A comprehensive and long term strategy focused on the optimization of resources and continuous improvement of Colombian floriculture. Florverde has been developed with a view to improving the competitiveness of Colombian floriculture, and is based on the concept of sustainable development.

Florverde Committee

Antonio Trujillo Céspedes
Juan Manuel Castro Caro
Rafael Umaña
Joaquín de la Torre
Margarita Jáuregui
Tania Chacín
Yimmy Enrique Restrepo
Ana María Acevedo
Piedad Villaneda
Fabiola Varcárcel Calderón
Yovana Caro
Martha Lucía Saza
Ernesto Vélez
Jessica Fernanda Díaz
Katherine Mejía
Mauricio Morales
Efigenia Cala

Augusto Solano Mejía
President

Juan Carlos Isaaza Cassolis
Florverde Director until 2008
Ximena Franco
Florverde Director since 2008

Technical Support
Florverde Team

Hugo Fernando Montero Sánchez
Environmental Projects Coordinator

Jaime Quintero Cardoso
IPM Coordinator

Juan Carlos Rodríguez Jiménez
Information System Coordinator

Patricia Martínez Segura
Occupational Health Coordinator

Ariosto Arévalo Ayala
Human Management Coordinator until 2008
Clara Torres
Human Management Coordinator since 2008

The Florverde standard, as well as other regulatory documents in the Florverde Certification System®, is the result of a joint effort from a wide range of Colombian floriculture stakeholders. Just like our sector, these documents have evolved over time and continue to reflect international trends in this area. We wish to express our sincere thanks to everyone involved in the production of this standard.

ISBN: 978-958-44-3856-0
INTRODUCTION

Asocolflores has created the Florverde® program as a strategic tool to promote sustainable floriculture underpinned by social responsibility, at both company and sector levels. Therefore, the program:

Promotes the adoption of the Florverde® standard, which features best farming practices, minimization of agrochemical products, protection of workers’ rights, high quality products and managerial responsibility among other.

Encourages the adoption of an independent, internationally known certification system which allows access of floral products to international markets.

Promotes participation in the Florverde® information system, which forms the basis for sectoral analysis, diagnosis and action through local measures aimed at improving the sector and region, together with other initiatives.

PROGRAM PRINCIPLES:

- **Workers’ welfare**: establish criteria for a comprehensive management of human resources, with a view to guaranteeing the health of workers, a work climate that respects individuals and promoting their welfare within the workplace while extending it to their families.

- **Environmental protection**: establish criteria for the production of ornamentals with minimum environmental impact, through the application of best farming practices to ensure floriculture is tuned in to its environment.

- **Handling and care of the product**: establish criteria for the handling and care of the product to ensure high quality and guarantee that a product certified by Florverde® is separated from products which are not certified.

- **Managerial responsibility**: promote the commitment from managers to continuous improvement, as well as the development and implementation of the program’s management system.

WHAT THE FLORVERDE® PROGRAM IS

It is a comprehensive strategy that includes two systems:

- **A certification system** based on national and international regulations which generate confidence as to how processes, flowers and ornamentals comply with the requirements of the standard, thus eliminating any possible technical barriers to trade.

- **A sectoral information system** with regard to the performance by companies which participate in the program.
OBJECTIVES OF THE FLORVERDE® CERTIFICATION SYSTEM (FCS):

→ To provide a framework that generates confidence among involved parties as to how Florverde® processes and products comply with standard requirements and other regulatory documents.

→ To be known in the main markets through the harmonization or mutual acknowledgment of equivalent schemes which are prepared to work together.

BENEFITS OF THE CERTIFICATION

Florverde® aims to meet the needs of:

→ Consumers, who will be able to purchase flowers and ornamentals of quality certified by an independent body, and which have been produced meeting high social and environmental responsibility standards.

→ Traders, who will be able to offer flowers and ornamentals of quality certified by an independent body, and which have been produced meeting high social and environmental responsibility standards.

→ Flower growers, who are able to strengthen their internal processes and achieve recognition for their social and environmental responsibility.

→ Society in general, because it can rely on an organized and responsible sector that contributes to the community’s long term wellbeing.

OBJECTIVES OF THE INFORMATION SYSTEM

→ To evaluate the sector’s socio-environmental performance through a series of indicators.

→ To design strategies for social and individual progress and improvement.

→ To give evidence of sector performance and represent it before interested parties.

REGULATORY DOCUMENTS OF THE FLORVERDE® PROGRAM

→ Florverde® Standard: establishes the requirements or criteria the company must meet to obtain Florverde® certification.

→ Florverde® General Regulations: establish the conditions that producers, Asocolflores and certifying bodies approved by Asocolflores must observe.

This document (Standard) is made up of fifteen chapters, each one containing:

→ A justification of the topic in the standard.

→ A table with a summary of the requirements that must be met by the companies that are applying for certification.

→ Level 1, 2 and 3 requirements, as described in Florverde® General Regulations.

BUILDING LOCAL CAPACITY

i) Since 1996, when it was created, Florverde® has reduced the use of agrochemical products, while implementing measures for a more rational use of water, soils and chemicals; waste recycling; compliance
with labor legislation and good working conditions; and enhanced occupational health and safety practices.

ii) The implementation of Florverde® has resulted in positive outcomes for producers, in terms of increased competitiveness and profits. Asocolflores, in turn, has strengthened its vision and experience through Florverde®, as the program requires participants to submit relevant information on each company's social and environmental performance. This way, Asocolflores is able to identify specific needs and design programs that offer solutions to both sector and region.

iii) Through Ceniflores –the Colombian Floriculture Innovation Center– information generated by Florverde® is used to plan innovation and research and thus support the improvement of the sector’s environmental performance.

iv) Florverde® information assists Asocolflores’ Social Development Division in the identification of social needs and the planning of programs to improve the quality of life of workers and their families. Current programs include building capacities for handling conflict in the family, workplace and community, as well as creating jobs for displaced persons and those vulnerable to violence; housing solutions and programs aimed at meeting education needs and childcare facilities for workers’ children.

v) By supporting companies to strengthen social capital building and the development of local capacities, the association consolidates its role as a catalyst for regional development.

TRANSITION TO NEW REGULATORY DOCUMENTS

The current version of the standard (5.1 of 2007) substitutes version 5.0 of 2007.


v) Participants are not able to obtain certification under version 2002 from: 1st of January, 2008.

General Regulations (version No. 4, 2007).

i) Version No. 4 of the General Regulations comes into effect on the 1st of July, 2007, and will apply in companies certified under version 2007, from the moment companies are certified.


For more information on the program, please go to www.florverde.org
1. MANAGEMENT SYSTEM

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Managers' responsibility
Involvement by top management (General Manager and Executives) is essential for the company’s good social and environmental performance.

A clear definition of the areas, positions and lines of authority is essential to good business outcomes as well as to set a sound basis for the definition of responsibilities and lines of authority among personnel. In order to allow every employee to know the basic social and environmental parameters (policies) of the organization, top managers must ensure these are communicated in a clear and explicit way. This, in turn, will allow employees to take into account the company's philosophy when performing their duties.

Further, it is in the interest of every organization to define the specific social and environmental outcomes (objectives and goals) it wants to achieve in the short, medium and longer term. This provides a clear direction in terms of the efforts and priorities. Specific action plans make it easier for employees at several levels to commit to the fulfillment of goals and objectives, within agreed deadlines and with specific resources.

Finally, top management must check whether the company's Socio-environmental Management System is an appropriate one for the fulfillment of social and environmental policies, goals and objectives, and whether it is working as expected. This will allow managers to commit to new tasks and resources that will lead to the continuous improvement of its socio-environmental performance.

Observations and Non-Compliances
Florverde’s social and environmental performance system is preventive in nature. This means that its application is aimed at avoiding non-compliance with or breaches of social and environmental regulations. However, observations or cases of non-compliance are inevitable; these are usually detected by employees or interested parties outside the company who express their concern or lack of satisfaction through complaints or requirements.

The company, therefore, must have in place effective mechanisms and methodologies to deal with breaches to social and/or environmental norms, solve immediately any problems and compensate for possible damages.

Once breaches to norms have been addressed, and depending on their seriousness or frequency, corrective actions must be taken to deal with the causes of the observations or non-compliance, and thus avoid their recurrence in the future. It is advisable for the company to keep statistics of norm breaches so solutions to problems can be prioritized according to their seriousness and/or frequency.

Procedures and formats are useful to streamline methodologies and controls to address breaches in a timely fashion (control of observations or non-compliances), avoid their recurrence (corrective actions) or anticipate potential breaches that have not taken place as yet (preventive actions).
Internal audits
Internal audits can be used in the company as a qualitative assessment tool to measure how the Socio-Environmental Management System is complying with Florverde requirements.

Given that the Socio-Environmental Management System must demonstrate continuous improvement in terms of performance, internal audits are useful to give feedback to those responsible for each of the processes about their performance, so they may be able to commit to specific improvement measures.

Internal audits also allow management to assess the effectiveness of processes designed to meet social and environmental policies, objectives and goals, and as such are an important source of information for reviews by management.

WHAT CAN YOUR COMPANY DO?
Management responsibility
Appoint a Florverde® Program Coordinator who has sufficient authority to ensure the Socio-Environmental Management System works in an effective and efficient way.

Set up a Socio-Environmental Committee with top managers responsible for providing general guidance in this area.

Review the performance of the system to check whether it can meet policies, objectives and goals, as well as to demonstrate good social and environmental performance as the basis for continuous improvement.

Observations and Non Compliances
Define and establish documented procedures that include criteria, controls and formats for handling observations and/or non-compliances.

Train personnel in the use of improvement tools through teamwork, carrying out both corrective and preventive actions.

Establish and put in practice documented procedures of corrective and preventive actions, so as to avoid the recurrence of breaches, or anticipate any possible breaches.

Channel information on observations and non-compliances, as well as on corrective and preventive actions for review by management.

Internal Audits
Select internal auditors among staff, based on a profile previously defined by the company, to be trained in the Florverde® standard and on current internal audit techniques for management systems. Alternatively, internal auditors may be hired on a temporary basis or be staff members of another farm of the same business group, as long as they meet the profile defined by the company.

Establish a documented procedure that defines the criteria for handling internal audits, which also outlines the types of activities, controls and records that must be kept with regard to the completion of the programming, preparation, implementation and reporting stages.
Follow up the fulfillment of commitments agreed upon by those responsible for the processes in order to keep the Socio-Environmental Management System up-to-date and ensure continuous improvement.

Gather information resulting from internal audits and submit it in a consolidated way for review by management.

### 1 MANAGEMENT SYSTEM

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MANAGERIAL RESPONSIBILITY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Is there currently a written, disseminated and well understood socio-environmental policy?</td>
<td>The Socio-environmental committee must define in writing the frequency of meetings and keep meeting records, including commitments, deadlines and staff members responsible for the implementation and maintenance of the company's social and environmental performance.</td>
<td>3</td>
</tr>
</tbody>
</table>
| 1.2 | Has a committee been officially set up with participation from top managers to implement and follow up social and environmental issues? | With regard to its socio-environmental policy the company must:  
   a) Have a written policy, signed by the General Manager and indicating its publication date. It must include commitments in terms of compliance with relevant social and environmental legislation, continuous improvement and its relationship with other interested parties.  
   b) Have available evidence of the activities and means employed to disseminate, promote and evaluate employees’ understanding of the policy. | 3     |
| 1.3 | Are there current socio-environmental objectives and goals and have they been disseminated? | The company must have well defined socio-environmental objective and goals, which must be:  
   a) Documented and show their approval date.  
   b) Defined according to the company’s socio-environmental performance level.  
   c) Consistent with the company's Socio Environmental Policy.  
   d) Measurable.                                                                 | 3     |
| 1.4 | Is there a Socio-Environmental Plan in place? | The company must draw up and implement a Socio-Environmental Action Plan to achieve its goals and objectives in these areas.                                                                                     | 3     |
| 1.5 | Is there a review programmed and carried out by Management? | Management must review the company’s socio-environmental objectives, goals and programs at least once a year and keep evidence of such review.                                                                     | 3     |

OBSERVATIONS AND NON-COMPLIANCES
### INTERNAL AUDITS

| 1.6 | Does the company have a program of inspections, internal audits and/or self-evaluations? | The company must have:  
   a) A program of annual inspections, internal audits or self-evaluations, at least every year.  
   b) Audit or self-evaluation reports.  
   c) Follow-up to audit or self-evaluation outcomes by a representative of management. | 1 |

| 1.7 | Does the company have an internal audit or self-evaluation program? | The company must:  
   a) Handle, control and respond to internal and external observations and cases of non-compliance.  
   b) Keep relevant records. | 1 |
2. BASIC LABOR REGULATIONS

WHY IS THIS OF INTEREST TO YOUR COMPANY?

The productive sector contributes to the creation of wealth and welfare to society and therefore is an essential element of sustainable development. In productive processes in general, and floriculture in particular, the human factor makes production possible. Floriculture is the agricultural activity in Colombia with the highest ratio of labor per hectare (around 16 workers), followed by coffee plantations, with an average of six workers per hectare.

When we find ourselves in a global commercialization process, in which we form part of one same territory -our planet- and in order to export our flowers, businesses must comply, among many conditions imposed by the market, with norms and regulations established by the majority of countries that are members of international organizations. In our case, an example is the International Labor Organization (ILO), which regulates the working relation between employees and employers, and constitutes the basis of subsequent international agreements signed by Colombia, many of which have been incorporated in our Constitution.

But apart from domestic or international laws and regulations, a company must understand that as a business it responds to an ethical and social raison d’être that goes beyond a legal system seeking liberty, dignity and justice as the basic principles of a contractual relationship. Personnel management, labor satisfaction and social welfare, training and occupational health are examples of fields where these basic principles can be applied.

Furthermore, and as the process of implementing different activities progresses, it is necessary to include “best practices” that contribute effectively to a comprehensive management process, greater human development and increased productivity, and to the company’s improved social performance.

WHAT CAN YOUR COMPANY DO?

The human factor is the most important one within organizations and as such must be managed with dignity and equity, leaving no room for discrimination under any circumstance. Further, compensation and risk management systems are aspects that take high priority in the business.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Are all workers over 18 years of age?</td>
<td>The company must prevent the recruitment, under any contract modality, of workers under 18 years of age, as recommended by the ILO.</td>
<td>1</td>
</tr>
</tbody>
</table>
| 2.2 | Does the normal working week have a maximum of 48 hours? | The company must:  
   a) Abide by the ordinary number of working hours established in its internal regulations, within the parameters established by labor legislation, an which in no case may exceed 48 hours in a week.  
   b) In case the working week consists of 48 hours, the company must prove that at least two hours of the working week are devoted for each worker exclusively to training, recreational, sporting or cultural activities, in line with records, timetables and action plans. | 1     |
| 2.3 | Are procedures to deal with disciplinary issues observed? | It is necessary to verify there is a disciplinary management procedure in place and it is being observed  
   a) In accordance with internal labor regulations, as approved by the competent authority.  
   b) Before imposing any sanctions to workers. | 1     |
| 2.4 | Is the maximum limit of 12 hours of overtime per worker per week being observed and is the company authorized by law for this purpose? | The company must provide evidence that it does not exceed the maximum limit of overtime work in a week through:  
   a) The current authorization for extra hours issued by the relevant authority and displayed in two areas of the company.  
   b) Payment records for overtime work, based on pay slips or payroll, without exceeding 12 hours per week.  
   c) Tables recording overtime and signed by the worker, as a sign of acceptance. | 2     |
| 2.5 | Is there due respect for freedom of association and participation by workers? | The company must keep evidence of the existence of one or more mechanisms to ensure respect for the freedom of association and democratic participation by workers, such as:  
   a) Training for workers on social and labor issues, such as rights and obligations.  
   b) A formal system to record claims and complaints filed by workers.  
   c) Documentation of bipartisan committees or participation spaces to promote the improvement of work conditions.  
   d) For companies with collective bargaining mechanisms, verify the negotiation.  
   e) A box for suggestions.  
   f) Other active association mechanisms, such as workers' funds. | 2     |
| 2.6 | Does the company guarantee there is no discrimination, abuse, harassment, obstruction, inequity, or lack of labor protection towards employees? | The company must give evidence that:  
   a) Pregnancy tests are banned during recruitment processes.  
   b) No discrimination due to pregnancy is allowed.  
   c) Workers are hired, remunerated and trained without being discriminated against.  
   d) There is a work harassment prevention mechanism in place, in accordance with internal work regulations.  
   e) Claims or complaints have been given a response or addressed.  
   f) Responses to claims have been disseminated to all personnel.  
   g) Norms for coexistence are promoted. | 1 |
| 2.7 | Are there internal work, hygiene and industrial safety regulations in place and have they been officially approved and published? | The company must give evidence that:  
   a) It has an official document to demonstrate that internal work regulations have been approved.  
   b) Regulations are published in Spanish in two visible areas within company premises.  
   c) Regulations are met. | 1 |
| 2.8 | Is forced labor banned in the company? | The company must prove that:  
   a) Workers decide to join and leave the company on a personal and voluntary basis.  
   b) The company does not retain workers’ personal identification documents for any purposes. |
3. PERSONNEL MANAGEMENT

WHY IS THIS OF INTEREST TO YOUR COMPANY?

From before the moment of recruiting a new employee or contracting with third parties, the personnel area must have a clear idea of the processes involved in recruiting new personnel and those relevant during the time they work in the company. This includes aspects like affiliation to social security, payment of wages and vacation, redundancies, etc. These processes form part of the personnel management area’s core business and when appropriately handled by the company it results in a team committed to the organization’s vision and ready to produce the best results, in line with clients’ needs and the interests of the company.

At the same time, a good performance in this area makes the human resources division an important and timely information tool for decision-making within the company.

WHAT CAN YOUR COMPANY DO?

The human development area in a company is a source of support for the organization and as such must guarantee an excellent quality of the services it offers:

→ As part of its social responsibility and influence, the company must ensure that contractors carry out the same practices in terms of pay and benefits for employees.
→ The efficient management of salary and redundancy payments, including contributions to the social security system and non-tax payments.
→ Compliance with all aspects of the labor relationship until the employee departs from the workplace.
## 3 PERSONNEL MANAGEMENT

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>RECRUITMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 3.1 | Do all employees have a written work contract? | The company must:  
   a) Write work contracts in Spanish for all its workers. Contracts must include at least the following aspects: identification and address of parties to the contract, place where and date when the contract is signed, location where the employee has been hired and where he/she will carry out duties, nature of the work, remuneration, form and frequency of remuneration, contract duration and grounds for termination.  
   b) Keep evidence that a copy of the contract and additional clauses, if applicable, was given to the employee. | 1 |
| 3.2 | Is there a formal filing system with updated files for each of the employees? | The company must:  
   a) Keep updated files of the workers with all the documents that are relevant to the work relationship from the moment the contract becomes effective.  
   b) Keep all documentation safely to avoid their destruction, loss or deterioration. | 1 |
| PAYMENTS AND REDUNDANCIES | | | |
| 3.3 | Does the company make correct and timely payment of salaries, as established in current legislation? | The company must ensure that:  
   a) The worker has signed supporting documents of salary payments (such as receipts, vouchers, payslips, etc.), in line with the conditions established in the contract, which the employee understands.  
   b) Any deductions made to the employee are allowed by labor legislation. | 1 |
| 3.4 | Does the company make correct and timely payments of bi-annual bonuses, interest on redundancy savings and does it advise employees of salary raises? | The company must ensure that:  
   a) It keeps supporting evidence of payments of bonuses and interest on redundancy savings signed by workers (such as receipts, vouchers, payslips, etc.), according to conditions established in the contract.  
   b) Salary raises must be advised in writing whenever they are given. | 1 |
<table>
<thead>
<tr>
<th>3</th>
<th>PERSONNEL MANAGEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO.</td>
<td>CHECKLIST</td>
</tr>
<tr>
<td>3.5</td>
<td>Does the company make correct and timely payments of vacation periods?</td>
</tr>
<tr>
<td>3.6</td>
<td>Does the company make correct and timely payments of social security and non-tax payments?</td>
</tr>
<tr>
<td>3.7</td>
<td>Does the company make correct and timely deposits to redundancy funds?</td>
</tr>
<tr>
<td>3.8</td>
<td>Are workers who earn up to two minimum award wages provided with working gear on time?</td>
</tr>
<tr>
<td>3.9</td>
<td>Is the paperwork required for the withdrawal of partial redundancy savings done in a timely fashion?</td>
</tr>
<tr>
<td>CONTRACT TERMINATION</td>
<td></td>
</tr>
<tr>
<td>3.10</td>
<td>Is the termination of the work contract formalized in accordance with the law?</td>
</tr>
<tr>
<td>CONTROL OF THIRD PARTIES</td>
<td></td>
</tr>
<tr>
<td>NO.</td>
<td>CHECKLIST</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
</tr>
</tbody>
</table>
| 3.11 | Does the company meet its quota of apprentices? | The company must:  
| | | a) Have an approval ruling issued by the relevant authority with regard to the number of apprentices.  
| | | b) Have current apprenticeship contracts, in line with quota. Alternatively, payments in lieu can be made for the totality of the apprentice quota or the existing gap in relation with the number of contracts.  
| | | c) If payments in lieu are made, the company must keep the monthly deposit slips in accordance with the number or apprentices and advise authorities of the payment made, through the appropriate list/payroll. | 2 |
| 3.12 | Are there written contracts for the engagement of third parties? | Contracting third parties requires:  
| | | a) Written and current contracts between the company and each contractor (individual or collective).  
| | | b) Contracts must include at least: Clauses regarding the nature of the tasks, duration, form of payment, type of relationship between contractor and its workers, responsibility regarding social security payments, supply of working gear, compliance with internal hygiene and safety regulations, and a clause about occupational health which includes the provision of PPE (Personal Protection Equipment) by contractors or subcontractors. | 1 |
### 3 PERSONNEL MANAGEMENT

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 3.13 | Are there written contracts or commercial offers with temporary services agencies? | When contracting a temporary service agency the company must:  
   a) Have current written contracts with the temporary services agency or agencies.  
   b) Ensure contracts include at least the following aspects: Clauses regarding the nature of the tasks, duration, form of payment, type of relationship between agency and its workers, responsibility regarding social security and non-tax payments, provision of working gear, compliance with internal hygiene and safety regulations, and a clause about the handling of occupational health and the supply of EPP to temporary workers.  
   c) Accept that the contract of one same temporary worker cannot be extended for more than two (2) terms of six (6) months each, and the company cannot sign a contract with a new temporary services company if the tasks of the original contract are still outstanding.  
   d) Have a copy of the ruling issued by the Ministry of Social Protection, authorizing the agency to offer temporary services.  
   e) Have a copy of the current contractual responsibility insurance policy. | 1 |
| 3.14 | Are there written contracts with Cooperatives or Associated Labor Organizations? | When contracting with cooperatives or associated labor organizations, the company must:  
   a) Have current written contracts with the cooperatives or associated labor organizations.  
   b) Ensure contracts include at least the following aspects: Clauses regarding the nature of the tasks, duration, form of payment, indicate the type of relationship between cooperative and worker, responsibility regarding social security and non-tax payments, supply of working gear and a clause on handling of occupational health that includes the supply of PPE to associated workers.  
   c) Have evidence of approval by the relevant authorities of the compensation and social security schemes.  
   d) Have a copy of the statutes of the Cooperative or Associated Labor Organization. | 1 |
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 3.15 | Is there supervision over social security payments by third parties? | The company must ensure that:  
  a) Internal control mechanisms are established for every third party (permanent contractors, including those of individual services, temporary services companies, cooperatives of associated labor), to allow monthly supervision that all social security and non-tax payments are being made.  
  b) Third party workers carrying out their duties in the company on a daily basis are the same ones listed in payrolls. | 1 |
4. WORK AND SOCIAL WELFARE

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Much of the work in floriculture is manual, with many processes depending on many people. This means the quality of production depends on the human factor and workers must be highly motivated; i.e., identified with, and committed to, the organization’s principles and values.

This is possible, among other factors, thanks to the analysis, dedication and attention the company gives to aspects related to the welfare of its employees while they work in the company. However, the involvement by and concern of company must go beyond the workplace to cover social and family aspects.

The company’s managers and its personnel welfare management division have organizational goals, mechanisms and tools to diagnose, plan, guide, manage, supervise and do follow-up to ensure the employees’ family and social development.

WHAT CAN YOUR COMPANY DO?

The motivation linked to the meaning that workers give to their performance, complemented with welfare services the company can provide, are crucial to the development of a stable contractual relationship, represented among others by the following:

- Provision of adequate facilities for the consumption of food, as well as dressing rooms and lockers.
- Development of labor welfare programs that respond to real and detailed needs of the working population.
- Meeting needs beyond the immediate workplace, such as housing, education for the worker and his or her children, and family relationship issues, inter alia.
# WORK AND SOCIAL WELFARE

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
</tr>
</thead>
</table>
| 4.1 | Are there facilities for food consumption? | The company must ensure that:  
   a) Refectories or canteens have smooth and washable floors, roof and enough tables and chairs for all workers, including contractors.  
   b) Refectories or canteens must be comfortable, clean, and hygienic.  
   c) Heating of food or its consumption is not allowed in areas different to those authorized by the company. |
| 4.2 | Are there dressing rooms and lockers for workers? | The company must ensure that:  
   a) Dressing rooms are divided by sex, have hard and washable floors, are ventilated and kept in clean and tidy conditions.  
   b) There must be enough lockers for all workers, including contractors, to keep their personal belongings. |
| 4.3 | Are there additional benefits for the welfare of workers? | The company gives other benefits to workers such as food and education subsidies, extra-legal bonuses, preparing workers for retirement and other services provided through the workers' fund or other mechanisms. |
| 4.4 | Has the company established a Social Welfare Plan? | The Social Welfare Plan must:  
   a) Respond to a socio-demographic analysis that is both current and written.  
   b) Have an action plan that responds to priority programs.  
   c) Keep records to demonstrate the implementation of activities defined in the action plans.  
   d) Have indicators that allow it to demonstrate the development of the action plans.  
   e) Appoint a professional staff member responsible for the plan. |
| 4.5 | ¿Does the company have projects or actions to support the community in its area of influence? | The company must have evidence of support actions in this area. |
5. PERSONNEL DEVELOPMENT AND TRAINING

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Organizations grow when they facilitate training and development for the people who form part of them. Further, labor costs as presented by companies in their financial statements amount to some 50-60 percent. Why, then, not invest in the area that represents the highest costs to the company?

The contents of the social component through the Florverde® program allow the company to undertake an analysis of its current situation, identify which areas need improvement and design strategies to ensure better management and performance. The process triggered by the program is continuous, defined by the dynamics and capabilities of each particular company, and with due regard for the company’s own timeframes, rhythm, and features. At the same time, improvement is encouraged through periodic evaluations of performance and outcomes.

WHAT CAN YOUR COMPANY DO?

The company must understand Florverde's social component as a strategic element of its core business and as a guide and provider of essential services for all relevant processes.

As part of its core responsibilities, the human resources areas can undertake the following:

→ Develop all the planning, design, implementation and follow-up of training and development programs in line with company requirements.

→ Centralize the coordination, evaluation and supervision of training and development activities throughout the company.

→ Develop evaluation systems to improve and reduce costs in this area while increasing productivity.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1</td>
<td>Is there an assessment of training and development needs for each level in the company?</td>
<td>The company must carry out an assessment of training needs that covers all the employees, duties and hierarchy levels.</td>
</tr>
<tr>
<td>5.2</td>
<td>Is there an induction, training and development program for personnel which responds to the company's internal needs?</td>
<td>The company must have a written action plan or timeline which outlines all the training and development programs carried out in the company, according to each task or area, and which covers at least the following aspects: a) Social and work topics: Policies, rights and duties, rules of coexistence. b) Occupational health and safety. c) Environment. d) Technical training. e) Records must be kept and include: training topic, trainer, date of training, number of hours and number of trainees, together with their signatures.</td>
</tr>
<tr>
<td>5.3</td>
<td>Does the company have the contents of technical training given to employees in relation with the company’s core business?</td>
<td>The company must keep written and updated technical training protocols or contents for tasks carried out as part of the company’s core business.</td>
</tr>
<tr>
<td>5.4</td>
<td>Is there a performance evaluation system and is it applied to the workers in the company?</td>
<td>The company must keep records of workers’ performance evaluations.</td>
</tr>
<tr>
<td>5.5</td>
<td>Is the worker interviewed when leaving the company?</td>
<td>Workers must be interviewed when leaving the company so they can express their opinions about the company or any other aspects. Records of exit interviews to workers must be kept.</td>
</tr>
</tbody>
</table>
6. OCCUPATIONAL HEALTH

WHY IS THIS OF INTEREST TO YOUR COMPANY?

There are basic reasons why companies must take care, through appropriate management, of their employees' quality of life.

Occupational health is fundamentally a moral obligation given that every employee carries out their duties under the premise that their work does not pose a threat to their physical integrity, especially when risks can be avoided.

Occupational health is a social responsibility in as much companies, in order to meet their financial goals, set up processes and activities that create some risks for their workers. For this reason, these companies must have in place control mechanisms to minimize occupational risks.

Occupational health has traditionally been perceived as a legal obligation imposed by society. However, it should rather be perceived as a competitive advantage, with the potential to mark the difference between a company and its competitors.

WHAT CAN YOUR COMPANY DO?

The company must frame Occupational Health as an effective tool to reduce occupational risks factors, through a strong and well organized team, with clear standards and defined goals which respond to the following principles:

→ Each worker in the company should be a safety agent, and incorporate the concept of prevention to thinking processes, and to their will and action through the development of a culture that promotes wellbeing.

→ Base the Occupational Health program on Colombian laws, and permanently update the program to reflect changes in legislation.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>OCUPPATIONAL HEALTH PROGRAM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 6.1 | Is the company's Occupational Health Program updated and documented? | The Occupational Health Program must include:  
a) Policies.  
b) Diagnosis.  
c) Objectives and goals.  
d) Action plans and timelines.  
e) Indicators.  
f) Employees responsible for the program and resources available.  
It must be updated whenever there are significant changes in the productive process. | 1 |
| 6.2 | COPASO | The company must demonstrate that:  
a) The committee is made up of workers’ representatives democratically elected and management representatives.  
b) COPASO is registered before the relevant authority.  
c) COPASO meets periodically and minutes demonstrate there is active participation by members in:  
   - Support for the risk identification process.  
   - Investigation of accidents.  
   - Periodic inspections (notified and not notified).  
   - Training in occupational health regulations. | 1 |
<p>| 6.3 | STAFF MEMBER RESPONSIBLE FOR THE PROGRAM | The person responsible for occupational health in the company must demonstrate relevant skills and competencies through academic degrees or training certificates in occupational health, as well as the capacity to coordinate and direct related activities. | 1 |</p>
<table>
<thead>
<tr>
<th><strong>PREVENTIVE AND WORK MEDICINE</strong></th>
</tr>
</thead>
</table>
| **6.4** | Does the company carry out entry medical examinations? | The company must:  
|  | a) Carry out entry medical examinations.  
|  | b) Guarantee that an aptitude certificate is signed by a doctor, and include his/her medical registration number.  
|  | c) Ensure it covers the cost of entry medical examinations carried out on employees. | 1 |
| **6.5** | Does the company carry out occupational medical examinations? | The company must:  
|  | a) Carry out occupational medical examinations.  
|  | b) Ensure it covers the cost of occupational medical examinations carried out on employees. | 1 |
| **6.6** | Does the company do a diagnosis of workers' health conditions based on record systems? | In order to undertake a diagnosis of health conditions, the company must rely on records of:  
|  | a) Sick leave.  
|  | b) Work accidents.  
|  | c) Periodic medical examinations according to the frequency established by company policy.  
|  | d) Data on mortality, in-house medical appointments, and/or EPS medical appointments, if available. | 2 |
| **6.7** | Does the company adopt recommendations regarding workers' re-adaptation to work and/or relocation? | The company must support workers’ re-adaptation and/or relocation processes in accordance with recommendations issued by the work medicine division of the EPS or ARP, and jointly agreed with the company’s occupational health area. | 2 |

<table>
<thead>
<tr>
<th><strong>INDUSTRIAL HYGIENE AND SANITATION</strong></th>
</tr>
</thead>
</table>
| **6.8** | Is there a methodology in place that identifies, evaluates and prioritizes risk factors for all the tasks carried out in the company? | The company must promote a safe and hygienic work culture through a methodology that:  
|  | a) Includes all the tasks performed in the company, direct or contracted, and identifies, assesses and prioritizes risks for employees.  
|  | b) Establishes controls to address risks identified in a) above and minimizes them as much as possible.  
<p>|  | c) Is updated according to changes in processes. | 1 |</p>
<table>
<thead>
<tr>
<th></th>
<th>Question</th>
<th>The company must:</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.9</td>
<td>Does the company have adequate hygiene facilities?</td>
<td>The company must:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Guarantee that hygiene facilities and/or sanitary units are separated by sex.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Keep toilet paper available (either in each unit or available in the facility).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) Place garbage cans or containers for toilet paper.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d) Have basind, soap and paper towels or hand dryers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>e) Have a toilet and/or urinal for each 15 workers. In the case of men’s washrooms, there may be a combination of urinals and toilets, as long as the overall proportion is kept.</td>
<td></td>
</tr>
<tr>
<td>6.10</td>
<td>Does the company provide drinking water to workers?</td>
<td>The company must:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Use safe drinking water sources.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Have a program in place for safe storage and handling of drinking water.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) In addition to the program, companies that re-bottle water must carry out a microbiologic test in two different points each month.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>d) Not allow the sharing of glasses or cups between workers.</td>
<td></td>
</tr>
<tr>
<td>6.11</td>
<td>Are all work stations kept in good order, hygiene and cleanliness conditions?</td>
<td>Every work station, common area and transit way must be in good condition of tidiness and cleanliness, preventing the accumulation of waste, scraps and unusable objects. Waste generated by daily activities is acceptable.</td>
<td>1</td>
</tr>
<tr>
<td>6.12</td>
<td>Does the company formulate action plans in accordance with its Health Assessment and Risk Outlook?</td>
<td>The company must:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Implement action plans outlining required prevention and control measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Record measures to follow up and supervise action plans.</td>
<td></td>
</tr>
<tr>
<td>6.13</td>
<td>Does the company supervise food handling personnel?</td>
<td>The company must ensure that food handlers:</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Are periodically trained.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Have undergone throat, fingernails and stool tests.</td>
<td></td>
</tr>
<tr>
<td>6.14</td>
<td>Are there hygiene and industrial safety regulations for common areas and are they published in Spanish?</td>
<td>The company must:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Disseminate regulations for common areas such as canteens, bathrooms, change rooms, parking lots, buses and sporting facilities.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Keep evidence of in-field implementation of these regulations.</td>
<td></td>
</tr>
<tr>
<td>6.15</td>
<td>Does the company have an updated list of all the chemical substances used in its premises?</td>
<td>The company must have:</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a) Lists of all chemical substances available.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) Safety sheets available in Spanish for all the chemical substances.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) Records of training on the familiarity with and handling of safety sheets.</td>
<td></td>
</tr>
<tr>
<td>INDUSTRIAL SAFETY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.16</strong> Is there a procedure to deal with work accidents?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company must:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Keep records of work accidents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Ensure that work accidents are reported to the ARP (Professional Risk Manager).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Ensure the recommendations resulting from the investigation of work accidents are adopted to prevent their recurrence.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Publish information regarding the handling of accidents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.17</strong> Does the company have an updated emergency plan?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company must:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) Have a procedure in place to handle emergencies.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Have a prioritized and updated vulnerability analysis, according to the company's own features and characteristics.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c) Have an inventory of human and physical resources available in case of emergency.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d) Know the location and inspect fire extinguishers, alarms, stretchers, emergency exits, water sources to extinguish fires, and the location of switches to turn off electricity and gas.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) Publish in a visible place the telephone numbers of police, ambulances, hospitals and fire fighters.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f) Keep records of the brigade line-up.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g) Have training records for workers who form part of the emergency brigade.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h) Have records of emergency drills carried out in the last year.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i) Have a trained person in first aid present in the premises during working hours. The person must have been trained within the last five years.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.18</strong> Does the company have adequate signposting according to risks?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company must signal those places where there are risks, according to the priorities identified in the methodology outlined in number 6.8.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.19</strong> Are areas demarcated according to risks?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company must demarcate the areas where there are risks, according to the priorities identified in the risk outlook.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6.20 Does the company provide and replace personal protection equipment (PPE)?

The company must:
- a) Have records of delivery and replacement of PPEs for every task that require them, according to the nature of the risk.
- b) Have records of training on the use and maintenance of PPEs.
- c) Keep a general table including at least: the area, task, required PPE and date of replacement.

6.21 Does the company have safety regulations for the storage of raw materials and inputs?

The company must ensure safety regulations for the storage of raw materials and inputs other than fertilizers and pesticides are observed.

---

7. WATER AND IRRIGATION

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Water, as an environmental resource, is one of the main inputs used by floriculture in Colombia. No agricultural activity can be conceived without this vital resource.

Water gains more importance each day due to its continuously increasing demand. In Colombia, the distribution of water does not necessarily respond to the demand for this resource because there is short supply in the mountainous regions, where most of the population lives and there is greater agricultural activity. This, added to weather changes in the last decade, must be carefully considered as they affect the availability of this important resource in the near future.

Furthermore, current environmental legislation establishes that the priority for the use of water is human consumption, followed by the preservation of flower and fauna, and agriculture in the third place. This norm can lead companies in the sector to a critical situation in times of water shortage, as they will find themselves competing for water.

For this reason, the Florverde® program promotes the rational and responsible use of water in floriculture, to contribute to its long-term preservation, guarantee its availability and ensure permanent flower production.

WHAT CAN YOUR COMPANY DO?

- Install flow meters in water wells and superficial sources, as well as in pumping stations, to gather information about consumption.
- Select and implement methods to determine irrigation needs, with a view to reducing the volume of water required.
- Increase the use of rainwater and complement demand with concession sources.
→ Monitor weather behavior to anticipate actions in the presence of adverse patterns.
→ Use more efficient irrigation technologies such as drip, hose and pulse irrigation or the like.
→ Use controlled and automated irrigation systems that ensure an efficient operation and application of water.
→ Implement an efficient use and saving of water scheme that allows the achievement of reduced consumption goals.
→ Maintain a permanent research and development program with regard to water, with the objective of reducing its use.

<table>
<thead>
<tr>
<th>7</th>
<th>WATER AND IRRIGATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>CHECKLIST</td>
</tr>
<tr>
<td>7.1</td>
<td>Does the company have permission from the relevant authority to extract water used on the farm?</td>
</tr>
</tbody>
</table>
| 7.2 | Are there water meters or measuring gauges installed and operating at the sources where water is extracted from? | The company must:  
  a) Have equipment or measuring gauges installed in places where water is collected, or where defined by the environmental authority, so the amount of water consumed from a superficial or underground source may be determined at any moment.  
  b) Have updated records of water consumption readings, obtained by equipment or meters installed in company premises.  
  This requirement does not apply to companies which do not have irrigation systems and the farm depends directly and exclusively on rainwater collected. | 1 |
| 7.3 | Are the volumes of water used in irrigation defined according to water requirements of the crop? | The company must:  
  a) Have a written procedure indicating the way in which irrigation needs are calculated.  
  b) Keep records of the calculation of water irrigation needs, based on measurements (e.g. tank type A, atmometer, weather station, tension meters and humidity retention curve, radiation methods, organoleptic, drainage volumes on substrates or other).  
  c) Demonstrate that the information obtained through such measurements is used to determine the volumes of water defined and applied in irrigation. | 2 |
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.4</td>
<td>Are there updated records of irrigation water consumption?</td>
<td>The company must have records indicating water volume used for irrigation by area units and date. Irrigation water volumes must be real; i.e. measured by a meter. This requirement does not apply to companies which do not have irrigation systems and the farm depends directly and exclusively on rainwater collected.</td>
<td>2</td>
</tr>
<tr>
<td>7.5</td>
<td>Is a five-year plan being implemented for an optimized consumption of water?</td>
<td>The company must: a) Have a diagnosis of water supply and demand, and identify productive processes that can be optimized to reduce consumption and waste of water. b) Implement a five-year plan with objectives, goals and actions to be undertaken for the rationalization of the use of water in previously identified productive processes. This plan must be complemented with an investment and implementation timeline. c) Have indicators that illustrate the achievement of proposed goals and objectives. This requirement does not apply to companies which do not have irrigation systems and the farm depends directly and exclusively on rainwater collected.</td>
<td>2</td>
</tr>
<tr>
<td>7.6</td>
<td>Are efficient irrigation systems being used to ensure the best possible use of hydric resources?</td>
<td>The company must have an irrigation system that makes a rational use of water. Otherwise, it must demonstrate that it has considered its technical and financial viability, and that there is a future implementation plan. This requirement does not apply to companies which do not have irrigation systems and the farm depends directly and exclusively on rainwater collected.</td>
<td>2</td>
</tr>
<tr>
<td><strong>SUSTAINABLE WATER SOURCES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| **7.7** | In case residual waters are used for irrigation, are they previously treated? | The company must:  
a) Demonstrate through laboratory analyses that residual waters used for irrigation have been previously treated and that the water resulting from treatments complies with specifications defined for irrigation in current legislation.  
b) If the water used originates from possibly polluted sources, laboratory analyses must demonstrate that water quality complies with domestic legislation. |
| **7.8** | Is a risk evaluation of irrigation water carried out on a yearly basis? | The company must have records of the risk evaluation of irrigation water, including:  
a) Physical, chemical and microbiological analyses focused on potential risks of water to the crop.  
b) Water sources available and their possible pollutants.  
c) Drainages received and their possible pollutants. |
| **7.9** | Is rainwater used on the farm? | The company must:  
a) Have maps/designs showing the rainwater collection and storage system, consistent with the facilities available in the field.  
b) Have documented records of actual rainfall for the last 12 months (measured in the field with adequate equipment).  
c) Have documented records of the last 12 months which show evidence of the volume of total water used on the farm, and measured volumes of water sourced from concession and rainwater.  
d) In case it is not possible to use rainwater due to financial or technical reasons, there must be a documented justification. |
| **7.10** | Has a bacteriological analysis of the water been carried out in an adequate laboratory? | The company must have the results issued by appropriate laboratories, capable of carrying out bacteriological analyses according to ISO 17025 or an equivalent norm. |
| **7.11** | Have specific measures been carried out in case of any adverse result of the bacteriological test of the water? | The company must have up-to-date records of the actions undertaken, along with laboratory results. |
8. SOILS, SUBSTRATES AND FERTILIZATION

WHY IS THIS OF INTEREST TO YOUR COMPANY?

A comprehensive management of soils and fertilizers allows companies to achieve savings in the cost of inputs, while working for the conservation and sustainable management of soils and substrates, and reducing the risk of contamination.

Through the safe management of fertilizers, companies can prevent and/or control the following situations:

- Run-off or infiltration of fertilizers to water bodies, sub-superficial layers of the soil or phreatic strata.
- Accumulation of heavy metals in the soil.
- Eutrophication of water bodies.
- Soil salinity.
- Chemical risk to the health of workers who handle fertilizers.

A monitoring program for soil nutrients in different areas of the farm must be used as a guidance tool to make decisions and give basis to the implementation of a fertilization program.

When decisions in terms of the application of organic matter and fertilizers are based on monitoring data, problems such as salinity or the increase of a particular chemical element in the soil and/or irreversible alterations to some of its physical properties of the soil with can be prevented.

The prevention and detection of physical deterioration of the soil, along with the implementation of strategies for erosion control, are important actions to achieve a responsible management and conservation of this resource.

When the soil is replaced by a substratum as a means to encourage the development and growth of flower farms, it is necessary to evaluate and undertake measures to minimize the negative environmental impact these systems can cause. For this reason, it is important to maintain a monitoring program of nutrient solutions in different points where the fertilizers run, and work in the implementation of methodologies that allow for the collection and re-utilization of drainage waters.

WHAT CAN YOUR COMPANY DO?

- Monitor the ion or ions in irrigation water that might generate risks to the soil or the fertilization/irrigation equipment.
- Establish a program to control the contribution of a problematic ion or ions present in irrigation water.
- Program fertilization activities according to periodic analyses of leaf nutrients and soils.
- Keep updated records of applied fertilizers.
→ For soil-based farming, it is recommended to implement an E.C., pH and NO₃ monitoring program in soils, applied nourishing solutions and percolation waters.

→ For substratum-based farming, the E.C. and NO₃ monitoring program should include nourishing solutions, substrates, leaching or drainage waters, and leaching waters receptor soils, in case the former are not collected.

→ Adjust fertilization programs based on routine monitoring of E.C., pH and NO₃, both for soil-based and substratum-based farming.

→ Implement methodologies aimed at collecting and re-using water drained from hydroponic crops, to prevent it from reaching water bodies or causing soil salinity.

→ Directly observe soil profile through digging of gullies and carry out physical analyses of soils in order to set preparation and management criteria, while maintaining their structure and avoiding their compacting.

→ Adjust and maintain erosion-control works as necessary.

→ Replace soil organic matter.

→ Set technical criteria for the application of organic matter, based on analysis of soils, organic matter contents, and on the analysis of the organic matter applied.

---

### 8 SOILS, SUBSTRATES AND FERTILIZATION

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>¿Does the company know the origin of substrates used and that these do not come from natural conservation areas?</td>
<td>The company must have records that allow tracing back the substrates to their origin and have evidence that they do not come from natural conservation areas.</td>
<td>3</td>
</tr>
<tr>
<td>8.2</td>
<td>In soil-less cultivation are leachates controlled to avoid drainage to the soil or natural bodies of water?</td>
<td>The company must a) Have systems for the collection and storing of leachates. b) Have appropriate methods for the use of leachates within or outside the farm so they do not pollute soil or water.</td>
<td>3</td>
</tr>
<tr>
<td>8.3</td>
<td>If substrates are reused, is water vapor used for their sterilization?</td>
<td>When substrates are reused, there must be documented evidence as to how water vapor was used for their sterilization.</td>
<td>3</td>
</tr>
<tr>
<td>Soil Preparation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------</td>
<td>----------------------------------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>8.4</td>
<td>Does the company carry out cultivation techniques aimed at reducing any possible erosion of the soil?</td>
<td>The company must demonstrate that it has carried out or is carrying out a program of appropriate techniques for soil conservation, with a view to reducing erosion (e.g., planting across the slope, correction of drainages, coverage and slope control of rainwater conduction channels, bank/slope conservation, sowing of mulch or use of environmentally-friendly fertilizers, reforestation in the periphery of cultivated areas, etc).</td>
<td>2</td>
</tr>
</tbody>
</table>
| 8.5                            | Does the company have well defined soil preparation techniques and equipment? | The company must:  
   a) Demonstrate that it applies technical criteria to select equipment, tools and adequate techniques for soil preparation in order to maintain and/or improve its physical properties and structure, as well as to avoid compacting.  
   b) Identify and document through maps the different types of soil for each area or greenhouse on the farm.  
This requirement does not apply to cultivation in substrates. | 3 |

<table>
<thead>
<tr>
<th>Monitoring of Nutritional Needs</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 8.6                            | Is there periodic monitoring of soil nutrients and substrates? | The company must:  
   a) Have the results of the analyses used to determine fertilization formulas for the farm.  
   b) Have the results of routinary check-ups, according to the types of analyses and the frequency technically determined by the company for each type of flower grown.  
   c) Demonstrate that analyses results are used to maintain or adjust fertilization formulas.  
   d) Demonstrate that to calculate fertilization needs and frequencies the company takes into account the nutrient input provided through the application of organic matter (compost, microbial solutions, humic acid, inter alia). | 1 |
| 8.7 | Are fertilization/irrigation solutions to be applied periodically checked up? | The company must:
  a) Consider the nutritional input of the water source in fertilization programs, according to the results of its physical and chemical analyses.
  b) Have records that show evidence of implementation of monitoring programs for nutritional solutions to be applied (eg. pH, E.C., NO3, int. al.).
  c) Select samples directly from the applicator (drip, sprinkler, and/or hose as appropriate).
  d) Demonstrate that results are used to maintain or modify the fertilization formulas that will be used.
  e) Have documents that demonstrate the chemical content of fertilizers to be used. | 1 |

| 8.8 | Have fertilization programs been designed by trained and competent employees? | The company must be capable of demonstrating that the technicians or advisors responsible for fertilization programs have the academic background, training and experience required to estimate the amount and types of fertilizers to be used. | 2 |

| 8.9 | Are records of fertilizer applications being kept? | The company must have records of organic or inorganic application of fertilizers to soils or leaves that include the following information:
  a) Geographic location of the area where the application took place (eg. name of the farm, name or number of the greenhouse, block, section, module, etc.).
  b) Date of application (day/month/year).
  c) Commercial name and type of fertilizer applied (eg. N-P-K) or its concentration level (eg. 25-10-17).
  d) Quantity applied (measured in weight or volume).
  e) Machinery and fertilization application method (eg. drip, spraying, manual, hose, etc.).
  f) Names of the persons who applied the fertilizers. | 1 |

<p>| 8.10 | Has the company made an assessment of the risk that may be caused by the application of organic fertilizers? | There must be documents that demonstrate that the following potential risks have been taken into consideration: disease transmission, weed propagation and heavy metal content. | 2 |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>8.11</strong></td>
<td>If sludge of untreated domestic residual water is used on the farm, is it treated previously?</td>
<td>The company must demonstrate that no sludge of untreated residual waters on the farm is being used. This does not apply when such sludge is not used.</td>
</tr>
<tr>
<td><strong>8.12</strong></td>
<td>Are there training programs targeted at personnel who handle and apply fertilizers in the company?</td>
<td>The company must demonstrate that it has in place and follows a training program, focused on safe management of risks and the correct use of PPEs, targeted to personnel who handle and apply fertilizers.</td>
</tr>
</tbody>
</table>
| **8.13** | Are solid chemical fertilizers stored safely? | The company must ensure that solid chemical fertilizers are stored under the following conditions:  
  a) In covered and ventilated areas.  
  b) In dry, tidy and clean areas.  
  c) Separated from pesticides, plant material, flowers or crop produce. Separation must avoid cross contamination between fertilizers and pesticides.  
  d) Fertilizers that are applied together with pesticides may be stored in the same place but should be kept in sealed containers.  
  e) In their original packaging, with readable identification labels that show the commercial name of the products therein contained. |
| **8.14** | Are liquid chemical fertilizers stored safely? | The company must ensure that liquid chemical fertilizers are stored under the following conditions:  
  a) In covered, ventilated, dry, and clean areas.  
  b) Separated from pesticides to avoid cross contamination between fertilizers and pesticides. Separated from plant material or flowers, or crop produce.  
  c) Separated according to chemical incompatibilities (e.g. corrosive material in confined areas apart from acids).  
  d) In containers (tanks, demijohns, garbage cans) with original and readable identification labels with the commercial name of the products therein contained.  
  e) Containers with pure liquid fertilizers (tanks, cans or demijohns), must be located in places equipped with solid confinement structures without leakages, with capacity to keep spills at least 110% over the volumes normally stored in the largest container.  
  f) Essential equipment to handle possible spills must be kept available.  
  g) Informative and preventive signs must be displayed on or near the access doors of storage places. |
| 8.15 | Are organic fertilizers stored safely? | The company must ensure that organic fertilizers are stored in a defined area and appropriate measures are taken to avoid pollution of natural water bodies. If no such measures are taken, a minimum distance of 25 meters must be kept away from natural water bodies. | 1 |
| 8.16 | Is fertilizer application equipment kept in good condition to guarantee that the correct amounts are applied? | The company must:  
   a) Keep maintenance records of the fertilizer application equipment.  
   b) Verify that the equipment is performing adequately, according to technical specifications. | 2 |
9. INTEGRATED PEST AND DISEASE MANAGEMENT (IPDM)

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Integrated pest management (IPDM), as a component of an integrated management of farms, is an environmentally-driven method that uses different control techniques harmoniously combined to maintain phytosanitary problems at levels that do not cause significant financial damage to planted products (taken from Falcon, L.A. and Smith, R.F., 1974).

Periodic monitoring of or follow-up to the fluctuations of pests and diseases, as well as of the environmental conditions that favor them are the basis to program, implement and evaluate the effectiveness of management strategies of the cultural, physical, biological and chemical aspects. They also form the basis to define action thresholds against pests of economic significance.

Chemical handling, based on the application of synthetic-based pesticides, has been one of the tools most used in IPDM. However, despite the advantages of this tool, it also poses a high risk to the health of people that handle and apply them, as well as to the environment (water, soil, air, fauna and flora) and to the very farms where these substances are used.

The use of biological inputs and plant extracts as part of an IPDM program is an important technological alternative to maintain and improve both the productivity and phytosanitary quality of the cut flower, thus reducing significantly the impact on the environment and human health (Cecodes, MAVDT and Asocolflores, 2004. Case study of cut flowers).

It is therefore necessary for farmers to develop their capacity to observe and understand the inter-relation of the agricultural ecosystem of their farms, in order to be able to determine where and when phytosanitary problems appear, and how to act on time to address them and obtain benefits such as:

- Early detection and control of pests and diseases.
- Reduce the use and consumption of toxic pesticides for human health.
- Minimize the chemical risk of pesticides on human health.
- Minimize the impact of pesticides and their waste products on the environment.
- Optimize the use of pesticides and guarantee their viability in the long term.

WHAT CAN YOUR COMPANY DO?

- Approach IPDM as part of an integrated farm management concept.
- Implement monitoring systems for pests and diseases of the quarantine type, as well as of those of greater economic significance.
- Use the information from monitoring processes to program control strategies.
- Implement quality assurance in IPDM-related processes.
- Foster native plants that attract the presence of natural biological controllers.
Implement strategies for physical, cultural and biological management of pests and diseases to complement their chemical handling.

Gradually substitute synthesis pesticides with biological inputs and cultural changes.

Only use pesticides that have a current license issued by the relevant authority.

Use less toxic pesticides and those with lower concentrations of active ingredient.

Do not use banned pesticides.

Keep an updated record of the types and quantities of pesticides used and, based on the figures, set goals for their reduced use.

Keep pesticide-applying equipment and facilities in good condition.

Implement practices to minimize waste products generated by pesticides.

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEST-FREE PLANT MATERIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9.1 Does the company comply with current phytosanitary regulations?

Companies that import and propagate plant material, or that grow or produce ornamental cut material, post-harvest rooms, flower traders and exporters, must:

a) Keep records of visits made by officials of the relevant authority in relation with the implementation of monitoring and contingency plans against pest and diseases that require quarantine.

b) Demonstrate that corrective actions related to non-compliance cases recorded during visits have been addressed, or are in the process of being implemented.

c) Have an organized and updated file for sanitation certificates, which demonstrate observance of current national legislation and international guidelines, as well as those of autonomous or sectoral origin.

d) Importing companies must have phytosanitary records demonstrating that imported planting material was checked by both producers and growers, and found free of any visible signs of pests and diseases, or that visible signs did not exceed acceptable levels.

9.2 Does the company have control measures against insects, birds and rodents?

The company must demonstrate that it has measures in place to control insects, rodents and birds in areas where plant material is stored, classified and packed, as well as in places where inputs or packaging material (eg. boxes and hoods) are stored. Controls must also be present in areas where food is eaten or stored, as well as in changing rooms and toilets, among other.
## SELECTION OF PESTICIDES

| 9.3 | Can the person responsible for the selection of pesticides and for integrated pest and disease management (IPDM) demonstrate his/her competence? | Competence may be demonstrated through academic titles in agronomy or related areas, or training certificates in areas related with pest control and integrated management. | 1 |
| 9.4 | Does the company meet legal requirements in the selection of pesticides to be used? | In any of the phases in the productive process the company must:  
  a) Use only chemical and biological pesticides (inputs) with a current sales/use permit issued by the competent national authority.  
  b) Have available a current list of the commercial names and active ingredients of all chemical and biological pesticides that have been applied in the last 12 months.  
  c) The list must include the names of new pesticides with a current sales/use licence issued by the competent national authority and/or withdrawn pesticides for which the sales permit has been cancelled. | 1 |
| 9.5 | Does the company observe the recommendations regarding the use of pesticides as described in their labels? | The company must observe the recommendations on use printed in the labels of pesticides, regarding the types of pests to be controlled, crops to be protected, dosage and caution measures, in accordance with the pesticide scheme established by the relevant national authority. | 1 |
| 9.6 | Does the company use banned pesticides? | The company must not use pesticides banned in Colombia by the competent national authority, or banned in the EU or the USA. A list of pesticides banned in these two markets must be kept in the company. | 1 |
| 9.7 | Does the company use the Methyl Bromide pesticide? | The company must not use methyl bromide as an alternative to disinfect soils or for any other uses. | 1 |
| 9.8 | Does the company monitor pests and diseases? | The company must:  
  a) Maintain updated records of results of pest monitoring.  
  b) Choose pesticides to be programmed and used, according to permanent monitoring of pests and diseases.  
  c) Demonstrate that phytosanitary control programs are justified according to monitoring results. | 1 |
| 9.9 | Does the company have technical criteria to select the pesticides to be used? | In any of the phases of the productive process (soil or substrate disinfection, seed treatment, propagation, production, post harvest), the company must:  
  a) Demonstrate that different alternatives have been considered before using chemical disinfection for the sterilization of soils and substrates (eg. Utilization of water vapor, solarization).  
  b) Choose selected and specific pesticides for pests and diseases, with a view to minimizing their effect on human health and the environment.  
  c) Keep records and demonstrate that rotation programs of action mechanisms by pest or disease are implemented as a strategy to reduce resistance to pesticides. This criterion does not apply for post-harvest pesticide application.  
  d) Have documents indicating the restrictions to the use of certain pesticides in their country of origin and in the countries of destination, as issued by their clients, commercial firms that produce the pesticide or any other reliable source. | 2 |
| 9.10 | Is the use of pesticides of toxic categories I and II (World Health Organization - WHO Ia and Ib) justified? | In any of the phases of the productive process, the use of pesticides of toxicological categories I and II (WHO) Ia and Ib must be avoided. In case they are needed, their use must be justified and clear evidence must be available to demonstrate that less toxic alternatives were considered. | 2 |

**Programs and Application Records of Pesticide Application and Other Control Strategies Used**
| 9.11 | Are there pesticide application records available? | Records of pesticide application carried out in the company during any of the phases of the productive process phases (soil or substrate sterilization, seed treatment, propagation, production and post-harvest), must include at least the following information:

a) Name of the crop or lot number of the harvested product that has been treated, or the type of material treated (eg. Soil, substrate).

b) Location of treated area (greenhouse, module, section, block).

c) Date of treatment (day, month, year).

d) Justification or reason why the treatment was made (common name of the biologic objective).

e) Commercial and scientific name of the applied product.

f) Dosage of the commercial product applied (gms. or cc/liter of water).

g) Amount of prepared and applied mixture (Liters or Kg.).

h) Type of equipment used to apply the pesticide (eg: portable equipment, back pump).

i) Direction and application method used (eg: soil, foliage, upper or lower part of the plant, high volume HV, ultra low volume ULV, spraying, fumigation, drench, sprinkling or manual application).

j) Names of the workers responsible for applying the pesticide.

k) Number of hours required for re-entry.

l) Name and signature of advisor responsible for making the recommendation. |

| 9.12 | Is there an updated record of the amount of active ingredient used? | The company must:

a) Keep a documented system (Kardex) that allows the follow-up to and supervision of the inventory of products that have entered and/or left on a daily and monthly basis during the last year.

b) Keep updated records showing consumption of the active ingredient by farm or by each type of flower grown, measured in Kg.a.i/Ha/month. |

| 9.13 | Does the company adopt an Integrated Pest Management approach that allows it to avoid dependence on chemical control? | The company must:

a) Have evidence that it has implemented at least one prevention strategy; that is, a cultivation method that helps reduce the incidence and intensity of pests so that the need for intervention is minimized (eg. hygiene, manual eradication of pests or diseases, change of greenhouse plastic, improvements to ventilation, crop rotation, use of varieties resistant to pests and diseases).

b) Have evidence that it employs at least one intervention strategy other than chemical control (Eg: use of sticky traps, vaccums, light traps, biological controllers, etc.). |
<table>
<thead>
<tr>
<th>Section</th>
<th>Question</th>
<th>Requirement</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.14</td>
<td>Does the company have a training program targeted at personnel who handle and apply pesticides?</td>
<td>The company must have training certificates in the safe use and handling of pesticides issued by a competent authority or give written proof that a request for training has been submitted to the relevant authority for such training. In case no training has been given by an official entity, there must be an internal training program and evidence of its execution.</td>
<td>1</td>
</tr>
<tr>
<td>9.15</td>
<td>Are medical examinations and clinical laboratory tests done to personnel who handle and apply pesticides?</td>
<td>The company must have records of medical exams and lab tests done to personnel who handle and apply pesticides. These exams/tests must be done before and after exposure periods (or after rotation periods defined by the company). Exams and tests will vary according to the type of pesticide to which the worker is exposed, and to their availability in the country.</td>
<td>2</td>
</tr>
</tbody>
</table>
| 9.16    | Have workers who handle and apply pesticides been provided with personal protection equipment (PPEs)? | The company must:  
- a) Demonstrate that in the field, any person involved in the use and handling of pesticides in any of the phases of the production process (soil/substrate disinfection, seed treatment, propagation, production, post-harvest) has been given a PPE in good condition and uses it adequately, according to the PPE/Task table defined by the company’s Occupational Health area, and/or the recommendations written in the safety briefs and the labels of pesticides being used.  
- b) Keep records that prove monitoring of the condition of the PPEs, and demonstrate they are changed on a timely basis. | 1      |
| 9.17    | Are minimum safety bands observed during pesticide application? | The company must:  
- a) Observe a minimum safety band of ten (10) meters between application areas and natural water bodies and/or traffic ways for vehicles or people, or places where people are present.  
- b) When the distance between the application and any of the above mentioned areas is less than 10 meters, the company must have infrastructure (eg. physical or biological barriers) or procedures (eg. restricted movement of people) in place that guarantee people or places are not exposed to the application of pesticides. | 2      |
<p>| | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 9.18 | Are signs that restrict personnel access to areas under pesticide application or that have been treated with pesticides being used and observed? | The company must:  
   a) Use clear and readable signs in all access ways to areas under treatment and/or treated with pesticides.  
   b) Signs must be made of resistant material, have an adequate size for reading purposes, and display the international danger symbol and text that reads at least: "Danger, area treated with pesticides. If you need to enter, use protection equipment". Additionally, signs can include the name of the product, toxicity category, date and time when the application finished, and date and time when the area can be re-entered without having to use protection elements. Re-entry intervals (REIs) start to count from the moment the application ends. | 1 |
| 9.19 | Are the required re-entry intervals (REIs) in pesticide-treated areas being observed? | The company must observe the re-entry intervals described in the labels of the applied products. Should these not be described in the labels, the company must observe the REIs recommended in written communication from the manufacturer. Whenever mixtures of products with different re-entry intervals are applied, the strictest REI is the one to be observed. | 2 |
| 9.20 | Does the company have procedures in place and enough resources to respond to emergency situations involving pesticides? | The company must:  
   a) Have available safety sheets of all the pesticides used in the company.  
   b) Have clear first aid procedures and keep them visible and accessible to personnel as well as all resources needed to respond to an emergency (eye wash system or clean water source) available within 10 meters from the store room and fixed mixture preparation areas. There must be a first aid kit accessible to deal with emergencies.  
   c) Have clear procedures and emergency tools to respond to spills, and keep them visible and accessible to personnel, located near the store room and mixture preparation areas. | 1 |
|   | ADEQUATE FACILITIES, EQUIPMENT AND PRACTICES FOR THE SAFE HANDLING OF PESTICIDES |   |   |   |
| 9.21 | Does the pesticide store room comply with minimum technical standards? | The company's pesticide store room must meet the following requirements:  
   a) Be physically separated by a rigid wall from the rest of the general store where other inputs or materials (eg: fertilizers, packing material, disinfectants, acids, preservatives, etc.) are kept.  
   b) Floor and walls must be built in a non-absorbing, strong solid structure that is fire resistant and can be cleaned easily, so that pesticides are protected against extreme weather conditions.  
   c) Shelves must be firmly placed on the floor and built from rigid, non-absorbing, and fire resistant material (metal or concrete), and easy to clean in case of spills. | 1 |
| 9.22 | Are pesticides stored observing minimum technical conditions? | d) Be equipped with a lockable door (safety lock or padlock) and be accessible only to workers trained in the safe handling of pesticides.  

e) Have sufficient and permanent ventilation (natural or artificial).  

f) Have sufficient lighting (natural or artificial) so that product labels can be read.  

g) Be equipped with confinement systems on the floor, capable of recovering 110% of the totality of liquid volume corresponding to the largest container in the store room. It must not have drains in the floor but there must be appropriate instruments, absorbent material and facilities available for handling any possible spills (sand, broom, recipients to collect waste, etc.).  

h) If equipped with water taps, the drainages or pouring systems with pesticide contents originated in them must have a control system so they can be collected and taken to the mixture preparation tanks for re-utilization in the field.  

i) Have informative and preventive signs near to or on access doors.  

The company must ensure that pesticides are stored observing the following requirements:  

|   |   | a) The store room must be used exclusively for pesticides. However, fertilizers that are mixed and applied with pesticides can be stored in the same room but in separate shelves and keeping containers sealed.  

b) Pesticides must not be kept in defective packages or bottles, or closed loosely as they can be spilled.  

c) Products must be kept in their original packaging or bottles, be tightly closed and identified with their original labels. However, if there are pesticides that have been repackaged to be sent to the field they must at least have an identification label made by the company.  

d) A method must be applied to ensure inventory rotation and low stocks of products in order to avoid the presence of expired products. In case expired products are found, they must be clearly identified and stored apart from products in use.  

e) Pesticides in shelves must be kept separately and classified according to their level of toxicity.  

f) If powder or granulated pesticides share the same shelf, they must always be placed above liquids to prevent their deterioration if the latter spill. |
<table>
<thead>
<tr>
<th>Section</th>
<th>Question</th>
<th>Details</th>
</tr>
</thead>
</table>
| 9.23    | Are pesticide amounts to be used measured or calculated meeting minimum technical conditions? | In whichever area of the company where the measurement or dosage of the amounts of pesticides to be used is determined (store room, or fixed stations for preparation of mixtures), the company must have at least:  
   a) A large weighing table made of a resistant material and set firmly on the floor.  
   b) Reliable measuring equipment (scales, test tubes) to measure liquids, powders and granulated products. The measuring equipment must have been internally checked and calibrated by the company less than twelve months before. |
| 9.24    | Are pesticides re-bottled meeting minimal technical requirements? | In case the company repacks pesticides, the following criteria must be followed:  
   a) The reuse of pesticide containers is only allowed for repackaging pesticides.  
   b) Pesticide bottles/packages must not be used for substances other than pesticides.  
   c) Identification labels or brands of the re-bottled product must have at least the following information:  
      - Commercial name of the product  
      - Quantity (gms. or cc.)  
      - Toxicity category  
      - Date of re-packing  
      - Destination (block, section or greenhouse)  
   d) Plastic bags different to the original ones must not be used for repacking pesticides. |
<p>| 9.25    | Are pesticides safely transported internally between the store room and mixing stations? | The company must guarantee that the internal transportation of pesticides between the store room and mix preparation stations is done in containers closed with lids to prevent any possible spill. Depending on the amounts to be transferred and the distances involved, products must be transported in safe vehicles (wheelbarrow, tricycle or tractor). |</p>
<table>
<thead>
<tr>
<th>9.26</th>
<th>Do fixed stations for the preparation of mixtures meet minimum technical conditions?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Stations or fixed places for the preparation of mixtures must meet the following requirements:</td>
</tr>
<tr>
<td></td>
<td>a) Be built of solid structure material (e.g., brick walls, chain link fencing, cement floors).</td>
</tr>
<tr>
<td></td>
<td>b) Be equipped with a door that can be locked (with a safety lock or padlock). Access must be limited only to personnel trained in safe handling of pesticides.</td>
</tr>
<tr>
<td></td>
<td>c) Have adequate signage near or at the entrance.</td>
</tr>
<tr>
<td></td>
<td>d) Have sufficient and permanent ventilation (preferably natural).</td>
</tr>
<tr>
<td></td>
<td>e) Have sufficient light (natural or artificial).</td>
</tr>
<tr>
<td></td>
<td>f) There must be no drains on the floor, which must be equipped with containment structures around mixture tanks, capable of retaining 10% more of the volume usually prepared.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9.27</th>
<th>Is pesticide application equipment gauged and calibrated each year?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The company must have records to prove that pesticide application equipment has been gauged and calibrated in the last 12 months by those who demonstrate competence to carry out this task. If there are no records, the company must demonstrate relevant field competence.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9.28</th>
<th>Are there designated areas for washing, drying and storing PPEs?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The company must:</td>
</tr>
<tr>
<td></td>
<td>a) Have facilities designated for washing, drying and storing PPEs and clothes after work with pesticides has ended.</td>
</tr>
<tr>
<td></td>
<td>b) Have floors, walls and counters made of compact and resistant material, easy to clean.</td>
</tr>
<tr>
<td></td>
<td>c) Have enough and comfortable washing areas to ensure that all the PPEs used by personnel can be cleaned properly.</td>
</tr>
<tr>
<td></td>
<td>d) Be equipped with sufficient clotheslines and drying areas for washed clothes and PPEs.</td>
</tr>
<tr>
<td></td>
<td>e) Have sufficiently ventilated areas to facilitate the drying of PPEs.</td>
</tr>
<tr>
<td></td>
<td>f) Guarantee that PPEs are kept separately from areas where pesticides are stored, mixed or applied, as well as from pesticide application tools and equipment.</td>
</tr>
<tr>
<td></td>
<td>g) Guarantee that no PPEs, pyjamas, towels or any other clothing used for pesticide handling are taken out of the company to be washed at home by the workers.</td>
</tr>
</tbody>
</table>
| 9.29  | Does the company have facilities to guarantee that workers can take a shower and change their clothes after finishing work with pesticides? | The company must:  
a) Have facilities with floors and walls built of compact material which is shock and water resistant, to enable cleaning duties.  
b) Have enough showers, equipped with both drinking and hot water (in regions where the temperature is lower than 18ºC).  
c) Provide soap and towels to personnel.  
d) Have comfortable dressing rooms and double individual lockers for each worker, so that working clothes used for pesticide handling or application can be kept separately from ordinary clothes. | 1 |
| 9.30  | Does the company participate in an independent gauging and certification plan of pesticide-applying equipment? | The company must keep documents and records that proof its participation in a gauging and certification plan for the machinery used in the application of pesticides. The plan must be carried out by independent and competent companies. | 3 |
10. WASTE MANAGEMENT

WHY IS THIS OF INTEREST TO YOUR COMPANY?

The floriculture production process generates solid, liquid and gaseous waste products which can have a negative impact on the environment if they are not reduced or handled properly.

Florverde® aims to develop a culture of minimizing the quantity and toxicity of inputs and waste products in all the phases of the production process. The program also seeks to handle the disposal of waste in accordance with national legislation and examples of best practice recommended by Florverde® itself.

Effective waste management will allow the company to avoid contamination, reduce the consumption of raw materials, incorporate useful waste into the production process and comply with current environmental legislation, thus guaranteeing greater efficiency and competitiveness of the flower sector.

WHAT CAN YOUR COMPANY DO?

Through good practices and available technologies it is possible to avoid, minimize or treat waste generated in the farm by:

→ Establishing a periodic training program targeted to staff on the handling and disposal of waste.
→ Using materials efficiently during production processes.
→ Reducing packaging that in some cases may be unnecessary.
→ Establishing environmental criteria for the purchase of consumption products (eg. prefer recyclable, reusable and biodegradable materials).
→ Reusing liquid and solid waste products whenever possible.
→ Maintaining equipment such as refrigerators, cauldrons and sulphur vaporizers in optimal working conditions, based on a detailed preventive maintenance program.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>WASTE MANAGEMENT</td>
<td></td>
</tr>
</tbody>
</table>

**PREVENTION AND MINIMIZATION**

<table>
<thead>
<tr>
<th>10.1</th>
<th>Have all possible forms of waste and pollution sources been identified?</th>
<th>The company must have a documented identification of all waste generated, as well as all the sources of pollution in each of the stages of the production process.</th>
</tr>
</thead>
</table>
| 10.2 | Is there a management plan being implemented to reduce waste generation and pollution sources? | The company must:  
  a) Have a documented management plan (objectives, activities, levels of responsibility, implementation dates) oriented towards reducing the generation of waste and pollution sources. The plan must be in implementation stage.  
  b) Show visible results on the farm that confirm the fulfilment of the management plan objectives.  
  c) The plan must include air, soil and water pollution issues. |
| 10.3 | Is training in waste management being given to its personnel? | The company must have training records or any other type of evidence to demonstrate an adequate handling of waste. |
| 10.4 | Is there control over bottles, packaging and crates of pesticides? | The company must:  
  a) Guarantee that all packaging and empty pesticide bottles are rinsed three times.  
  b) Make empty containers unusable (by perforating or cutting empty pesticide bottles while keeping their original labels). |
| 10.5 | Is fuel stored safely? | Any location in which fuel is stored must meet at least the following conditions:  
  For liquid fuel:  
    a) Have a containment structure (water-resistant walls and floors) for any possible spills. The containment capacity must be 10% larger than the volume of the largest container.  
    b) Be covered and ventilated (preferably natural ventilation).  
    c) Cans, tanks or demijohns where fuels are kept must be labeled.  
    d) Have elements to handle any spills that may occur. Hydrocarbons must not be spilled in soil or water as a result of any process in the company.  
  For solid fuel (coal):  
    e) Coal must be kept covered with a case or stored in a covered area.  
  For compressed gas: |
### WASTE MANAGEMENT

<table>
<thead>
<tr>
<th>NO.</th>
<th>Checklist</th>
<th>Compliance Criteria</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.6</td>
<td>Are there temporary storing areas for useful and useless waste?</td>
<td>f) Gas must be kept in ventilated and signposted areas (built of non-combustible material and ventilated naturally).</td>
<td>2</td>
</tr>
<tr>
<td>10.7</td>
<td>Are there temporary storing areas for hazardous waste?</td>
<td>The company must: a) Have a collection center for useful waste, which must be covered and dry, with defined spaces and adequately signposted so that useful waste is separate from other stored waste. b) Have a designated area for the temporary storage of useless waste (such as domestic waste and non-recyclable plastic). This area must be enclosed, covered, ventilated and signposted.</td>
<td>1</td>
</tr>
<tr>
<td>10.8</td>
<td>Is there a periodic inspection and preventive maintenance program for refrigerating equipment?</td>
<td>The company must: a) Keep evidence of periodic inspections and preventive maintenance done to installed refrigerating equipment. Keep up-to-date written records that indicate the date and level of consumption of refrigerating gas. b) Ensure that people who carry out maintenance must be properly trained or know good practices in relation to ozone depleting substances. c) Keep refrigerating equipment in good working condition.</td>
<td>2</td>
</tr>
<tr>
<td>10.9</td>
<td>Is there a periodic inspection and preventive maintenance program for cauldrons (boilers)?</td>
<td>The company must have: a) A program outlining inspection and preventive maintenance activities that must be carried out, along with their frequency. b) Records that show evidence of the fulfilment of inspection and preventive maintenance activities carried out in each of the cauldrons (boilers). c) Updated records for each of the boilers, which include the number of hours of use per day and the amount of fuel used in gallons/hour or kg/hour. d) Emission license for each boiler in case the level of fuel consumption exceeds legal limits, when these are defined by law. e) Records of quality analysis of the fuel used in the boiler, to demonstrate that contents do not exceed domestic legal limits, if they exist. These records must be requested from</td>
<td>2</td>
</tr>
</tbody>
</table>
## REUSE AND RECYCLING

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 10.10 | Is there plant waste management? | The company must adequately handle all plant waste (e.g.: composting, vermiculture, direct application to crops or meadows, int.al.). The selected alternatives must not affect human health or the environment. The following precautions must be taken into account:  

a) Processing within the farm - Records of amounts processed must be kept. If leachates are formed, the company must be aware of the potential risks of polluting water sources, including water table, and take relevant measures.  

b) External handling - The company in charge of external processing must be aware of potential risks of polluting water sources, including water table, and take relevant measures. Records of the amounts of material delivered to external processing companies must be kept.  

c) Manure in meadows - The company must demonstrate that plant waste is chopped and extended in a uniform way to prevent livestock from feeding on it.  

d) Disposal of plant waste is not permitted in any of the following ways:  
  - As fresh food for livestock within or outside the farm  
  - Leaving the farm with unknown destination  
  - Sent to municipal dumps  
  - Used for open fires. | 2 |
## 10 WASTE MANAGEMENT

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 10.11 | Is useful solid waste reused and recycled? | The company must have:  
   a) Records of the types and amounts of solid waste reused in the company.  
   b) Records or shipment of useful material removed from the company.  
   c) Records of less than one year showing evidence of the final disposal of useful waste by those responsible for recycling or transforming it. | 2 |
| 10.12 | Are there measures in place for the re-utilization of hazardous liquid waste generated by pesticide use? | The company must:  
   a) Guarantee that liquid waste resulting from triple rinsing of bottles and packaging is sent to mixture preparation tanks.  
   b) Have systems installed (eg. injection of coloring to indicate the beginning and end of applications) or information about gauging (eg. tables to indicate filling of conduction pipes) to guarantee there are no residues of the mixture inside the hoses or conduction pipes.  
   c) Guarantee that rinsates resulting from the washing of application equipment and PPEs are collected and reused in the crop (i.e. discharged into pesticide mixing tanks, coloring tanks or used as irrigation water in ornamental areas within the company).  
   d) Collect and reuse rinsates or effluents if they are generated in pesticide dosification areas (store, mixing stations or others) and flower dipping in post-harvest, by sending them to the mixing tanks. | 1 |
| 10.13 | Are residues of Silver Thiosulphate (STS) treated? | The company must:  
   a) Demonstrate it treats residues of STS prior to sending them to soil or water bodies (natural sources, ditches or reservoirs), to ensure the solution is under 0,5mg/Lt Ag.  
   b) Have chemical analyses of STS residues carried out less than one year before, to demonstrate the removal of silver.  
   c) Demonstrate that mud generated during treatment through precipitation, evaporation or other means is collected, dried and stored in a special store room, until final disposal. | 1 |
| 10.14 | Are residues of tinctures with contents of heavy metal treated? | The company must:  
   a) Have technical cards showing the chemical composition and/or recent chemical analyses of remains to confirm | 2 |

## TREATMENT AND FINAL DISPOSAL
10 WASTE MANAGEMENT

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>whether they contain heavy metals and if so, in what level of concentration.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>b) If tincture residues have heavy metals and their concentration levels exceed those permitted by law, the company must demonstrate that this type of waste is not sent to soil or natural water bodies.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>c) Have chemical analyses carried out less than one year before to prove the removal of heavy metals in the final effluent of treatment, so concentration levels permitted by law are met.</td>
<td></td>
</tr>
<tr>
<td>10.15</td>
<td>Is domestic sewage water treated?</td>
<td>The company must: a) Demonstrate that treatment systems for domestic residual water generated in sanitation batteries and in the canteen or refectory have been installed. b) For treatment systems which final effluents are discharged into natural water bodies, there must be records analyses taken less than 12 months earlier of the parameters required by national legislation of BOD5, COD and Suspended Solids, with a minimum removal of 80% or as requested by the regional environmental authority. c) For treatment systems which final effluents are discharged into soil, it must be demonstrated that the quality of phreatic water is not affected.</td>
<td>1</td>
</tr>
<tr>
<td>10.16</td>
<td>Is there an adequate final disposal of useless solid waste?</td>
<td>The company must: a) Have receipts of payment from the municipal garbage collection entity, for the collection and final disposal of useless (domestic) waste services. b) In case there is no access to municipal garbage collection services, the company must guarantee that final disposal of waste is made in approved locations or acknowledged for that purpose, either by the company itself or through contracted out services. In the latter case, there must be records of delivery and final disposal showing at least: date, name of the service provider (individual or collective), amount of waste and name of the disposal site. c) Not use ditches or sanitary landfills inside the farm for final disposal of unusable waste. d) Not make open fires to burn unusable waste as a final disposal alternative.</td>
<td>1</td>
</tr>
<tr>
<td>NO.</td>
<td>CHECKLIST</td>
<td>COMPLIANCE CRITERIA</td>
<td>LEVEL</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>---------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| 10.17 | Are there appropriate measures in place for the handling and final disposal of used oils? | The company must:  
   a) Demonstrate that used oils from maintenance to vehicles and equipment are collected and stored in covered areas with containment structures to control any spills that may occur.  
   b) Ensure used oils are taken to areas approved by the environmental authority for final disposal, and leave the corresponding records.  
   c) Ensure used oils are not used to immunize wood, apply on roads, or directly used as fuel mixed with other fuels in ovens or cauldrons (boilers). | 2 |
| 10.18 | Is there an adequate final disposal of hazardous waste? | The company must:  
   a) Have evidence that demonstrates the actions carried out for the final disposal of obsolete or expired pesticides, or keep records that demonstrate they have either been eliminated by an entity authorized by the competent authority or returned to the supplier.  
   b) Keep records showing evidence that pesticide bottles, packaging and crates are either taken to designated areas as part of an official or authorized program, returned to suppliers through an appropriate return mechanism, or delivered to entities authorized by the competent authority for the elimination of this type of waste.  
   c) For waste such as obsolete PPEs and pesticide application equipment, or other residues defined by law as hazardous waste, there must be updated records showing evidence of their delivery to entities authorized by the competent authority for their elimination. | 1 |
11. LANDSCAPE AND BIODIVERSITY

WHY IS THIS OF INTEREST TO YOUR COMPANY?

In Colombia, flower growing for export is done mainly under plastic-covered structures, which has a visual impact on the landscape that cannot go unnoticed.

Among the objectives of the Florverde® program are promoting the conservation of natural ecosystems, recovering the landscape affected by floriculture, and aesthetically improving the work environment in companies.

A company that undertakes actions to recover the landscape will be able to:

- Reduce the visual impact of greenhouses on villages or main roads.
- Mitigate the impact of frosts on farms.
- Contribute to the company’s security.
- Attract beneficial fauna.
- Erect biological barriers that physically prevent the migration of plagues to the flowers.
- Increase the biodiversity in the surrounding area and inside the farm.
- Improve the quality of the work environment for the company staff.
- Create recreational green zones.
- Protect special management areas (wetlands, water bodies-surrounding areas, forests reserves).

WHAT CAN YOUR COMPANY DO?

- Define present landscape units and handling of existing vegetation on the farm (e.g. reservoir and river banks, landmarks, administrative area, recreational area).
- Select appropriate forest species (preferably native), taking into account the objectives of each handling unit, soil features of the place, climate, topography, supply of plant material and the requirements of the species.
- Set up live fences in borders in order to reduce the visual impact of greenhouses.
- Guarantee the quantity and quality of plants about to be sown.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td><strong>LANDSCAPE AND BIODIVERSITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.1</td>
<td>Is the company authorized to use the land?</td>
<td>The company must demonstrate it is located in a territory where floriculture is either allowed or not restricted by the competent authority.</td>
<td>1</td>
</tr>
<tr>
<td>11.2</td>
<td>Does the company have a registration system for each area, sector or greenhouse where flowers are grown?</td>
<td>The company must have documented and updated records identifying each of the surfaces occupied by each type of flower grown.</td>
<td>1</td>
</tr>
</tbody>
</table>
| 11.3 | Is there an identification or visual reference system in place for each area, sector or greenhouse? | The company must:  
   a) Physically identify each area, sector or greenhouse through a code, number or color.  
   b) The identification of the area, sector or greenhouse must coincide with records kept. | 2 |
| 11.4 | Is a risk evaluation carried out before introducing new agriculture production areas? | For new farms or extensions of existing farms, the company must document a risk assessment that takes into account at least:  
   a) Type of soil.  
   b) Current or potential degrees of erosion.  
   c) Depth of phreatic level, according to terrain topography.  
   d) Availability of sustainable water sources.  
   e) Prior use given to the area.  
   f) Soil pests (in particular, presence of nematodes).  
   g) Current use given to adjacent areas.  
   h) Environmental impact on adjacent areas.  
   For existing farms due for extensions, initial studies carried out will remain valid. This requirement does not necessarily apply to every farm, when the type of flower grown changes. | 1 |
| 11.5 | Is there a corrective action plan to minimize the risks identified in new production areas? | The company must:  
   a) Identify the seriousness and likelihood of each risk identified, as well as the measures required to prevent and control it.  
   b) Avoid the inclusion of new production areas when the assessment identifies at least one risk which is not controllable and is critical to human health and/or the environment. This requirement may not apply to all farms. | 2 |
<p>| | <strong>BIODIVERSITY AND CONSERVATION</strong> | | |</p>
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 11.6 | Has the company carried out reforestation activities with native species on the margins of natural water sources and/or in protective forest reserve areas? | The company must:  
a) Have documents (e.g. inventory and maps or photographic records of areas with planted species) to demonstrate that reforestation with native species has taken place on the margins of natural superficial water sources (e.g. rivers, streams or wetlands) or in forest reserve areas as defined by the environmental authority.  
b) Demonstrate in the field the reforestation carried out with native species on the margins of natural superficial water sources and in forest reserve areas.  
c) Deforestation of water margins and forest reserves is not permitted. In case the company uses the forest, it must have a permit issued by the competent environmental authority. | 2 |
| 11.7 | Is there an environmental landscape and biodiversity management program in the company? | The company must be implementing a permanent program aimed at improving landscape and biodiversity within the farm and in its perimeter, which may be individual or part of a regional project or program, and which must include:  
a) Objectives.  
b) Definition of the company's landscape units.  
c) Inventory of the species planted in each landscape unit.  
d) Updated map of the farm, no older than one year, at a scale of between 1:1000 to 1:3000, with landscape units defined and including all corresponding explanations.  
e) Identification of landscape units subject to improvement.  
f) Names of the species, preferably native, and quantities to be planted in each landscape unit.  
g) Timeline of implementation of activities aimed at improving or maintaining the landscape units. | 2 |
| 11.8 | Is there a band between natural bodies of water and the farm? | The band between natural bodies of water and company premises must be observed in accordance with parameters defined by the relevant authorities. | 3 |
| 11.9 | Does the company support a regional initiative that helps to improve the environment of surrounding areas? | There must be tangible evidence of the company's participation in or support for a regional initiative for the protection of the environment, promotion of biodiversity or the strengthening of environmental awareness in the neighboring community. | 3 |
11. LANDSCAPE AND BIODIVERSITY

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.10</td>
<td>If the company has unproductive areas, does it have a plan to convert them to conservation zones and thus foster native fauna and flora?</td>
<td>The company must have a plan to convert any existing unproductive areas into flora and fauna conservation zones.</td>
<td>3</td>
</tr>
</tbody>
</table>

12. ENERGY AND MAINTENANCE

WHY IS THIS OF INTEREST TO YOUR COMPANY?

Energy is an increasingly relevant topic, because it is an important input for productive sectors, the environmental impacts involved in its production and use, and the consumption costs for the company.

Some floriculture activities require energy generated by hydroelectric plants and fossil fuels. However, energy use is a variable independent from production and often has a support component. Some especially relevant energy uses include the following:

- Farm lighting.
- Operation of boilers and electricity generators.
- Operation of equipment and production support machinery.
- Cooling rooms.
- Sulphur vaporizers.
- Operation of water-pumping systems (deep wells and water storage and utilization on the farm).

The economic and environmental importance of energy use in flower companies, from a financial and environmental point of view, will depend on the activities they carry out, as well as on the way they manage it. This will reveal waste and inefficiencies in the use of energy that can be minimized.

Florverde® aims to promote the capacity to measure and identify waste and inefficiencies in energy use among farms, and provide guidance on how to address these problems through the implementation of good practices that will be reflected in reduced consumption and costs.

WHAT CAN YOUR COMPANY DO?

- Identify the types of energy used in different production activities.
- Measure general and specific energy consumption levels.
→ Obtain information from equipment and machinery producers (ideal energy consumption) and specific requirements for each crop (eg., lighting).
→ Identify energy waste and suggest possible improvements.
→ Design an action plan to address energy waste.
→ Modify energy supply systems to make them more manageable and efficient.
→ Carry out a gradual conversion plan to acquire more energy efficient equipment.
→ Carry out preventive maintenance to electric facilities, machinery and equipment (eg. cooling rooms, boilers, electric generators and sulphur vaporizers and distribution networks, int. al.) on a periodic basis.
→ Improve the efficiency of lighting systems and develop new lighting standards on the farm.
→ Grow new varieties that require less lighting.
→ Keep energy consumption records establish indicators.

<table>
<thead>
<tr>
<th>12</th>
<th>ENERGY AND MAINTENANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NO.</td>
</tr>
<tr>
<td>12.1</td>
<td>12.1</td>
</tr>
</tbody>
</table>
| 12.2 | 12.2 | Is there an energy use plan to improve efficiency? | The company must:  
|     |      | a) Have a diagnosis that identifies processes and activities in which the consumption of energy can be optimized.  
|     |      | b) Implement a program describing actions to improve energy use efficiency. |
| 12.3 | 12.3 | Does the company have inventories of equipment, machinery and tools, as well as their corresponding preventive maintenance programs? | In line with any significant risks identified in its risk outlook, the company must:  
|     |      | a) Have a documented procedure of preventive maintenance to machinery, equipment and tools.  
|     |      | b) Keep inventories of machinery, equipment and tools.  
|     |      | c) Have a timeline for preventive maintenance, either contracted out or carried out in-house.  
|     |      | d) Have records to demonstrate compliance with the maintenance timeline for machinery, equipment and tools.  
|     |      | e) Have maintenance records of pesticide application machines.  
|     |      | f) Ensure that safety regulations are written in Spanish, are well known and applied by users.  
|     |      | g) Keep training records of personnel that operate machines, equipment and tools. |
13. TRACEABILITY AND RECORDS

WHY IS THIS OF INTEREST TO YOUR COMPANY?

An increasing trend in companies and markets is the ability to trace back the product to its origin in order to identify the conditions under which it was produced. The importance of traceability has increased, even to the point it has become a requirement on clients’ part.

The objective of traceability is to allow the identification of any ornamental product within a company, from the moment raw materials or inputs were purchased, to the activities of production, transformation and distribution, and up to the moment when the operator delivers to the next link in the chain.

For organizations, it is important to be able to trace back the origins of the product, as well as the exact process whereby the product was obtained. This allows the identification of causes behind quality problems and the undertaking of initial steps to ensure a continuous improvement of its processes and products. This way it is possible to inform clients in a timely fashion and address any concerns and socio-environmental requirements in terms of quality, phytosanitary and safety nature.

Traceability aims to strengthen the following aspects:

→ Improve production processes and product quality.
→ Improve the Florverde® management system and the socio-environmental performance of the production process.
→ Position the image of Colombian flowers internationally.

WHAT CAN YOUR COMPANY DO?

→ Create and implement an identification scheme of the origins of the product.
→ Optimize inventory methods and develop techniques to identify better the product (flower).
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.1</td>
<td>Is there a documented traceability system that allows tracking back the</td>
<td>There is a documented traceability system that allows the tracking down of a dispatched product from a company or companies that make up a group, up to the immediate client. Information on the product lot dispatched must be connected to its origin, whenever the product has been directly grown or purchased from third parties. Refer to General Regulations for group option.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>product from where it was dispatched up to its immediate client?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.2</td>
<td>Are the records necessary to support the implementation of Florverde®</td>
<td>The company must: a) File and keep records regarding Florverde® requirements available for a period corresponding to the previous year and the current one. b) Companies new to Florverde® must have records available for at least three months prior to the certification audit.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>requirements filed for a two-year period and made available if necessary?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14. ORIGINS OF PLANT MATERIAL

WHY IS THIS OF INTEREST TO YOUR COMPANY?

The quality and way in which plant material arrives at a company that propagates, cultivates or commercializes it has an important impact on the organization’s sustainability as a whole. Bringing in plant material that meets legal requirements and quality standards expected by the client is a crucial measure to guarantee the company’s sustainability.

High quality of the processes and products is also affected by the quality of the plant material, which makes it an important aspect of a company’s socio-environmental improvement process and competitiveness.

The payment of breeder rights guarantees the producer’s competitiveness and, therefore, the sustainability of the business as long as international market regulations aimed at protecting producers of new varieties are observed.

When clients’ expectations are met their loyalty is guaranteed, along with the company’s survival, the livelihood of the human team that forms it, and the viability of continuous socio-environmental improvement.

The aim is to address the following aspects:

→ Strengthening the relationship between clients and suppliers of plant material, to guarantee its legal trade and the company’s sustainability.
→ Preventing adverse phytosanitary impacts on the company.
→ Positioning the image of Colombian flowers internationally.

WHAT CAN YOUR COMPANY DO?

→ Respect the rights of variety breeders, by observing legislation.
→ Maintain communication channels with clients.
<table>
<thead>
<tr>
<th>No.</th>
<th>Checklist</th>
<th>Compliance Criteria</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>14.1</td>
<td>Does the producer know and meet quality criteria required by the client in relation with plant propagation material?</td>
<td>The company must: &lt;br&gt;a) Keep written correspondence with the supplier that demonstrates agreements regarding quality specifications of the plant material, if they exist. &lt;br&gt;b) Demonstrate that the supplier meets quality specifications required. &lt;br&gt;c) Demonstrate that the varieties received from the supplier are those required as part of quality specifications. &lt;br&gt;d) Have written agreements with the supplier with regard to the varieties that will be propagated and those that will be grown. &lt;br&gt;This record may not apply (N/A).</td>
</tr>
<tr>
<td>14</td>
<td>14.2</td>
<td>Does the company respect breeder’s intellectual property or the corresponding plant patents of the varieties grown?</td>
<td>The company must: &lt;br&gt;a) Have an updated list of legally protected varieties being grown. &lt;br&gt;b) Have documentary evidence to demonstrate that the grower has received the plants or propagating material grown from a legal source (sales contract, confirmation of purchase order, invoice, written declaration) or is authorized to propagate and/or to self-propagate the protected variety (license contract).</td>
</tr>
<tr>
<td>14</td>
<td>14.3</td>
<td>Is there a document that guarantees the quality of the seed or plant material produced?</td>
<td>The company must have records or certificates from the supplier that demonstrate the quality of the seed or plant material acquired, in terms of national legislation and phitosanitary quality. Additionally, records must include the name of variety and its purity, batch number and name of the supplier.</td>
</tr>
<tr>
<td>14</td>
<td>14.4</td>
<td>Has the company considered the characteristics of the chosen varieties with regard to resistance/tolerance to pest and diseases?</td>
<td>When choosing a variety, the company must demonstrate knowledge of the resistance/tolerance of plant material to pests and diseases, as long as the information exists and justifies the selection of the relevant variety.</td>
</tr>
</tbody>
</table>
## ORIGINS OF PLANT MATERIAL

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5</td>
<td>Is there a phitosanitary quality control system in place for the propagation area of the farm?</td>
<td>If the company has a propagation area, it must have a monitoring system that helps control any visible signs of pest or disease, thus avoiding their multiplication in production areas, and reducing the need for intervention with chemical controls and the like. There must be records of monitoring and control programs. Rootstock material must have documents that relate to its phytosanitary condition at origin.</td>
<td>2</td>
</tr>
</tbody>
</table>
| 14.6 | Do breeders who obtain or grow GMOs (genetically modified organisms) comply with the regulations of the country where they are grown? | Farms that breed or grow GMOs must:  
a) Have documents that demonstrate compliance with laws of the country where GMOs are grown  
b) Have information about the genetic modification made to the plant material. | 1 |
| 14.7 | Does the breeder of GMO plant material have information available? | If the company uses genetically modified organisms it must have records available with regard to their use, sowing and production. | 2 |
| 14.8 | Does the grower inform direct customers of the condition of genetically modified plant material? | The company must show evidence of written communication to direct customers informing them about the production condition of genetically modified organisms. | 1 |
| 14.9 | Is there a plan to minimize the risk of contamination between organisms that have been genetically modified and conventional plant material? | The grower must have a written plan explaining how genetically modified plant material (harvests and tests) is handled and stored to avoid or minimize the risk of contamination to conventional material (eg., by avoiding accidental mixtures of modified material with adjacent conventional material and thus maintaining the integrity of the product). | 2 |
| 14.10 | Are harvests of genetically modified plant material stored separately from conventional crops? | The producing company must demonstrate that:  
a) Harvested crops of genetically modified plant material are stored separately from conventional material.  
b) The storing area for genetically modified plant material is identified and guarantees the integrity of the product. | 1 |
## ORIGINS OF PLANT MATERIAL

<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.11</td>
<td>Have varieties or patterns been agreed with the company’s main clients?</td>
<td>There is a written agreement between producer and client, and the variety meets client quality specifications.</td>
<td>3</td>
</tr>
<tr>
<td>14.12</td>
<td>When varieties or patterns are agreed with clients, is there a written specification that defines the varieties to be grown?</td>
<td>There is a written agreement between producer and client, and the variety meets client quality specifications.</td>
<td>3</td>
</tr>
<tr>
<td>14.13</td>
<td>Do crops meet written specifications?</td>
<td>Registration documents (phytosanitary passport) must be available and meet client specifications.</td>
<td>3</td>
</tr>
</tbody>
</table>
15. POST-HARVEST TREATMENT

WHY IS THIS OF INTEREST TO YOUR COMPANY?

The handling of a flower from the moment it is harvested and its subsequent treatment involves good practices with regard to the environment and the people who participate in its production process.

The production of a harvested product implies a significant investment of natural and human resources. Meeting client requirements by guaranteeing the freshness of the flower and generating less waste are actions of social and environmental responsibility consistent with good practices applied during the production process.

Post-harvest treatment aims to:
- Lengthen the life span of flowers in a vase.
- Avoid flower waste products, management costs and losses in value added.
- Meet client expectations by using legally approved substances.
- Reinforce the appropriate use of machinery and tools.
- Reinforce the concept of hygiene during harvest and post-harvest.
- Position the image of Colombian flowers internationally.

WHAT CAN YOUR COMPANY DO?
- Give adequate use to machinery, equipment and tools.
- Maintain good hygiene practices.
- Control the quality of water used.
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
</tr>
</thead>
</table>
| 15.1 | Is there a procedure in place to guarantee that the harvest process is carried out under hygienic conditions? | The company must:  
  a) Demonstrate that it has and fulfills a documented procedure to guarantee hygienic conditions during the harvest process of the product.  
  b) The procedure must take into account at least the following aspects:  
    • Cleanliness of boxes or transport containers, which are free of waste, residues, soil, insects, etc.  
    • Tidiness and cleanliness of areas used for the storage of boxes, buckets, canvases and other transport containers.  
    • Cleanliness of cutting tools. |
| 15.2 | Is there a procedure in place to avoid dehydration of the harvested product from the moment it is cut to the cooling down process? | The company must:  
  a) Demonstrate it has and fulfills a documented procedure to avoid dehydration of the product harvested up to the cooling down process.  
  b) The procedure must take into account at least the following aspects:  
    • Permanent inflow of flowers from the harvest area to the post-harvest area.  
    • Established times between the reception of plant material (from suppliers or directly from the harvest area) and arrival at the cooling down area. |
| 15.3 | Are the classification, packing and cold room areas in good tidiness, cleanliness and good order condition? | The company must demonstrate there is no accumulation of plant, liquid, or any other type of waste. A minimum level of residues resulting from a day’s work is accepted. |
| 15.4 | Has the company considered different alternatives to the use of chemical substances for flower preservation? | The company must demonstrate that different alternatives to the use of STS (Silver Thiosulphate) and pesticides in post-harvest have been considered and assessed.  
Regarding the use of pesticides during post-harvest, IPDM requirements 9.3, 9.4, 9.5, 9.6, 9.9 and 9.11 must be met. |
<table>
<thead>
<tr>
<th>NO.</th>
<th>CHECKLIST</th>
<th>COMPLIANCE CRITERIA</th>
<th>LEVEL</th>
</tr>
</thead>
</table>
| 15.5 | Does the company have a procedure in place to guarantee adequate cooling down conditions for the product while it is stored and transported to the airport for dispatch? | The company must:  
a) Demonstrate that it has and meets a documented procedure to guarantee the right cooling down conditions during storage and transportation to the airport for dispatch.  
b) The procedure must consider at least the following aspects:  
   • Temperature range that must be kept in cold rooms.  
   • Means of transportation up to delivery at the airport for dispatch.  
   • Handling of cold rooms (Eg.: opening and closing of doors in cold rooms).  
   • Periodic check-up of cold room operation. | 2 |
| 15.6 | Does the company implement procedures for simulated travel and flower life span in vase to assess the longevity of the flower dispatched to clients? | The company must:  
a) Demonstrate it has and observes a documented procedure for simulated travel and flower life span in vase.  
b) Have records of assessment outcomes.  
c) Demonstrate corrective measures have been taken based on assessment outcomes. | 2 |
| 15.7 | Does the company follow up complaints filed by clients to analyze their causes? | The company must have an evaluation system to determine the reason for clients' complaints and the corrective actions undertaken. | 2 |
| 15.8 | Does the company never use untreated residual waters in post-harvest? | Untreated residual waters of domestic or industrial origin must never be used during post-harvest. | 1 |
| 15.9 | Are analyses of the quality of water used for post-harvest being carried out? | The company must:  
a) Carry out physical, chemical and microbiologic analyses of water used for post-harvest, according to the features of its supply source.  
b) Analyses must be carried out at least once a year and records must be kept.  
c) Demonstrate that measures have been taken in case of unfavorable results. | 2 |
| 15.10 | Is the laboratory responsible for analyzing the water used in post-harvest treatments adequate? | The laboratory must be certified under ISO 17025 or be officially approved, or be in the process of being certified or approved. | 3 |
GLOSSARY OF TERMS

**ACTION PLAN:** a set of actions, activities, timeline and resources systematically organized to achieve an objective or goal.

**ACTUAL CONTROL SYSTEM:** measures implemented to minimize the occurrence of work accidents and professional illness.

**ADJUSTMENT OF MEASURING INSTRUMENTS:** procedure to regulate a measuring instrument in order to leave it in an adequate condition for use. The adjustment may be automatic, semi-automatic or manual.

**APPLICATOR:** any person or company that applies pesticides.

**APPRENTICESHIP CONTRACT:** a special modality of Colombian Labor Law, whereby a person (apprentice) develops theoretical and practical experience in an authorized entity, in exchange for a sponsoring company providing the means for the apprentice to acquire complete training in a specific trade or activity. This implies involvement from the apprentice in the company’s administrative, operational, commercial or financial activities during a specific period of up to two (2) years, in exchange for a monthly allowance which is not deemed to be a salary.

**AUDIT:** a systematic, independent and documented process to obtain evidence of a review and objectively assess it to determine compliance with criteria established in the standard.

**AUDIT PROGRAM:** a set of one or more planned audits for a specific period and aimed at a specific objective.

**BI-ANNUAL BONUS:** special annual payment or benefit received by an employee in two installments (one each semester) and which substitutes workers’ share of profits.

**BLOCK:** an area or place where a crop is sown and where activities are carried out to produce flowers.

**CAPABILITY TO WORK:** from a medical point of view, it is the assessment of the relationship between work demands and the health of the individual that will carry out the work.

**CLAIM OR COMPLAINT:** a manifestation of dissatisfaction made to a company with regard to its products or to its way of handling claims, and which implies the expectation of a response or solution (explicit or implicit).

**COLLECTION CENTER:** a designated area to store and classify solid residues according to their potential to be reused or transformed.

**COMPOST LEACHATES:** liquid that drains out of compost, when it is overly moist and sometimes augmented by rainwater.

**COMPOSTING:** the controlled decomposition or transformation of organic matter by the action of micro organisms. The result of the decomposition of organic waste is known as compost.

**CONFINEMENT STRUCTURE:** a structure built from stone, concrete or any other waterproof material that allows the collection or recovery of spilled liquid and prevent it from contaminating other elements.

**CONTROL OVER THE PERSON:** personal protection elements, equipment and accessories used for the protection of workers from contact with elements that may cause injury or illness.

**DEGREE OF HAZARD:** indicator of the level of danger posed by a known risk, which assists in the qualitative and quantitative assessment and hyerarchical structuring of each of the identified risk factors.
DEGREE OF REPERCUSSION: indicator that reflects the incidence of a risk in relation with the exposed population. This indicator is obtained by multiplying the degree of hazard by a weighing factor that takes into consideration exposed groups. This way, it is possible to clearly visualize which risk must be addressed as a priority.

DELIMITATION: a process through which work areas and traffic ways are defined, marked, or outlined.

DIAGNOSIS OF WORKING CONDITIONS: a systematic way of identifying, locating and assessing risk factors that allows for periodic updating and facilitates the design of relevant intervention measures.

DISCIPLINARY MANAGEMENT: a procedure or manner established by the company to apply internal measures whenever regulations are contravened by a worker.

Dosification of Pesticides: measuring and weighing of amounts of pesticide according to needs stated in the programming of pesticide application.

Electric conductivity (EC): a commonly used measuring variable which indicates the presence of salts in the soil and in the water.

Elimination: the process that may lead to recover, recycle, regenerate, reuse, treat, store, or make final disposal of waste.

EMERGENCY PLAN: a set of planned and implemented strategies by a group, in which a planning process is identified and carried out to prevent an emergency, prepare for it, mitigate its impact, respond to it and recover from it so as to allow employees to reduce the impact on themselves or on the environment.

ENVIRONMENT: the surroundings, including water, air and soil, and the interrelationship between them, as well as the relationship between these elements and any other living organisms.

Filtration: a process whereby water penetrates from the surface of the earth down to the soil.

Final Disposal: process of isolating and confining waste, particularly useless or hazardous residues, in especially selected, designed and authorized areas to avoid contamination and harm or risk to human health and the environment.

Gauging: a comparison made against a pattern of measuring equipment under standardized specifications.

Hazardous Waste: a type of scrap or waste which may have corrosive, reactive, explosive, toxic, infectious or radioactive characteristics and therefore may pose a risk or cause harm to human health or the environment. Bottles, packaging and crates that have been in contact with this type of elements are also considered to be hazardous waste.

Humidity Curve: an indicator of the capacity of soil to retain water, as well as the capacity of the field, water available and wilting point. The curve varies according to the components of the soil (clay, sand, limestone, etc.).

INTEGRATED PEST AND DISEASE MANAGEMENT (IPDM): a system to combat pests which, in the context of an associated system and population dynamics of pest species, uses all the compatible techniques and methods available and maintains pest populations below levels that produce losses or unacceptable economic damage.

INTERNAL WORK REGULATIONS: a set of norms or regulations that determine the conditions under which both employers and employees must operate when carrying out their professional activities.

LABEL: written, printed, graphic, or adhesive material displayed in containers, bottles, packaging and crates of pesticides.

LACK OF WORK PROTECTION: any behavior on the part of the employer that puts a worker’s integrity and safety at risk through instructions or assignation of functions without regard for minimum protection and safety standards.
**Landscape Unit:** an area made up of a plant community with particular characteristics, the purpose of which is to create a positive impact in the workplace, improve its external visual quality or protect relevant environmental areas (e.g., rivers, wetlands, forests). The landscape units are defined by the company, depending on its own characteristics.

**Legal Equipment:** working gear (shoes and overalls) the company gives out three times a year (every four months) to every worker who earns less than two legal award salaries.

**Measuring Structures:** a group of systems or civil works built in rivers, lakes or superficial water sources based on a hydraulic design that allows for the measurement of the level or volume of water that passes through the structures.

**Mistreatment at Work:** any act of violence against a worker’s physical or moral integrity, their physical or sexual freedom, or their belongings. Includes any verbal insult, offence or slander against the moral integrity or right to intimacy and good reputation of those who participate in a work relationship, or any behavior aimed at damaging the self-esteem of a person who is part of a work relationship.

**Mixing of Pesticides:** to add water to and dilute pesticides present in mixing tanks, taking into account the sequence and quantities described in an application program.

**Monitoring:** a tool that facilitates the routinary way to supervise the conditions of the farm in the field.

**Non-Tax Payments:** monthly contributions made by employers to the family subsidy system, the Colombian Institute for Family Welfare (ICBF), and the National Learning Service (SENA).

**Organoleptic:** qualitative assessment of a soil sample, in terms of its amount of humidity in an area to be sprinkled, and which is based exclusively on the senses (eyesight and touch). While this analysis aims to obtain an objective definition of humidity contents, the general assessment will always be subjective given the differing views that people who take the samples may have, which not always coincide with others’.

**Pathogen:** a micro organism that produces sickness, and which is commonly limited to a living agent such as bacteria, fungus, nematodes or virus.

**Payroll:** a list of names of workers in a company who have received or are meant to receive payments, with their corresponding deductions. It also refers to the division in a company responsible for making payments of salaries and social security entitlements as part of the employer-employee relationship in a company.

**Pay Slip:** a document that records regular or sporadic payments to employees.

**Perceived Sickness:** the perception of the population with regard to health problems.

**Pest:** any living organism whose population density may cause harm to plants, animals or humans.

**Pesticide:** any chemical, physical or biological agent which either alone or when mixed or combined is used for the prevention, repression, attraction or control of insects, mites, pathogen agents, nematodes, weeds, rodents or other organisms that are harmful to plants, animals (or they derived products), human health or beneficial fauna. The definition also includes products used as defoliants, physiological regulators, pheromones and any other product that may be considered as such by the Ministry of Health or the Ministry of Agriculture. (Ruling 1843 of 1991, Ministry of Health).

**Pesticide Station:** a fixed location where the dilution and mixing of pesticides takes place, and from where the mixture is pumped to the location on the farm where it will be applied.

**Phreatic Level:** the depth of the surface of a free acquiferous with respect to the surface of the earth.

**Pollution:** an artificial discharge of substances in such a level of concentration that they produce harmful effects on the environment, including humans.
**Prioritization**: a method through which a plan or activity is meant to be carried out before others.

**Producer**: understood to be a person or company that produces ornamentals, either flowers or foliage (greens), including propagators for seedling or ornamental plant material.

**Rational Energy Use Program**: a set of actions the company must design and carry out based on a diagnosis of energy supply and demand, with the objective of meeting annual goals for the reduction or optimization of energy use.

**Readaptation to Work**: a set of actions required for the identification, evaluation, follow-up and supervision of employees who are suffering from a particular deficiency, disability or impairment that affects their work performance. The objective is to ensure that workers adapt to new work requirements that fit their physical and psycho-social condition, and which facilitate and guarantee their productive performance.

**Recycling**: a process whereby solid waste is used and transformed to restore its potential to be incorporated as raw material for the production of new outputs.

**Record**: a document or format which records data or information about an activity carried out in a specific period and in a systematic way to give evidence of their occurrence.

**Redundancy Payment**: a payment given to the worker when the work contract expires. It is equivalent to one month’s pay for every year of work and pro-rata for each fraction of the year. Workers may withdraw partial funds in anticipation under conditions established in the law.

**Re-entry Interval (REI)**: a period of time that must be left between the application of a pesticide and the entry of people to the treated area without the need for personal protection equipment (PPE).

**Reposition**: a process whereby an element is replaced by another one in better condition.

**Resource Inventory**: a process through which needed resources are identified to prevent or respond to a possible emergency after the nature of the threat is known.

**Risk**: likelihood of the occurrence of an event with negative consequences.

**Safety Band**: minimum distance that must be kept between the location where a pesticide will be applied and the area that requires protection.

**Safety Regulations**: (or standards) are commonly accepted reference levels which describe the minimum safety conditions that must be observed in work procedures and methods, with a view to guiding employees as to how injuries or material damage may be prevented.

**Salary**: remuneration for the services provided by the employee as part of a dependent work relationship. It includes not only a fixed or variable remuneration but also everything the worker receives, in money or in kind, as compensation for the service provided (eg. annual bonus, fringe benefits, overtime, sales commissions, percentage commission, etc.).

**Signposting**: an information system which, through the use of symbols of different colors and geometric shapes (with or without text) warns people about a situation that may affect their health or safety.

**Silver Thiosulphate**: a substance used to inhibit the synthesis of ethylene gas and, this way, lengthen the life of some types of flowers and guarantee their quality to consumers.

**Social Security**: a harmonious group of public and private entities, regulations and procedures made up of general established systems for pensions, health, professional risks and complementary social services as defined by law.

**Socio-Demographic Diagnosis**: an analysis aimed at acknowledging the social condition of workers in a company.
**SPECIAL SOLID WASTE STORE:** a defined and adapted physical space for the temporary and safe storage of hazardous waste before being delivered to its supplier or recipient.

**SPILLAGE:** any final discharge of an element, substance or compound contained in residual liquid of any origin (eg., agricultural, mining, industrial, sewage) into a body of water, a canal, the soil or subsoil (Decree 901, April 1\(^{st}\), 1997).

**SPRAYING:** a procedure used for the application of pesticides dissolved in water or oil, using equipment that produces a cloud of drops of variable size.

**Tensiometer:** a measuring device to determine the level of humidity of the soil, which helps to determine the appropriate time and amount of irrigation required.

**Third Parties:** persons or companies without any type of contractual relationship with the company or its employees.

**Traceability:** capacity to trace back the movement of a product or service throughout specific stages such as its production, preparation or handling and subsequent commercialization. Traceability also refers to the possibility to find and track down a product throughout the logistics chain, including its transformation and distribution.

**Treatment:** a method, technique or process able to modify the physical, chemical or biological characteristics or composition of solid waste, in order to neutralize its negative environmental impact, or transform it into inert matter, or recover it or reduce its volume so it can be transported, stored, disposed of or used in a safe way.

**Use and Handling of Pesticides:** all the activities carried out in relation with these substances, including their storage, application and final disposal of their residues or waste products.

**Vulnerability Analysis:** a process through which the company determines its level of exposure and susceptibility to lose one element or a group of elements given a specific threat.

**Washing of Pesticide Application Equipment and Personal Protection Elements:** the process of washing and rinsing with water the equipment and elements employed for personal protection or for applying a pesticide, in areas designated to that end.

**Waste Minimization:** optimization of productive processes aimed at diminishing the generation of waste.

**Water Consumption from a Concession Source:** water taken from its source (deep well, river, stream, lake or lagoon) within a specific period and over which the environmental authority has assigned a water concession or is in the process of assigning it.

**Work Contract:** a document in which a person commits to provide a service to another person or to a company, in a subordinate relationship and in exchange for an agreed remuneration.

**Work Discrimination:** any treatment given to a particular worker or group of workers as a result of considerations of race, sex, family origin, nationality, religious beliefs, political preferences or social situation, and which is unreasonable from a work perspective.

**Work Harassment:** any conduct known for its repetitive pattern or evident arbitrariness and which leads to infer the employer’s intention to induce an employee into resigning through disqualification, excessive workload, or permanent changes in the work schedule that may discourage the employee from fulfilling his/her duties.

**Work Inequity:** assignation of functions in contempt of the employee.

**Work Obstruction:** any action aimed at hindering, delaying or making difficult a worker’s fulfillment of activities. Some examples of this behavior include the deprivation, hiding or rendering useless of inputs, documents or tools required for work; the destruction or hiding of information; or hiding of correspondence or electronic mails.