



### CVA Vulnerability Analysis Matrix for IFMA

CRITICAL AREA	RESPONSIBLE UNIT/PERSON	OBJECTIVE	RISK FACTOR	LIKELIHOOD OF OCCURRENCE	SIGNIFICANCE OF IMPACT	CONTROL ACTIVITY/ MECHANISM	ASSESSMENT OF CONTROL OR SAFEGUARD	AREA FOR IMPROVEMENT
<b>Area: IFMA – Application</b>								
Application for IFMA area	Proponent	To secure an IFMA area	“Favoring” applicant/s over other applicant/s	Low	Low	IFMA Process Flow (Application); DAO 99-53	Adequate	Strictly follow the SOP on “first come, first serve” policy
<b>Area: IFMA – CDMP</b>								
Conduct of 5% timber inventory within residual forest	Composite Team (CENRO, PENRO, Region, FMB – CO, rep IFMA proponent	To determine the ISLO/ASLO (Inadequately Stock Logged Over areas/ Adequately Stock Logged Over areas)	Misdeclaration/ Under declaration of the vegetative cover of the area - Impairment of objectivity	Low High	Low High	DAO 99-53; DAO 91-08	Adequate	Conduct spot checking of the inventory plots

**Note: ISLO – clear cut (convert into forest plantation); ASLO – selective logging**



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<b>Area: IFMA – IOP Approval</b>								
Conduct of 20% timber inventory within areas for logging operation	Inventory Team (CENRO – Tree Markers, Timber Mgt. Officer, PENRO, rep from Region, ENRO/LGU)	To determine the area for logging operation and volume to be harvested (annual allowable cut)	Misdeclaration/ under declaration of vegetative cover Impairment of objectivity	Low  High	Low  High	DAO 99-53; DAO 91-08	Adequate	Conduct spot checking of the inventory plots/Validate the output of the inventory team (to make sure that the 20% timber inventory is not just “table survey”)
Review/evaluate IOP	Regional Deliberation Committee (CENRO, PENRO, EMB, RTDs, all Division Chiefs of Region, LGU/ENRO, NCIP)	To either recommend approval or denial of the IOP	Political interference (inside and outside)	Low	Low	DAO 99-53; DAO 91-08; MC 96-04	Insufficient (in terms of approval of IOP)	Set specific time frame on the processing/approval of IOP



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<b>Area: IFMA – IOP Implementation</b> B. Monitoring of IOP B.1 Logging Plan/Operations B.1.1 “Tree Marking Set-up” Establishment								
Establish “tree marking set-up”	Tree Markers (DENR and IFMA Proponent)	To determine the area/ boundary of the set-up	- Concealing information (trees cut within the 50% slope and 20m strip along riverbanks and creeks) - Impairment of objectivity	Low  High	Low  High	PD 705; IOP; ECC; NIPAS law	Adequate	Strict monitoring on the set-up establishment ; enforcement of penalties for violators (such as suspension/ cancellation of lease agreement; payment of forest charges and surcharge of 300%)
Prepare “tree marking set-up” with map	Tree Markers (DENR and IFMA Proponent)	To come-up with a “set-up” map	None	-	-	IOP	Adequate	-
Submit “tree marking set-up” to CENRO for approval	DENR Tree Markers	For DENR’s control and monitoring	Inaccurate report	Low	Low	“Tree marking set-up” is a control mechanism in itself	Adequate	Conduct validation of submitted report (by the regional office)
Provide copy of “tree marking set-up” to proponent	CENRO	Serves as guide for the proponent’s operation	None	-	-	“Tree marking set-up” map is a control mechanism in itself	Adequate	-



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<b>Area: IFMA – IOP Implementation</b> B. Monitoring of IOP B.1 Logging Plan/Operations B.1.2 <b>Tree Marking</b>								
Conduct pre-sampling inventory	Tree Markers (DENR and Proponent)	To determine the number of trees to be marked	-Misdeclaration and under declaration of residual trees - Impairment of objectivity	Low  High	Low  High	Selective Logging Handbook; IOP; “Tree Marking Set-up”; Market force is a control in itself	IOP and “Tree Marking set-up” maybe sufficient but the IOP implementation is not strictly followed	Strict compliance with Selective Logging Handbook; Intensify monitoring on the proponent’s compliance with the IOP
Mark trees “to be cut” and “residual trees”	Tree Markers (DENR and IFMA Proponent)	To determine marked trees as “to be cut” (harvestable trees – with 60 cm. diameter & up) and “residual” (15 – 50 cm diameter)	-Misdeclaration and under/over declaration of residual trees	Low	Low	Pre-Sampling Inventory Report; Selective Logging Handbook; IOP; “Tree Marking set-up”	Adequate	Strict compliance with Selective Logging Handbook; Intensify monitoring on the proponent’s compliance with the IOP
Prepare the tree marking report (trees “to be cut” and “residual” trees)	DENR Tree Markers	To come-up with a Tree Marking Report	Inaccurate Report (in terms of estimated volume and tree species)	Low	Low	Pre-Sampling Inventory report; Tree marking “set-up”	Adequate	Strict compliance with Selective Logging Handbook; Intensify monitoring on the proponent’s compliance with the IOP



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Encode in the "Forest Stock Management System" (FSMS)	CENRO Encoder	To input information in the FSMS	Proponent-driven information (proponent encodes the information)	High	High (accuracy of the report)	Review by TMO or Forester III, DAO 96-04, Memo Order 96-06	Inadequate	Encoders must be from the CENRO
Submit tree marking report to CENRO for approval	DENR Tree Marker	For DENR's control and monitoring	Approval of inaccurate report	Low	Low	Pre-Sampling Inventory report; Tree marking "set-up"	Adequate	Validate submitted report
Provide copy of report to proponent	CENRO	Serves as guide for the proponent's operation	None	-	-	Pre-Sampling Inventory report; Tree marking "set-up"	Adequate	-



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<b>Area: IFMA – IOP Implementation</b> B. Monitoring of IOP B.1 Logging Plan/Operations B.1.3 <b>Cutting and Scaling</b>								
Proponent starts cutting of trees	Proponent, assisted by Scaler (CENRO)	To scale the trees cut	- Underscaling or misdeclaration of volume & tree species	Low	High	Multi-agency checking mechanism, Tree Marking Report/FSMS	Adequate	Intensify validation and monitoring of report; enforcement of penalties for violators
			- Cutting outside the IOP	Low	High (loss in gov't. revenue; unsustainable forest management) --- cause for suspension of the logging operation of proponent	Geographic Positioning System (GPS), DAO 99-53		
			- Impairment of objectivity	High	High			



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Scale logs going to log pond, sawmill or sold outside	Scaler (DENR and proponent)	To determine volume of trees cut for production report	- Underscaling or misdeclaration of volume & tree species	Low	High (loss in gov't. revenue; unsustainable forest management; ecological imbalance)	FSMS; Annual Allowable Cut (AAC)	Adequate	Strict implementation of IOP; AAC; Establish scaling site (from cutting area to sawmill or log pond) to serve as checkpoint
Prepare forest charges for payment	Scaler/TMO	To determine the amount of forest charges	Non-payment or underpayment of forest charges	Low	High (loss in gov't. revenue)	DAO 16 series of 2004 (forest charges)	Adequate	Strict implementation of DAO 16; conduct rescaling/reassessment



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<b>Area: IFMA – IOP Implementation</b> B. Monitoring of IOP B.1 Logging Plan/Operations B.1.4 <b>Residual Inventory</b>								
<b>Note:</b> Residual Inventory activity is not applicable in the case study (CSDC proponent) due to the absence of ASLO.								
Check the marked residual trees	Tree Markers	- To determine the damaged marked residual  - To check the cutting if within the “set-up”	- Misdeclaration of damaged residual (in terms of number and volume of residual trees) - Misdeclaration of “set-up logged” (cutting outside the set-up)	-	-	Tree Marking report	-	Validate the marked residual trees (CENRO); impose penalties for violators
Prepare Residual Inventory report	Tree Markers	- To come-up with a Residual Inventory Report	Inaccurate report	-	-	Tree Marking report	-	Validate submitted report/creation of a validation team (CENRO)





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Compute the Silvicultural fees and prepare Order of Payment for CENRO's approval	Tree Markers	- To determine the amount of silvicultural fees to be paid and prepare OR	- Under declaration of amount to be paid	-	-	Residual Inventory report; Tree marking report; fell-logged report	-	Validate submitted report/creation of a validation team (PENRO/Regional Office)
<b>Note:</b> CENRO informs proponent of payment of silvicultural fees (thru letter)								



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<b>Area: IFMA – IOP Implementation</b> B. Monitoring of IOP B.1 Logging Plan/Operations B.1.5 <b>Road Repair and/or Rehabilitation</b>								
Check the road specification (from the approved IOP) - either as Rehabilitated Road or Newly Constructed Road with clearance from Secretary	CENRO (Chief of Engineering & Infrastructure Unit)	To check/ monitor road maintenance activities – if road is for rehabilitation or for new road construction	Tolerance to minimal deviations (as per specs on road repair/ rehabilitation)	Low	Low (little deviations from the specs on road repair)	IOP	Adequate	Strict compliance with the specifications on road repair and/or rehabilitation
<b>For Rehabilitated Road:</b>								
Prepare Inspection/ Evaluation Report for submission to PENRO	CENRO (Chief of Engineering & Infrastructure Unit)	To come-up with an Inspection Report for submission to PENRO	None	-	-	IOP	Adequate	-



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<b>For Newly Constructed Road:</b>								
Reports initial findings to CENRO	CENRO (Chief of Engineering & Infrastructure Unit)	To inform findings to CENRO	Concealing of actual result of findings; Political Interference (pressure from inside and outside)	Low	Low	IOP	Adequate	Expedite the processing of clearance (set specific time frame on issuance of clearance)
Prepare Inspection/Evaluation Report for submission to PENRO	CENRO (Chief of Engineering & Infrastructure Unit)	To come-up with an Inspection Report for submission to PENRO	Inaccurate Report	Low	Low	IOP	Adequate	Conduct validation of submitted report (by PENRO, regional office)
Inform proponent of violation as per Terms of Condition of IOP (thru letter) and recommend stoppage of operation <i>Assumption: No clearance from the Secretary - for Newly Constructed Road</i>	CENRO	To notify (thru letter) the proponent of their violation (as per Terms of Condition of the IOP) and recommend stoppage of operation	Request to disregard clearance from the Secretary)	Low	Low (ecological disturbance i.e. soil erosion; river siltation)	IOP	Adequate	Expedite the processing of clearance (set specific time frame on issuance of clearance)



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<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.2 Cut Disposition and Utilization Program                      (Note: In this phase, the Utilization Section (CENRO) prepares the production report (log production, lumber production and veneer/plywood production) for submission to PENRO and RED</p>								
<p><i>Note: The “cut” logs are either processed by the proponent’s own plant or sold to others</i></p> <p>Proponent requests for CTO/CLO, auxiliary invoice</p>	Proponent	To transport logs and lumber from sawmill to market/log pond	<p><i>Assumption: Proponent was issued CTO/CLO</i></p> <p>-“Recycling” of CTO/CLO and other transport documents (e.g. OR)</p>	High	High (loss in gov’t. revenue)	DAO 94-07 (CTO/CLO Issuance)	Adequate	Implement the computerized system of CTO/CLO issuance and monitoring
Prepares the CTO/CLO requests and conducts inspection of logs and lumber	Chief, Utilization Section (CENRO)	To handle processing of requests	-Intentional delay	Low	Low	DAO 94-07 (CTO/CLO Issuance)	Adequate	Conduct of values formation seminar or any seminar/training related to integrity development



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Measures the volume of logs and lumber to be transported and prepare payment of forest charges (if no payment has been made)	Scaler (CENRO)	To determine the actual volume of logs and lumber to be transported	-Underscaling of logs and lumber	Low	High	DAO 94-07 (CTO/CLO Issuance)	Adequate	Conduct of values formation seminar or any seminar/training related to integrity development  Implement the computerized system of CTO/CLO issuance and monitoring
		To determine if payment of forest charges has been made	-Non payment of forest charges (for a particular shipment)	Low	High (loss in gov't. revenue)			
<b>Note:</b> Prepares OR and CTO/CLO for review and initials by CENRO and records unit releases CTO/CLO to proponent								



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<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.3 Reforestation (Refo) Plan                      (Note: For Nursery and Seedling Production)</p>								
<p><b>Note:</b> As for Nursery and Seedling Production, CENRO validates seedling production of proponent (either for own use or for disposition) vis-à-vis Disposition Logbook. CENRO prepares Monitoring Report (Seedling Production and Disposition) for submission to PENRO and RED.</p>								
<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.3 Reforestation (Refo) Plan                      B.3.1 Plantation Establishment</p>								
<p><b>Note:</b> Proponent prepares site/area for planting for verification by CENRO. Then, proponent starts their planting activities.</p>								
Validate area planted/developed and prepare Validation Report (Plantation Establishment)	CENRO	To determine area planted/ developed	- Inaccurate declaration of area planted/ developed	Low	Low	IOP; Reforestation Plan	Adequate	Validate submitted report of CENRO by PENRO, Regional Office and Central Office
Submit to PENRO and Regional Office	CENRO	To determine degree of compliance with IOP and Refo Plan	Inaccurate Report	Low	Low	IOP; Reforestation Plan	Adequate	Validate submitted report of CENRO by PENRO, Regional Office and Central Office



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<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.4 Silvicultural Treatment Program                      B.4.1 For Timber Stand Improvement (TSI) and ANR/Enrichment Planting</p>								
<p><b>Note:</b> CENRO validates report of proponent (on the ground) if the proponent complies with the IOP. CENRO also prepares validation report for submission to PENRO/Regional Office.</p>								
<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.5 Protection Program                      B.5.1 For Forest Patrol; Census/Survey of Forest Occupants; Checkpoints; Information Dissemination/Education Campaign; and Forest Pest and Disease Control)</p>								
Activity: <i>Forest Patrol</i>  Construct firelines; lookout tower; bunkhouse	IFMA Proponent	To prevent spreading of forest fire; to detect forest fire; to serve as shelter for the workers	None	-	-	IOP	Adequate	



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Activity: <i>Checkpoints</i>  Check transport documents (CTO/CLO, OR, auxiliary invoice, delivery receipt, consignee)	Forest Guard/ Forest Ranger	To check the completeness of documents	Recycling of CTO/CLO & other transport documents (will not stamp documents as "used")	High	High (loss in gov't. revenue; unsustainable forest management)	Job description (duties and responsibilities in manning the checkpoints); Commitment Sheet in the Performance Evaluation System; multi-agency checking mechanism	Adequate	Imposition of penalties for violators; strengthen mobile checkpoint (random check of forest product in-transit)
Verification of species and rescaling per transport documents	Forest Guard/ Forest Ranger	To determine the species and volume of forest products	Misdeclaration of species and volume of forest product)	Low	High (loss in gov't. revenue; unsustainable forest management)	Scale Sheet; Transport documents	Inadequate	Recheck transport documents and rescale the forest products for verification





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Record pertinent information (species, no. of species; volume of forest products) in the Logbook and prepare Checkpoint Report	Forest Guard/ Forest Ranger	To input information as reference for their report to regional office	Inaccurate report	Low	Low	Scale Sheet; Transport documents	Inadequate	Compare and recheck transport documents vis-à-vis the FSMS (Forest Stock Mgt. System) by the regional office; imposition of penalties to violators
<p><b>Note:</b> For all other activities (Forest Patrol, Census/ Survey of Occupants, Information Dissemination/Education Campaign; and Forest Pest and Disease Control): CENRO validates report of proponent if the proponent complies with the IOP. CENRO also prepares validation report for submission to PENRO/Regional Office.</p>								
<p><b>Area: IFMA – IOP Implementation</b>                      B. Monitoring of IOP                      B.6 – B.8 Research Program; ECC; and Community Development</p>								
<p><b>Note:</b> For the activities on Research Program and Community Development: CENRO validates report of proponent if the proponent complies with the IOP. CENRO also prepares validation report for submission to PENRO/Regional Office. For ECC, the EMB-Regional Office is in-charge of monitoring (<b>as handled by the IDR ECC-CVA group</b>).</p>								