supervised by a licensed private applicator according to manufacturer's instructions in compliance with pesticide regulations in the country of production and country of distribution.	A document review shall verify that all pesticide applications have been supervised by a licensed applicator according to manufacturer's instructions in compliance with pesticide regulations in the country of production and country of distribution.
PM 2.2	Additional risk mitigation measures are taken if highly hazardous fumigant pesticides are used.	A document review shall verify that each application of fumigants has written justification for why it was necessary and evidence that EPA-guidance on fumigant protections (https://www.epa.gov/soil-fumigants/implementing-safety-measures) was followed including, but are not limited to: 1. A written site-specific fumigant management plan completed before fumigation begins (https://www.epa.gov/sites/default/files/2013-10/documents/sfm-phase2-sitespec-mgmt-plans-2012.pdf). 2. Handlers are fit-tested for respirators and trained to use them. 3. For tarp removal a minimum of 5 days is allowed between application and tarp perforation and 2 hours between perforation and tarp removal. 4. For post-application reentry, reentry intervals (REIs) must be posted and followed.
PM 2.3	If pesticides are stored on-farm, they are stored in a locked containment area, off the ground, within a secondary containment device or structure. The storage area is located at least 400 feet (125 meters) from any public or private drinking water source and 200 feet (62 meters) from surface water. A spill response/cleanup kit is in the pesticide storage facility.	Visual observation of the crop protection material store and mixing areas shall verify that they are: 1. Locked at all times when not in use; 2. Have sufficient containment capacity to hold the contents of the store plus any reasonably expected rain plus 50%; 3. At least 400 feet (125 meters) from any public or private drinking water source; 4. At least 200 feet (62 meters) from surface water; and 5. Equipped with a spill response/cleanup kit.
PM 2.4	A written emergency response plan is available and posted prominently in areas where pesticides are handled.	A document review shall verify that there is a written Pesticides Emergency Response Plan. Visual observation shall verify that it is prominently posted in all locations where pesticides are handled.
PM 2.5	Pesticide applications are consistent with the Application Exclusion Zone (AEZ) of the U.S. federal Worker Protection Standard. Applications are suspended any time there is a non-applicator person within 100 feet (30.5 meters) of the application regardless of application method.	LTIs and FWIs shall verify that correct AEZs are maintained, and non-applicators are never within 100 feet (30.5 meters) when an application is applied.
Soil Management (SM)		
Standard SM-1 Farm procedures maintain or improve soil quality, protect soil resources, and promote healthy crop production.		
SM 1.1	If applicable, procedures are in place to measure and reduce soil erosion and compaction.	Visual observation shall verify that that soil erosion and compaction is not taking place. In cases where it is, a document review shall verify that mitigation efforts are documented and implemented.
SM 1.2	If using synthetic fertilizers, process details are provided for measuring and optimizing fertilizer use efficiency. This may include use of organic/biological soil amendments and crop rotation.	A review of nutrient application records shall verify that a nutrient application plan, designed to optimize fertilizer use, is implemented and includes calculations of all nitrogen (N) inputs from the end of the previous harvest or previous audit to the audit date.
SM 1.3	Fertilizer and pesticide application equipment shall be calibrated following the schedule and procedures recommended by the manufacturer.	A record review shall verify that fertilizer and pesticide application equipment is calibrated and tested using correct procedures at least as often as recommended by the manufacturer.

SM 1.4	Field operations directly engaged in the production of in-scope commodities shall be assessed using the Cool Farm Tool (CFT) to guide soil health improvements and the reduction of greenhouse gas emissions.	<p>A report review shall verify for field operations that the CFT has been populated with all available data from the end of the last growing season or the previous audit through to the audit date.</p> <p>MTIs shall verify that the output from CFT is being used to consider how to improve soil health and reduce greenhouse gas emissions for field operations.</p> <p>For greenhouse operations, a document review and MTIs shall verify that a plan for reducing energy and greenhouse gas emissions is implemented. Use of the CFT is not required.</p>
Water Management (WM)		
Standard WM-1 Irrigation and other water management practices support the conservation of resources and do not contaminate water.		
WM 1.1	Irrigation practices limit runoff. Grower uses a system of measurement to determine need (e.g., soil moisture level) and use (flow rate) of water to avoid excess use and runoff.	Review of irrigation records and visual observation shall verify that soil moisture and water use is measured, and records are kept.
WM 1.2	If farm has aquatic habitats like rivers, streams, creeks, sloughs, wetlands, or seasonal watercourses, uncultivated buffer strips (preferably of native vegetation) at least 9 feet (2.7 meters) wide are planted between crop fields and moving water habitats.	Visual observations shall verify that uncultivated buffer strips of at least 9 feet wide (2.7 meters) are in place between crops and lakes, rivers, streams, creeks, sloughs, wetlands, or seasonal watercourses.
WM 1.3	Irrigation use is optimized through monitoring and calculation of water use efficiency.	<p>A document review and MTIs shall verify that there is an irrigation optimization strategy that includes the ongoing calculation and improvement of water use efficiency.</p> <p>A document review shall verify that irrigation equipment is maintained, tested, and calibrated per the manufacturer's recommendations.</p>
Worker Involvement – Environment (WI-ES)		
Standard WI-ES-1 Farmworkers are knowledgeable, trained, and empowered to ensure compliance with environmental stewardship standards.		
WI-ES 1.1	As part of pesticide safety training, farmworkers are trained annually on basic concepts of Integrated Pest Management and to the U.S. federal Worker Protection Standard.	FWIs and a review of training materials shall verify that farmworkers receive annual training on basic concepts of IPM and to the U.S. federal Worker Protection Standard.
WI-ES 1.2	Farmworkers are trained to access information on pesticide product names, intended use, active ingredients, product labels, and Material Safety Data Sheets.	FWIs shall verify that farmworkers have been trained on how to access information on pesticide product names, intended use, active ingredients, product labels, and Material Safety Data Sheets.
WI-ES 1.3	Leadership Team is briefed as to on-farm Integrated Pest Management measures and use reduction goals.	LTIs and a review of LT minutes shall verify that the LT has been briefed by management on IPM measures and pesticide use reduction goals.
WI-ES 1.4	Farmworkers are trained on and understand importance of re-entry interval and ensure it is not violated.	FWIs shall verify that farmworkers have been trained on and understand the importance of re-entry intervals and that these intervals are not violated.