

# Management & Monitoring HCV or Integrated HCV - HCS

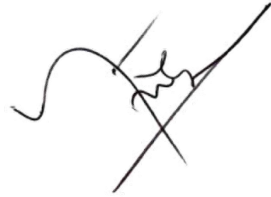
STANDARD OPERATING PROCEDURE (SOP)

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Approved by,

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Vice President Strategy Stakeholder

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Chief Executive Officer



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## 2. GENERAL DESCRIPTION

### 2.1 Background

GVL has committed to applying the principles of sustainable palm oil production (SPO) to continuously improve to achieve a sustainable plantation company, work procedures that form the basis for plantation and mill operational activities that refer to SPO principles are needed. This is included a commitment not to open oil palm plantations with high conservation value (HCV) areas, high carbon stock (HCS) forests, and peat areas regardless of depth. These three important areas are then managed in an integrated manner.

In an effort to implement these commitments, especially HCV and HCS, GVL considers it necessary to develop Integrated Standard Operating Procedures (SOP) for Monitoring and Management of High Conservation Value and High Carbon Stock (HCV &HCS) which aims to maintain and improve the quality these areas.

### 2.2 Objective and Scope

#### Objective

- As a guide to protecting areas identified as HCV or HCV-HCS.
- Optimizing integrated management and monitoring of HCV or HCV-HCS areas.
- Guide to mitigating damage and threats to integrated HCV or HCV-HCS areas.

#### Scope

The entire process of monitoring and managing HCV or HCV-HCS areas within the operational unit.

### 2.3 Definition

Term	Definition
High Conservation Value (HCV)	An HCV is a biological, ecological, social, or cultural value of outstanding significance or critical importance (Common Guidance for the HIGH CONSERVATION VALUES, 2018)
High Conservation Value Areas (HCVA)	High Conservation Value Area is an area that has one or more HCV.
Protected area	Areas that function to protect their subordinate areas consisting of local protected areas (including coastal borders, river banks, areas around lakes/reservoirs, and areas around springs) as well as nature reserves and cultural reserves (including nature reserves, marine reserve,s and their waters, mangrove forested coastal areas, national parks, grand forest parks and nature tourism parks and cultural and scientific heritage areas), which includes protected forest areas, peat areas, and water catchment areas.
HCV Management	Activities aimed at maintaining and increasing the sustainability of HCVs that have been identified and designated as HCVAs.
HCV monitoring	Activities aimed at evaluating management activities for HCVs that have been identified and designated as HCVAs to avoid environmental impacts caused by oil palm plantation operations and other activities.



High Carbon Stock	HCS forests are those identified through the HCS Approach as forested areas to be prioritized for protection from conversion.
Young Regenerating Forest	Forests are dominated by young trees that are growing back into the forest, but occasionally remnants of older forests (a kind of transitional forest) are still found. Canopy closure of 30-40% with an estimated carbon value of 35-75 tC/Ha.
High-Density Forest 1	It looks like remnants of natural forest but is in a very disturbed state and is currently recovering. Inside there are people's plants/mixed gardens. Canopy cover >50% with estimated carbon value >75-90 tC/Ha.
High-Density Forest 2	Remaining a natural forest, but in a more disturbed condition than HK3. Canopy cover >50% with an estimated carbon value of 90-150 tC/Ha.
High-Density Forest 3	Remaining natural forest, secondary forest with conditions close to primary forest. Canopy closure >50% with estimated carbon value >150 tC/Ha.
Management and Monitoring Master Plan of HCV or Integrated HCV-HCS	A document containing a generally HCV or integrated HCV - HCS area management and monitoring plan for a period of 5 years.
Primary Observations	Observations are made once in three months by recording the time of direct animal encounters in the form of type, time, species, location, number, and type of encounter (direct, sound, nest, trace).
Secondary Observations	Observations made at the time of direct animal encounters.
HCV or Integrated HCV-HCS Rehabilitation	Efforts to remediate, maintain, and enhance HCV or integrated HCV-HCS functions.
Remote sensing	The science and art of obtaining information about an object, area, or phenomenon through the analysis of contact data obtained with an instrument without direct contact with the object, area, or phenomenon under review.
HCV or Integrated HCV-HCS Management and Monitoring Plan	Masterplan follow-up document containing an annual plan (according to the validity period of the Masterplan) for detailed management and monitoring of HCV or integrated HCV-HCS areas.
Water Resources Buffer	Certain areas around water resources that have important benefits for maintaining the sustainability of water resources.
Invasive Species	Species that can cause damage to the environment and the economy directly or indirectly have a tendency to spread relatively



	quickly.
RTE Species (Rare, Threatened, Endangered)	Species that are included in the category of rare, threatened, and in danger of extinction.
Water resources	Water resources are natural water resources that have the potential to benefit humans, flora, fauna, and the environment
Exotics Plants	Plant species originating from abroad or outside their natural habitat are invasive (rapid spread) and have the potential to become a threat to native plants in the local area.
Endangered, Threatened, and/or Protected Species	<p>Endangered species is a conservation status given to species that have a high risk of becoming extinct in the wild or will become completely extinct in the near future.</p> <p>Threatened species are species that are at very high risk of extinction in the future.</p> <p>Protected species are species that have small populations, there is a sharp decline in individuals in nature and limited distribution areas. Included in the IUCN (International Union for Conservation on Nature and Natural Resources) Red List with the following criteria: (Critically Endangered/CR); (Endangered/EN); (Vulnerable / VU).</p> <p>Protected under the rules of the Convention of International Trade in Endangered Species (CITES) with Appendix I and Appendix II categories.</p> <p>Limited distribution/endemic (on an island or part of it).</p> <p>Species threatened due to local extermination.</p>

## 2.4 Duties and responsibilities

- a. Top management (CEO, COO, VPSS)  
Responsible for validating and approving HCV or Integrated HCV-HCS Management and Monitoring Master Plan
- b. Sustainability Head  
Responsible for preparing HCV or Integrated HCV-HCS Management and Monitoring Master Plan in accordance with procedures for further approval by the CEO.
- c. Operational Unit Head (Regional Controller/RC and Farm Manager/EM)  
Responsible for HCV or Integrated HCV-HCS management and monitoring activities as well as allocating funds and resources for the implementation of activities.
- d. Conservation Coordinator  
Assisted by the Conservation Officer, responsible for planning and implementing HCV or Integrated HCV-HCS management and monitoring activities within the Plantation Unit and socializing company policies regarding conservation to employees and stakeholders, and reporting the implementation of management and monitoring to the Unit Head.
- e. GIS Department



- Responsible for providing technical assistance and documentation related to mapping.
- f. Head of the Security Unit  
Responsible for providing technical assistance in the form of activities that protect HCVA and the surrounding area along with problem-solving.

## 2.5 Management and Monitoring of HCV or Integrated HCV-HCS

### 2.5.1 Management of HCV or Integrated HCV-HCS

Implementation of HCV or Integrated HCV-HCS management in the field, including:

#### A. Setting of HCV or Integrated HCV-HCS boundaries.

- a. HCV or Integrated HCV-HCS areas are demarcated by the Operational Unit with the aim that these areas have clear boundaries and facilitate the management and monitoring of integrated HCV or HCV-HCS areas.
- b. Boundary signs are prepared by the Conservation team and the taking of coordinate points and their mapping is assisted by the GIS team.
- c. Map and coordinates of the location of boundary signs are documented to facilitate monitoring and maintenance activities.
- d. The installation of HCV or integrated HCV-HCS boundary signs that are related to the interests of the community is carried out in a participatory manner and is documented in the Minutes of Installation of HCV or Integrated HCV-HCS boundary signs.
- e. Maintenance of boundary signs is carried out every 6 (six) months and documented.

#### B. Socialization

- a. Direct socialization.
  - i. Direct outreach is carried out through meetings aimed at providing information and increasing understanding of HCV or integrated HCV-HCS areas so that their whereabouts can be identified.
  - ii. The target of socialization is plantation and mill staff/employees (internal) as well as external stakeholders around the plantation area.
  - iii. Internal socialization activities can be carried out during morning circles or other meeting activities.
  - iv. Socialization activities with external stakeholders can be carried out in the form of meetings or in person.
  - v. Internal and external outreach is documented in the form of minutes, attendance lists, and photos.
- b. Indirect socialization
  - i. Socialization is indirectly conveyed by placing warning boards and/or other socialization media (posters, leaflets, etc.) that aim to inform the presence of HCVs or Integrated HCV-HCS.
  - ii. Warning boards and/or other socialization media are prepared by the Conservation Coordinator and Conservation Officer.
  - iii. Unit leaders are responsible for ensuring that the warning boards are installed and allocating funds and resources for the implementation of activities.
  - iv. Map and coordinates of signboard installation locations are documented to facilitate monitoring and maintenance activities. Documentation of installing



the signboards is documented in the minutes of installing the HCV or Integrated HCV-HCS Warning boards.

- v. Installation of Warning boards relating to the interests of the community is carried out in a participatory manner and documented and photos of the activities are attached.
- vi. Maintenance and monitoring of Warning boards are carried out once every 3 (three) months and documented by the Conservation team. Maintenance of notice boards is documented in a special form.

#### C. Protection of water source

Protection of water resources is carried out through:

- a) Determination of water resource boundaries following management plan recommendations in HCV or Integrated HCV-HCS identification documents, management and monitoring reports, or applicable government regulations.
- b) Do not carry out chemical application activities in the water resource border area. Installing spray boundary signs or chemical applications on the outermost part of the water resource boundary area.
- c) In water resource border areas that have been planted with oil palm:
  - i. Marking the limit of chemical application by making a cross using red paint around the palm stems embedded in the water resource border.
  - ii. Planting local species of wood in the riverbank to improve the condition of the water resources border ecosystem.
  - iii. Not replanting after entering 1 (one) oil palm plantation cycle or entering the replanting period.

#### D. HCV or Integrated HCV-HCS Rehabilitation.

HCV or integrated HCV-HCS rehabilitation is carried out in areas that have been designated as HCV or integrated HCV-HCS areas but there has been a change in land cover strata after being designated as a conservation area. HCV or Integrated HCV-HCS rehabilitation is carried out by:

- a. Preparation of an implementation plan for the rehabilitation of HCV or integrated HCV-HCS areas is carried out by the Conservation team which is part of HCV or Integrated HCV-HCS annual management and monitoring plan.
- b. Rehabilitation activities for Integrated HCV or HCV-HCS are carried out in the following steps:
  - i. Prepared seeds by nurseries or natural saplings: local species, healthy, have a sufficient height (around 50-100 cm).
  - ii. Prepare a planting hole with a minimum distance according to the distance between the palms.
  - iii. Plant during the rainy season but you also need to consider the flooding potential in the rehabilitation area.
  - iv. Mark the rehabilitation plants with stakes made of bamboo or wood or other materials that can be provided.

#### E. Invasive Species Control.

- a. If an invasive species is found in an HCV or integrated HCV-HCS area that threatens a conservation area, then control activities are carried out to protect the HCV or integrated HCV-HCS area.





- b. The invasive species in question are a group of plants or animals that are not native species, easily adaptable, whose spread is difficult to control so that they can threaten endemic plants and animals in the conservation area.
- c. Invasive species control activities are documented according to *special form*.

#### F. Fire prevention and management

Activities for fire prevention and management are regulated separately from this SOP

#### G. Prevention and management of conflicts with wild animals

Prevention of human-wildlife conflict aims as a standard rule in handling and preventing conflicts that occur between humans and wild animals. Mitigation of human-wildlife conflict is a process and effort or activity to overcome or reduce conflicts between humans and wild animals by prioritizing human interests and safety without compromising efforts to preserve wild animals, through the following procedures:

- a) Identification of each potential conflict animal through interviews or direct observation in the field is carried out by the Conservation team together with the operational unit.
- b) Mapping locations that have the potential for wildlife conflict to occur.
- c) Wildlife conflict prevention and management activities can be carried out as follows:
  - i. Create/build facilities that avoid direct human contact with conflict animal locations
  - ii. Maintenance of river border areas as living spaces for animals.
  - iii. Routine patrols/monitoring around locations where there is a potential for wildlife conflict to occur.
  - iv. Elimination of wild animals with the potential for conflict by the Conservation team and carried out in groups.
  - v. If an employee has a conflict with a dangerous animal, stay calm, stop all work, try to avoid the location.
  - vi. Record and verify each encounter with conflict wild animals no later than 1x24 hours using the provided form.
  - vii. Coordinate as soon as possible within 1x24 hours with the relevant parties when encountering a dead conflict animal.
  - viii. Report every month all incidents of wildlife conflict.

### 2.5.2 Monitoring of HCV or Integrated HCV-HCS

The implementation of integrated HCV or Integrated HCV-HCS monitoring in the field includes:

#### A. Monitoring land cover changes in HCV or Integrated HCV-HCS areas with Remote Sensing.

Monitoring using remote sensing is carried out by the GIS team regularly once a year. The end result of monitoring activities using remote sensing is a map with information on the current area of the HCV or Integrated HCV-HCS areas and the area of the previous year in tabular form.

#### B. HCV or Integrated HCV-HCS baseline verification.

One of the HCV or Integrated HCV-HCS monitoring activities is baseline verification



based on initial identification data or previous data. This is done by taking into account that the availability of data and information is more accurate with the actual conditions of the field. This evaluation allows for changes to the map and the extent of HCV or integrated HCV-HCS areas due to boundary corrections, the addition of HCV or integrated HCV-HCS objects, or due to changes in the legal framework. Steps taken include:

- a. Analysis of satellite imagery or aerial photography
- b. Field survey
- c. Discussions between sustainability, GIS, and operational units including top management
- d. Map finalization and evaluation result area calculation
- e. Preparation of minutes and memos of evaluation results

#### C. Monitoring of HCV or Integrated HCV-HCS Attributes.

Monitoring the condition of the HCV or integrated HCV-HCS area attributes is carried out to determine the condition of the HCV or integrated HCV-HCS attributes in the field. The HCV or integrated HCV-HCS attributes monitored include:

- a. Mark the boundaries of HCV or integrated HCV-HCS areas.
- b. HCV or Integrated HCV-HCS Warning boards.
- c. Spray limit sign. The results of monitoring the condition of the HCV or integrated HCV-HCS area attributes must be properly documented.

#### D. Wildlife and Plant Monitoring.

- a. Wildlife and plant monitoring is carried out to determine the presence of wild animal and plant species in HCV or integrated HCV-HCS areas.
- b. Wildlife and plant monitoring activities are carried out by the Conservation team with technical assistance from the Sustainability Department team according to the monitoring plan that has been prepared.
- c. Wildlife and plant monitoring includes primary and secondary monitoring.
- d. Primary monitoring locations are determined by the Head of Sustainability and Conservation team.
- e. Primary monitoring of wildlife is carried out periodically every 6 months with a set time and observation plot (permanent). The method used for data collection is a reconnaissance survey and/or line transect on permanent plots for mammals, aves, and herpetofauna classes.
- f. Primary monitoring locations are in the form of observation paths or plots and are presented in the form of maps of primary monitoring locations for wild animals and plants.
- g. Secondary monitoring is carried out by recording all types of RTE species found in all areas of the management unit.
- h. Plant monitoring using the grid line method in permanent plot locations.
- i. Conservation coordinator determines recommendations for plan monitoring plot locations and carries out plot monitoring once a year.
- j. In addition to direct observation, information on the presence of wild animals and plants was also carried out by interviewing employees and the local community regarding the presence of wild animals and plants.

#### E. Monitoring of HCV or Integrated HCV-HCS Conditions.

- a. Monitoring of HCV or Integrated HCV-HCS conditions aims to identify problems,



threats, and other information in HCV or Integrated HCV-HCS areas.

- b. Conservation team periodically monitor the condition of HCV or Integrated HCV-HCS by exploring the inside or edges of HCV or Integrated HCV-HCS areas so that all HCV or Integrated HCV-HCS areas can be monitored every month.
- c. Data collection is carried out in accordance with guidelines made separately.
- d. If there is a threat that cannot be resolved then it is coordinated with the unit leader.

#### F. Water Resources Monitoring.

Monitoring of water resources is carried out by recording the water discharge and river sedimentation rate. Monitoring is carried out in conjunction with taking water samples for regular water quality testing at least once a year. The monitoring point for sedimentation rate and recording of water discharge refers to the environmental monitoring program.

#### G. Erosion Level Monitoring.

- a. Erosion level measurements are carried out to see the level of soil erosion and as a parameter of the success of the management of the conservation techniques carried out.
- b. Measurements are made based on soil type and slope class.
- c. Erosion level measurements are carried out every 6 (six) months by Conservation Team.

#### H. Monitoring of Rehabilitation Activities.

Monitoring is carried out to ensure the success of rehabilitation activities. Monitoring rehabilitation activities includes the realization of planting area, tree condition, and calculating the survival rate of rehabilitation plants, with a sampling of 20% of the total realized area.

#### I. Integrated Socio-Cultural Monitoring of HCV or Integrated HCV-HCS Areas.

- a. Socio-cultural monitoring is carried out by interviewing the community or people who represent the entire local community who utilize the HCV or integrated HCV-HCS areas, especially those related to HCV 5 and HCV 6. The interviews are carried out simultaneously with direct socialization and are documented.
- b. Any HCV or integrated HCV-HCS utilization activities carried out by local communities must be known by the head of the unit.

### 2.5.3 Activity Reporting

#### A. Preparation of HCV or Integrated HCV-HCS Management and Monitoring Reports.

Preparation of HCV or Integrated HCV-HCS management and monitoring report is carried out through the following stages:

- a. Conservation Coordinator prepares documentation of the Management and Monitoring implementation that has been carried out and sends it to the Head of Sustainability.
- b. The Head of Sustainability together with the Conservation coordinator prepares a report document on the implementation of HCV or integrated HCV-HCS management and monitoring periodically once a year.



**B. Review of HCV or Integrated HCV-HCS Area Management and Monitoring Reports.**

The operational unit reviews and provides input if necessary on the HCV or Integrated HCV-HCS management and monitoring reports that have been prepared.

**C. Finalization and Distribution of HCV or Integrated HCV-HCS Management and Monitoring Reports.**

If improvements are needed, the Conservation coordinator finalizes the report and then distributes it to operational units. The results of HCV or integrated HCV-HCS monitoring are used for follow-up actions to improve HCV or integrated HCV-HCS management plans for the next period.



3. Flow-chart Management Monitoring of HCV or Integrated HCV-HCS

