

ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATION STAGE 1 AUDIT CHECKLIST

AUDITORS : _____ DATE : _____

CLIENT : _____

A. SITE REVIEW

I. CHEMICAL CHECKLIST

	Now Using	Have Used	Remarks
Cd			
Cyanide			
P			
Pb			
Cr ⁶⁺			
As			
Hg			
PCB			
Se			
CCl ₄			
Dichloro-methane			
1.1.1 Trichloro-ethane			
Tetrachloro-ethylene			
Thiram, Simazine, Thiobencarb			
Acids			
Alkalis			
Petrochemicals			
Fuels			
Agrochemicals			
Flammable (Other than above)			
Other corrosives (Other than above)			
Powders			
Other Liquids (Specify)			
Other Solids			

II. COMPANY PERIMETER

Items	Findings
<p>1. Drainage and Landscape</p> <ul style="list-style-type: none"> a) Evaluate the company's drainage plan <ul style="list-style-type: none"> • Is there any underground waste effluent pit? • How many drains discharge points? b) Does the drain contain exceptional / abnormal amount of water especially when not raining? c) Is rubbish trap installed in any discharge of the drains? d) Is the condition of the rubbish trap properly maintained? e) Is oil sump installed in any of the drains? f) Is there any sign of clogged of the oil sump? g) Describe the company landscape. h) Is there any sign of unpleasant or pleasant visual impact? i) What standard they comply with? <p>2. Wastewater Treatment Plant</p> <ul style="list-style-type: none"> a) Are there any special drains to cater for discharge from the WWTP? <ul style="list-style-type: none"> • Does discharge goes into monsoon drain, river or to the sea? • Determine the discharge point(s). Are there any monitoring equipment at the discharge point? • Is discharge being monitored? • Is the drain cracked/clogged? • Describe the physical characteristics of the drain content (clear/foamy/muddy) b) Are there any sign or evidence of pollution (e.g oil)? c) Are there any sign of spillage of chemicals / scheduled wastes? d) Any sludge generated (organic sludges, metal hydroxide sludge)? e) Type of treatment (physical treatment, chemical treatment, biological treatment)? 	

Items	Findings
<p>3. Utilities/Maintenance</p> <ul style="list-style-type: none"> a) Study the overhead pipelines <ul style="list-style-type: none"> • (Color code, maintenance, sign of leakage) b) Study the boiler <ul style="list-style-type: none"> • (Type of fuel, licence from DOE, black smoke, dust, boiler chemical) c) Study the cafeteria (Domestic waste disposal). d) Study the cooling tower (Chemical used, discharge of effluent etc.) e) Study Fire fighting equipment (e.g. Halon/ CO₂) f) Diesel/fuel storage (containment) g) Any standby gensets available h) Any scrubber / dust collectors / chimneys? <p>4. Chemical/Oil Storage Area</p> <ul style="list-style-type: none"> a) Site <ul style="list-style-type: none"> • Is there any designated area for chemical store? • Is there any potential of flood? • What is the condition of access road? • Is there any emergency/fire equipment including spillage (spill kits)? b) Design <ul style="list-style-type: none"> • Is the area appropriately bunded or with secondary containment? • Is there any perimeter drain around the storage area? • Are there any sign of spillage of chemicals • Is the store sheltered or covered? • Is the area properly barricaded? • Is there any signages of 'dangerous' or 'bahaya' c) Storage/Operation <ul style="list-style-type: none"> • Are the stocking of containers appropriate? • Is the material generating hazardous dust/vapours? • Is there on inventory of chemical? If yes, is it updated? • Are there any MSDS/procedures for handling spillage available at the area? • Is the segregation of chemicals properly done? • Is the labelling of chemicals containers as OSHA (CPL) 1997? 	

Items	Findings
<p>5. Waste storage area (scheduled)</p> <p>a) Site</p> <ul style="list-style-type: none"> • On-site storage or off-site storage • Is there any potential of flood? • What is the condition of access road? • Is there any emergency/fire equipment including spillage (spill kit)? <p>b) Design</p> <ul style="list-style-type: none"> • Is the area appropriately bunded? • Is there any perimeter drain around the storage area? • Are there any sign of spillage of chemicals? • Is the store sheltered or covered? • Is the area properly barricaded? • Is there any signages of 'dangerous' or 'bahaya' <p>c) Storage/Operation</p> <ul style="list-style-type: none"> • Are the containers durable? • Is the stacking of containers appropriate? • Is the material generating hazardous dust/vapours? • Is there on inventory of scheduled waste? If yes, is it updated? • Is there any information of scheduled waste / procedures for handling spillage available at the area? • Is the segregation of scheduled waste properly done? • Are the labelling of wastes containers per EQ(Scheduled Wastes) Regulations? <p>6. Production Area</p> <p>a) Is the production floor free from spillages (i.e from oil, chemical, waste, etc?)</p> <p>b) Is there adequate containment to prevent pollution to various environmental media?</p> <p>c) Are there existing practices follows the standard norm (i.e storage, handling, operation etc.).</p> <p>d) Are there any sign of fugitive emission?</p> <p>e) Is the in-transit chemical storage area:</p> <ul style="list-style-type: none"> • adequately ventilated? • contain MSDS of chemical stored? • are the chemicals adequately contained? • are the spill kit available and appropriate? • are chemicals properly capped? • are SOPs/WI available for decanting? • are the chemicals containers properly label ? 	

B. ISO 14001: 2004 REQUIREMENTS		
Requirements	Yes/No	Remarks
<p>4.1 General requirements</p> <p>a) Has the organization described how to fulfil the International Standard requirements? (written/diagram)</p> <p>b) Has the organization defined and documented its EMS scope?</p> <p>c) Has the scope covered;</p> <ul style="list-style-type: none"> i) activities ii) products; and iii) services <p>d) If a critical part of an organization (with respect to Environment) is excluded from the scope of its EMS, has the organization provides the explanation.</p> <p>4.2 Environmental Policy</p> <p>a) Has the organization established/documentated an environmental policy consistent with the scope of the EMS?</p> <p>b) Has the policy takes into account its significant environmental impacts of its activities, products or services?</p> <p>c) Is the policy appropriate to the nature and scale of the activities, product and services (statement that touches on water, air, land, energy and resource conservation)</p>		
<p>d) Has the environmental policy includes:</p> <ul style="list-style-type: none"> i. commitment to continual improvement ii. commitment to prevention of pollution iii. commitment to comply with applicable environmental regulation iv. commitment to comply with other requirements to which the organization subscribes <p>d) Has the policy been documented and signed by top management?</p> <p>e) Will the policy be made available to the public?</p> <p>f) Has the organization establish means on how the policy will be communicated to all person working for or on behalf of the organization?</p>		
Requirements	Yes/No	Remarks

4.3.1 Environmental Aspects

- a) Has the organization established a procedure to identify the environmental aspects of its activities, products and services within the scope of the EMS?
- b) Has the activities, products and services covered in the procedures considers where appropriate the following :-
 - i. manufacturing processes
 - ii. extraction and distribution of raw materials and natural resources
 - iii. energy usage
 - iv. packaging and transportation
 - v. waste (to air, land, water) management
 - vi. design and development
 - vii. distribution, use and end-of-life of products
 - viii. environmental performance and practices of contractors and suppliers
 - ix. wildlife and biodiversity
 - x. recycling
- b) Has the procedure addressed activities, products and services that it can control and those that it can influence?
- c) Has the procedure take into account planned or new developments, or new or modified activities, products and services?
- d) Has the procedure identified the environmental aspects as emissions to air, releases to water, releases to land, use of raw materials and natural resources, use of energy, energy emitted, waste and by-products and physical attributes.
- e) Has the organization considers the following condition when identifying the environmental aspects:
 - i. Normal
 - ii. Abnormal
 - iii. Emergency
- f) Has the procedure established method and criteria to determine significant environmental impacts from its associated aspects?
- g) Are the methodologies and criteria logical and make sense.
- h) Has the organization evaluated its impacts consistently through out?
- i) Has the organization clearly identified those significant aspects that have or can have significant impacts on the environment?

Requirements	Yes/No	Remarks
<p>j) Has the organization established method or mechanism to keep aspects/impacts information up-to-date?</p> <p>k) Has the following being considered in triggering the up-dating or review:- i. interested parties ii. changes of activities/product/services iii. changes in regulation iv. changes in policy</p> <p>l) Has the organisation demonstrate how the significant environmental aspects are taken into account in establishing, implementing and maintaining its EMS?</p>		
<p>4.3.2 Legal and other requirements</p>		
<p>a) Has the organization established a procedure to identify the applicable legal and other requirements to which the organization subscribes related to its environmental aspects?</p> <p>b) Has the procedure included method(s) to access to applicable legal requirements?</p> <p>c) Has the organization identified applicable legal requirements (i.e. specific regulation, clause, or subsection applicable, licences/permits/approval condition, EIA conditions, etc.) that it subscribed related to its environmental aspects?</p> <p>d) Have the organization established method to determine how these requirements apply to its environmental aspects?</p> <p>e) Has the organization established methods on how to keep track on changes to legal requirements and other environmental requirements and the mechanism to keep information up-to-date?</p> <p>f) Has the legal and other requirements being considered in developing, and maintaining the EMS?</p>		
<p>4.3.3 Objectives, targets and programme(s)</p>		
<p>a) Has the organization established and documented their environmental objectives and targets?</p>		

Requirements	Yes/No	Remarks
<p>b) Has the organization established and documented environmental objectives and targets at relevant functions and levels?</p> <p>c) Has the basis for establishing and setting or reviewing the objectives and targets take into account:</p> <ul style="list-style-type: none"> i) the legal requirements and other requirements which the organization subscribes, ii) its significant environmental aspects <p>and considered:</p> <ul style="list-style-type: none"> i) its technological option ii) its financial iii) operational and business requirements iv) view of interested parties <p>d) Has the used of these criteria been made transparent?</p> <p>e) Are the objectives and targets measurable and consistent with environmental policy including commitment to prevention of pollution, compliance to applicable legal and other requirement and to continual improvement?</p> <p>f) Are the targets, set based on specified baseline to show true environmental performance improvement?</p> <p>g) Are the program of achieving the objectives and targets defined the:</p> <ul style="list-style-type: none"> i. person responsible ii. mean of achieving objectives and target iii. time frame <p>4.4.1 Resources, roles, responsibility and authority</p> <p>a) Has the organisation specify provision of essential EMS resources?</p> <p>b) Does the resources include:</p> <ul style="list-style-type: none"> i) human resources and specialized skills, ii) organizational infrastructure, iii) technology and iv) financial resources <p>c) Has the organization defined roles, responsibility and authorities of workers to facilitate environmental management?</p>		
Requirements	Yes/No	Remarks

<p>d) Does the roles, responsibility and authority include the following personnel:-</p> <ul style="list-style-type: none"> - Top Management } Organization Chart - Management Level } Organization Chart - Management representative } EMS Committee Chart - EMS committee } EMS Committee Chart - Personnel responsible for environmental related issues - Personnel responsible for identifying legal requirement - Personnel responsible for ensuring compliance to legal compliance <p>e) Has the organization established method to communicate roles, responsibility and authorities of workers involved in the EMS?</p> <p>f) Has the organization appoint a specific management representative with defined roles, responsibility and authority for :</p> <ol style="list-style-type: none"> i. ensuring that EMS are established, implemented and maintained. ii. reporting on the performance of EMS to top management for review, including recommendations for improvement 		
<p>4.4.2 Competence, training and awareness</p>		
<p>a) Has the organization identify person(s) performing tasks for it or on its behalf that have the potential to cause a significant impact?</p> <p>b) Has the competence requirements based on appropriate education, training or experience been identified?</p> <p>a) Has the organisation established a mechanism to evaluate competence requirement for:</p> <ol style="list-style-type: none"> i) person working for ii) person working on behalf <p>d) Has the organization established a method to identify training needs?</p> <p>a) Has the organization identified the training needs associated with its environmental aspects and its environmental management system? (List of training or type of training to be given)</p> <p>f) Has the organization established methods how to fulfil the identified training needs?</p>		

Requirements	Yes/No	Remarks
--------------	--------	---------

<p>g) Has the organization established procedure or method to make persons working for it or on its behalf aware of:</p> <ul style="list-style-type: none"> • The importance of conformance with the environmental policy, procedure and with EMS requirement ii. Significant environmental aspects and related (actual/potential) impacts of their work activities and the environmental benefits of improved personnel performance. iii. Roles and responsibilities in achieving conformance to EMS requirements • The potential consequences of departure from specified procedures <p>* Documents required for verification:</p> <ol style="list-style-type: none"> 1. List of training needs on significant impact(s). 2. Type of training to be given to those whose work may create significant impact(s). <p>4.4.3 Communication</p> <ul style="list-style-type: none"> • Has the organization established procedure for internal communication? • Has the procedure cover internal communication at the various levels and function of the organization? (top down/bottom up) • Has the organization established procedure for receiving, documenting and responding to relevant communication from external interested parties? • Has the organization identified mandatory external communication that needs to be communicated? (Eg: Department of Environment, DOSH, Local Authority) • Has the organisation decided whether to voluntarily communicate about its significant environmental aspects to interest parties? • Is the decision documented • If yes, has the organisation established a method for this external communication? <p>4.4.4 Documentation</p> <p>f) Has the organization established a documentation systems that include:</p>		
--	--	--

Requirements	Yes/No	Remarks
--------------	--------	---------

- j) environmental policy, objectives and targets
- k) description of the scope of the environmental management system
- l) provide a description of the main elements of the EMS and their interaction and direction to EMS related documentations
- m) documents and records required by the standard.
- n) documents and records necessary to ensure the effective planning, operation and control of processes that relate to the significant environmental aspects.

4.4.5 Control of documents

- Has the organization established a procedure to control all documents required by the EMS and the standard?
- b) Has the procedure covers the following:
 1. approve documents for adequacy prior to issue
 2. review and update as necessary and re-approve documents
 3. ensure that change and the current revision status of documents are identified
 4. ensure relevant versions of applicable documents are available at points of use
 5. ensure that documents remain legible and readily identifiable
 6. ensure that documents of external origin determined by the organisation to be necessary for the planning and operation of the environmental management system are identified and their distribution controlled, and
 7. prevent the unintended use of obsolete document and apply suitable identification to them if they are retained for any purpose.

4.4.6 Operational control

- Has the organization identified and planned those operations including maintenance that are associated with significant environmental aspects in order to ensure that they are carried out under specified conditions?
- Has the organization established documented procedures and work instruction on these activities in order to ensure that they are carried out under specified condition and their absence could lead to deviations from the environmental policy, objectives and targets?

Requirements	Yes/No	Remarks
--------------	--------	---------

<ul style="list-style-type: none"> • Has the procedure stipulate the operating criteria? d) Has the organization established procedures related to the significant environmental aspects of purchased goods and services? e) Has the organization established method to communicate the applicable procedures and requirements to suppliers and contractors? <p>4.4.7 Emergency preparedness and response</p> <ul style="list-style-type: none"> a) Has the organization established a procedure to identify potential emergency situations and potential accidents (e.g. risk assessment, site inspection, safety inspection, management walk-about, etc) that can have an impact on the environment? b) Has the organization established procedures for responding to potential emergency situations and potential accidents? c) Has the Emergency plan includes:- <ul style="list-style-type: none"> b) Emergency organization and responsibilities c) a list of key personnel and contact number iii. details of emergency services (e.g. fire dept, spill clean-up, impacts mitigation, decontamination, etc) iv. internal and external communication plan v. action taken in the event at different types of emergency vi. information on hazardous materials vii. training plans viii post mortem and review for effectiveness d) Has the organization described the mechanism to review and revise (where necessary) the relevant procedure in particular after the occurrence of emergency situation or accidents? e) Has the organization established the periodical period to test (where practicable) the procedure(s)? <p>4.5.1 Monitoring and measurement</p> <ul style="list-style-type: none"> a) Has the organization established a procedure to monitor and measure operations and activities that can have significant environmental impact? b) Has this procedure described the key characteristic of the operations and activities which should be monitored or measured? 		
Requirements	Yes/No	Remarks

<p>c) Has this procedures include the followings:</p> <ul style="list-style-type: none"> d) documenting of information to monitor performance e) conformance with the organization's environmental objectives and targets f) applicable operational control (parameter to be controlled) <p>d) Has the organization established a procedure to calibrate or verify the monitoring and measuring equipments?</p> <p>e) Has the procedure or monitoring programme defined</p> <ul style="list-style-type: none"> i. Personnel responsible to carry out monitoring ii. Monitoring parameters iii. Monitoring frequency <p>g) Sampling point</p> <p>h) Methodology of monitoring</p> <p>i) Standard of compliance</p> <p>4.5.2 Evaluation of compliance</p> <p>Has the organization established a procedure for periodically evaluate compliance with applicable legal requirements and other requirements?</p> <p>ii. Has the procedure defined :</p> <ul style="list-style-type: none"> i) mechanism to evaluate the compliance ii) frequency of evaluation iii) person responsible to carry out the evaluation <p>4.5.3 Nonconformity corrective action and preventive action</p> <p>a) Has the organization established a procedure for dealing with actual and potential nonconformity (ies) and for taking corrective action and preventive action?</p> <p>b) Has the procedure defined methods and responsibility to identify actual and potential nonconformity?</p> <p>Has the procedure defined the method to handle and investigate actual and potential nonconformity (ies) and defined the responsibility to take corrective action and preventive action?</p>		
--	--	--

Requirements	Yes/No	Remarks

<p>e) Has the procedure defined requirements for:</p> <ul style="list-style-type: none"> iv. identifying and correcting non-conformity(ies), and taking actions to mitigate the impacts ii. investigate nonconformity (ies), determine their cause(s) and taking actions in order to avoid recurrence, iii. evaluating the need for action(s) to prevent nonconformity (ies) and implement appropriate actions designed to avoid occurrence iv. recording the result of corrective action and preventive action taken, v. reviewing the effectiveness of corrective action and preventive action taken. 		
<p>4.5.4 Control of records</p>		
<p>a) Has the organization established procedure for identifying, collecting, protecting, retrieving, retention and disposal of all environmental records used to support the EMS and the standard</p> <p>b) Has the identified and documented environmental records include:</p> <ul style="list-style-type: none"> i. information on environmental laws j. complaint records k. training records l. process information m. product information n. inspection, maintenance and calibration o. pertinent contractor and supplier information p. incident report q. info on ERP r. info on significant environmental aspects s. audit result t. management review 		
<p>4.5.5 Internal Audit</p>		
<p>g) Has the organization established a procedure for carrying out internal audit?</p> <p>h) Has the procedure addressed the following:</p> <ul style="list-style-type: none"> • Internal audits of the environmental management system are conducted at planned interval • determination of audit criteria, audit scope and audit objectives • audit methodologies • EMS auditors competence • person responsible to establish audit programme /audit plan, conducting the audit and reporting results need and retaining the associated records. 		

Requirements	Yes/No	Remarks

<p>i) Has the procedure defined the basis for development of audit programme? Does the basis include consideration of environmental importance of the operation(s) concerned and the results of previous audits?</p> <p>j) Has the organization established a mechanism to ensure consistency among the auditors (e.g. audit checklist)</p> <p>k) Has the procedure defined the basis for selection of auditors?</p> <p>l) Does the selection of the auditors and conduct of the audit are objective and impartial of the audit process?</p> <p>m) Has the organization carry out internal audit?</p> <p>n) Based on the audit finding, is the internal audit effective and reliable.</p> <p>4.6 Management review</p> <p>iv. Has the organization established procedure for conducting management review and for determining the follow up action?</p> <p>Has the procedure addressed the following:</p> <p>f) schedule the management review at planned interval.</p> <p>g) composition of the management review committee</p> <p>h) agenda of management review</p> <p>i) responsibility for recording the review meeting</p> <p>j) input to management reviews</p> <p>k) output from the management review</p> <p>Has the organization conducted a management review as planned?</p> <p>Did the agenda specified the following inputs to be reviewed:</p> <p>a) Appropriateness/suitability of Environmental policy</p> <p>b) results from internal audits</p> <p>c) status of compliance to legal and other requirements</p> <p>d) communication(s) from external interested parties, including complaints</p> <p>e) the extent to which objectives and targets have been met</p> <p>f) status of corrective and preventive actions</p> <p>g) follow-up actions from previous management reviews</p>		
Requirements	Yes/No	Remarks

<p>h) changing circumstances, including development in legal and other requirements</p> <p>i) recommendation for improvement</p> <p>Has the output been recorded for further actions?</p> <p>From the minutes of meeting, has the review been adequately performed</p>		
<p>General Requirements</p> <p>i. Are there adequate records to indicate effective implementation of the standard?</p> <p>ii. Is the internal audit effective?</p> <p>iii. Is the management review effective?</p> <p>iv. Has the organization establish an environmental management system that comply with all the requirements of MS ISO 14001 (Clause 4)</p>		

**STAGE 2 AUDIT CHECKLIST
ISO 14001 : 2004**

Audit team : _____

Audit date : _____

Client : _____

Requirements	Results
<p>4.1 <u>General requirements</u></p> <p>1. Has the organization implemented, maintained and continually improved an environmental management system in accordance with the requirements of the International Standard within the defined scope of the EMS</p>	
<p>4.2 <u>Environmental policy</u></p> <p>1. Has the organization's environmental policy been effectively deployed, communicated, and implemented throughout the organization</p>	
<p>4.3.1 <u>Environmental aspects</u></p> <p>1. Has the organization controlled the impacts of their activities, products and services on the environment, consistent with their environmental policy and objectives</p>	
<p>4.3.2 <u>Legal and other requirements</u></p> <p>1. Does the organization has access to applicable legal requirements and other requirements to which the organization subscribes and ensure that legal and other requirements information are kept up to date all the time</p>	
<p>4.3.3 <u>Objectives, targets and programme(s)</u></p> <p>1. Has the organization implemented and maintained the objectives, targets and programme(s) at each relevant function and level according to plan</p> <p>2. Has the organization tracked the progress and determined the status towards achieving the established targets</p> <p>3. Has the organization achieved its objectives and targets, or completed the programme(s)</p>	

Requirements	Results
<p>4.4.1 <u>Resources, roles, responsibility and authority</u></p> <ol style="list-style-type: none"> 1. Has the organization called for a commitment from all persons working for the organization or on its behalf 2. Has the top management established the policy, provided appropriate resources and ensure that the EMS is implemented 3. Has the designated Management Representative(s) fulfilled his/her roles, responsibility and authority pertaining to the standard requirements 	
<p>4.4.2 <u>Competence, training and awareness</u></p> <ol style="list-style-type: none"> 1. Has the organization identified the awareness, knowledge, understanding and skills needed by any person with the responsibility and authority to perform tasks on its behalf 2. Has the organization required those persons are competent to perform tasks which they are assigned 3. Has the organization identified training needs and taken actions to ensure the provision of training 4. Has the organization required that all persons are aware of the organization's environmental policy and EMS, and the environmental aspects of the organization's activities, products and services that could be affected by their work 5. Has the organization required that contractors working on its behalf are able to demonstrate that their employees have the requisite competence and/or appropriate training <i>(The number of person(s) interviewed should be appropriate so as to reveal a satisfactory confidence level to the auditor)</i> 	

Requirements	Results
<p>4.4.3 <u>Communication</u></p> <ol style="list-style-type: none"> 1. Has the internal communication being implemented to ensure effectiveness of the EMS 2. Has the communication from/with the interested parties being managed according to the procedure 3. Has the organization decided to communicate externally on its significant aspects and carried out the communication according to the procedure 	
<p>4.4.4 <u>Documentation and Control of documents</u></p> <ol style="list-style-type: none"> 1. Has the organization maintained documents in a manner sufficient to implement the EMS 	
<p>4.4.5 <u>Control of documents</u></p> <ol style="list-style-type: none"> 1. Are the current versions of relevant documents are available at all locations where operations essential? (refer to distribution list) 2. Has the organization maintain and control their documents in accordance to established procedure? 	
<p>4.4.6 <u>Operational control</u></p> <ol style="list-style-type: none"> 1. Has the organization ensured that activities/operations associated with identified significant environmental aspects are conducted in conformity with the documented procedures 2. Has the organization communicated the relevant operational controls procedures to the suppliers and contractors <p><i>(Each auditor should sample appropriate/relevant procedures during the audit to verify its effectiveness)</i></p>	
<p>4.4.7 <u>Emergency preparedness and response</u></p> <ol style="list-style-type: none"> 1. Has the organization implemented an EPR plan or procedures that suits its own particular needs 2. Has the organization reviewed and confirmed conformity with the plan/procedures 3. Has the organization periodically tested such plan/procedures (where practicable)? <i>(Confirm the participation of internal and relevant authority)</i> 	

Requirements	Results
<p>4.5.1 <u>Monitoring and measurement</u></p> <ol style="list-style-type: none"> 1. Has the organization monitored and measured the key characteristics of its operations and activities that can have significant environmental impacts as planned and in accordance to the procedure 2. Has the organization made analysis of the data collected or monitoring results, such as trend analysis, tracking and performance and used the knowledge to implement corrective and preventive action 3. Has the organization calibrated or verified the measuring equipment at specified intervals, or prior to use 4. Has the organization appointed sub-contractor/consultant Company for the monitoring and measurement activities? If yes, has the organization assessed their sub-contractor capability and competency <p>4.5.2 <u>Evaluation of compliance</u></p> <ol style="list-style-type: none"> 1. Has the organization demonstrated that it has evaluated compliance with the relevant legal requirements and other requirements to which it has subscribed (e.g. EQA, Poison Act, Factory and Machinery Act, Petroleum Act, OSHA, requirements of licenses/permits/ authorizations, Industrial COP, Corporate/Customer requirements, Treaty, etc.) 2. Has the organization complied with all the requirements 	
<p>4.5.3 <u>Nonconformity, corrective action and preventive action</u></p> <ol style="list-style-type: none"> 1. Has the organization implemented and maintained the identification activities, corrective action and preventive action following the procedure 2. Has the corrective action and preventive action taken appropriate to the magnitude of the problems and commensurate with the environmental impact encountered 3. Has the organization reviewed the effectiveness of corrective action and preventive action taken and make necessary changes to EMS documentation 	

Requirements	Results
<p>4.5.4 <u>Control of records</u></p> <p>1. Are the environmental records required by the EMS and the standard (e.g. legislative and regulatory requirements, permits, environmental aspects and their associated impacts, associated training and competence, training activity, inspection, equipments calibration and verification, monitoring data, periodical evaluation of legal requirements and other requirements, details of nonconformity, accidents/incidents, complaints and follow-up, results of corrective actions and preventive actions, associated with audit, etc.</p> <p><i>(Verify the identification, collection, indexing, filing, storage, maintenance, retrieval, retention and disposition of these records by sampling).</i></p>	
<p>4.5.5 <u>Internal audit</u></p> <p>1. Are the auditors conducting the audit competence and in a position to do so impartially and objectively</p> <p>2. Has the internal audit ensured timeliness and effectiveness of corrective action and preventive action</p> <p>3. Has the internal audit (based on interview with audit team member(s), audit planning, conduct of audit, NCR issuance, and audit reporting) been effective and reliable</p>	
<p>4.6 <u>Management review</u></p> <p>1. Has the organization conducted the management review in accordance to the plan and covering the scope of the EMS</p> <p>2. Has the output from management review being explicitly recorded</p>	

**CHECKLIST FOR SURVEILLANCE AUDIT
(ISO 14001:2004)**

No.	Item	Findings and remarks
Changes to the organization		
1.	Has there been any significant change to the organization since the last audit involving: (a) Top management (including MR) (b) Products, processes and / or systems covered by the scope of certification	
2.	Where applicable, have these changes been adequately addressed / incorporated in the EMS?	
3.	In the case of changes to the top management, is there evidence that the new management is committed to maintaining and improving the effectiveness of the system?	
Follow-up on non-conformities identified during the last audit		
1.	Have non-conformities raised during the last audit been satisfactorily closed out?	
2.	Have the corrective actions taken been effective?	
Follow-up on appeals, complaints and disputes made against certified organization (if applicable)		
1.	Has there been any appeal, complaint or dispute involving the organization brought before SIRIM QAS since the last audit?	
2.	From the result of investigation, was it caused by a non-conformity or a failure by the organization to meet certification requirements?	
3.	Has the organization investigated its own systems and procedures and taken the necessary corrective action?	
Internal audit		
1.	Have internal audits been planned and carried out in accordance with the standard and the organization's documented procedure?	
2.	Do records demonstrate adequate coverage of the entire system?	
3.	Is it evident from the findings of the audits and / or interviews with the auditors that the auditors are competent?	
4.	Has timely action been taken to eliminate detected non-conformities and their causes?	

No.	Item	Findings and remarks
5.	Have follow-up activities been effective in ensuring that action taken been verified and the results of such verification reported?	
6.	To what degree can the organization's internal audit system be relied upon to ensure satisfactory implementation, maintenance and improvement of the system?	
Management review		
1.	Has the organization conducted management reviews of the system at planned intervals?	
2.	When was the last review meeting held?	
3.	Did the input to the review include information on: <ul style="list-style-type: none"> • results of audits • results of evaluation of compliance with legal and other requirements • communication from external interested parties, including complaints • the environmental performance of the organization • the extent to which objectives and targets have been met • status of corrective and preventive actions • follow-up actions from previous management reviews • changes which could affect the EMS • recommendations for improvement 	
4.	Did the output from the review include decisions and actions related to: <ul style="list-style-type: none"> • possible changes to environmental policy, objectives, targets and other elements of the EMS consistent with the commitment to continual improvement. 	
5.	Was there any conclusion reached on the effectiveness of the system with regard to achieving the organization's objectives?	
Legal and other requirements		
1.	Has the organization identified new legal and other requirements that are applicable to their environmental aspects?	
2.	Are there any new approval obtained?	
3.	Has the legal register been updated according?	
4.	Has it been communicated to relevant personnel?	

No.	Item	Findings and remarks
Achievement of objectives and targets.		
1.	Has the organization achieved all of the established objectives and targets?	
2.	If not, any justification or decision been made?	
3.	Has the organisation implemented all of their EMP as schedule?	
4.	Has the organisation monitor the progress of the EMP and the extent to which the objectives and targets been met?	
5.	Has the EMP been reviewed to accommodate changes	
6.	Has the organisation evaluate the effectiveness and benefit (environmental performance and cost saving) from the implemented EMP	
Monitoring and measurement AND non-conformity, corrective action and preventive action.		
1.	Has the organisation implemented all of their monitoring and measurement programmes as scheduled?	
2.	Has the organization maintain their compliance with legal requirements with respects to : <ul style="list-style-type: none"> - air emission - effluent discharges - schedule waste requirement - other related legal requirements 	
3.	Has the records of the monitoring activities been maintained and where applicable, communicated to relevant authority?	
4.	Has the organization evaluated the records/trends of the monitoring and measurement programme?	
5.	Has the organisation issued non-conformity report on any data that exceed control limit?	
6.	Where applicable, has the required action been determined and implemented?	
7.	Have the corrective actions taken been reviewed?	
8.	Have potential non-conformities and their causes been determined?	
9.	Where applicable, has the required action been determined and implemented?	
10.	Have the results of action taken been recorded?	
11.	Have the preventive actions taken been reviewed?	

No.	Item	Findings and remarks
Use of marks		
1.	Does the organization use the SIRIM Environmental System Certification Mark?	
2.	In what form has the mark been used: <ul style="list-style-type: none"> • On stationery? • In promotional material? • Business cards? • Others? (please state) 	
3.	Has the mark been used correctly in accordance with SIRIM QAS guidelines?	
4.	In the case of products, does the mark (on its own or accompanied by an explanatory statement) appear on the product or packaging that is likely to reach the end-user? (This is unacceptable)	
Handling of complaints/external communication.		
1.	Has there been any complaint from interested parties or summons from the authority?	
2.	Is the mechanism for handling external communication/complaints effective?	
3.	Are records of complaints satisfactorily maintained?	

RECERTIFICATION AUDIT CHECKLIST ISO 14001:2004

Requirements	Yes/No	Remarks
<p>4.1 <u>General requirements</u></p> <ol style="list-style-type: none"> 1. Has the organization defined/documentated the scope of its EMS? 2. Is there any changes to the scope since the previous audit 3. Has the organization described how it will fulfill these standard requirements? 		
<p>4.2 <u>Environmental policy</u></p> <ol style="list-style-type: none"> 1. Has the policy been reviewed? 2. Is the policy still relevant to the organization's nature, scale and environmental impacts? 3. Has the policy been effectively deployed and communicated to all person working for or on behalf of the organization? 		
<p>4.3.1 <u>Environmental aspects</u></p> <ol style="list-style-type: none"> 1. Has the organization reviewed its environmental aspects and impacts procedure? 2. Is the methodology to determine the significant impact still make sense, logical and sound? 3. Are there any changes to the organization activities, products and services? 4. Has the environmental aspects and impacts associated with the changes been identified? 5. Has the environmental aspects and impacts identification procedures take into consideration normal, abnormal and emergency situation, and also issues related to control and influence? 6. Are the identified significant impacts and aspects still appropriate to the nature and activities of the organization? 		

Requirements	Yes/No	Remarks
7. Has the organization reflected that significant environmental aspects are taken into account in establishing, implementing and maintaining its EMS?		
4.3.2 <u>Legal and other requirements</u> <ol style="list-style-type: none"> 1. Are there any new legal and other requirements applicable to the organization environmental aspects being identified? 2. Are there any new written approvals, licenses, permits being obtained? 3. Has the legal and other requirements register been updated to include the details? 4. Has the organization determined how the identified legal and other requirements are applicable to its environmental aspects? 5. Are the relevant PIC aware of the changes? 		
4.3.3 <u>Objectives, targets and programme(s)</u> <ol style="list-style-type: none"> 1. Has the organization established the environmental objectives and targets at each relevant level and functions? 2. Are the objectives and targets consistent with the environmental policy which include the commitment to prevention of pollution, to comply with legal and other requirements and continual improvement? 3. Are the basis for establishing and reviewing the objectives and targets taken into account legal and other requirements and significant environmental aspects? 4. Do the basis include other considerations, such as technological options, financial, operational and business requirements, and the views of interested parties? 5. Are the above criteria made transparent? 6. Are the relevant programmes to achieve the objectives and targets being established? 7. Has it included the designation, means and time-frame by which they are to be achieved? 8. Has all of the objectives and targets achieved? 9. Based on three years achievement, has it resulted in improved environmental 		

Requirements	Yes/No	Remarks
<p>performance?</p> <p>10. Has the programmes been updated or amended following any review or new development?</p>		
<p>4.4.1 <u>Resources, roles, responsibility and authority</u></p> <p>1. Has the organization's management provided adequate resources essential to the implementation of the EMS?</p> <p>2. Has the Management Representative implemented his/her role and responsibility?</p> <p>3. Are there any committee being established?</p> <p>4. Are the roles and responsibilities being adequately defined and known?</p> <p>5. Is the existing structure and responsibility effective in ensuring implementation and maintenance of the system?</p>		
<p>4.4.2 <u>Competence, training and awareness</u></p> <p>1. Has the competency requirements based on education, training or experience for all person performing tasks for or on its behalf that have potential significant impacts being defined clearly?</p> <p>2. Has the record being retained?</p> <p>3. Has the training needs associated with its environmental aspects and EMS being identified adequately?</p> <p>4. Has the training plan been established? Was it based on the identified training needs?</p> <p>5. Has the appropriate training been provided adequately?</p> <p>6. Are there any training records? Has it been updated?</p> <p>7. Are there any mechanism established to evaluate the training effectiveness and competency requirements?</p> <p>8. Has the organization implemented awareness training to all its employees?</p>		

Requirements	Yes/No	Remarks
9. Based on samples, are the significant environmental impacts task personnel competent to carry out their job? 10. Based on samples, are the level of awareness of the employees satisfactory?		
4.4.3 <u>Communication</u> 1. Has the organization effectively implemented its internal communication accordingly (both top bottom and bottom up)? 2. Has the organization implemented procedure for receiving, documenting and responding to relevant information and request from interested party? 3. Are there any complaints/ compounds received? 4. Has the decision to communicate its significant aspects being documented? (if decision is to communicate) 5. Has the mechanism being defined and implemented accordingly? (if decision is to communicate)		
4.4.4 <u>Documentation</u> 1. Has the description of the main elements of the EMS and interaction, and reference to related documents being adequately provided?		
4.4.5 <u>Control of documents</u> 1. Has the organization reviewed its documents? 2. Was the review carried out in accordance to their procedure – including approval, identified changes and revision status? 3. Are the current versions of documents available at all location essential to its implementation? 4. Are the documents of external origin necessary for planning and operation of the EMS being identified and their distribution controlled? 5. Are there any identification applied to the retained obsolete documents?		

Requirements	Yes/No	Remarks
<p>4.4.6 <u>Operational control</u></p> <ol style="list-style-type: none"> 1. Has the organization established adequate procedures (WI, SOP, etc) to manage the operations/activities associated with the identified significant aspects consistent with its environmental policy, and objectives and targets? 2. Has the organization communicated the relevant operational controls and procedures to relevant employees, suppliers and contractors? 3. Verify the implementation of the operational control at site relevant departments/ operations <p>Note: Each auditor should sample appropriate/relevant procedures during the audit to verify its effectiveness.</p>		
<p>4.4.7 <u>Emergency, preparedness and response</u></p> <ol style="list-style-type: none"> 1. Has the organization established a procedure to identify potential emergency situation? 2. Has it been implemented accordingly? 3. Has the procedure for responding to the identified emergency situation being established? 4. Has it been tested on a regular basis (through drills)? 5. Has the EPR being communicated and trained to relevant employees? 6. Has the organization established an emergency response team (ERT)? 7. Has the ERT members been trained? 8. Has the organization recorded any environmental related accidents/incidents/ fire occurred? 9. Verify on the investigation, corrective actions and preventive actions taken. 		
<p>4.5.1 <u>Monitoring and measurement</u></p> <ol style="list-style-type: none"> 1. Has the organization implemented its monitoring and measurements programmes as scheduled/planned? 		

Requirements	Yes/No	Remarks
<ol style="list-style-type: none"> 2. Are the monitoring programmes including the significant environmental aspects, achievement of objectives and targets. 3. Are the results of monitoring being tracked accordingly? 4. Are there any deviation from stipulated limit/ standard/target? 5. Has the organization identified relevant in-house equipment used for monitoring and measurement? 6. Has the calibration procedure/programmes being established? 7. For those using third party contractors, are there any mechanisms established to ensure that any calibrated or verified monitoring and measurement equipment is used? 8. Has the record associated with the calibration activities being retained? 		
<p>4.5.2 <u>Evaluation of compliance</u></p> <ol style="list-style-type: none"> 1. Has the organization established procedure(s) for periodically evaluating compliance with applicable legal requirements and other requirements? 2. Has the evaluation being conducted? (checked the date) 3. Are the results correctly reflecting the current status? 		
<p>4.5.3 <u>Nonconformity, corrective action and preventive action</u></p> <ol style="list-style-type: none"> 1. Has the organization established procedure(s) for dealing with <ol style="list-style-type: none"> a) actual non-conformities b) potential non-conformities 2. Have the following been raised?: <ol style="list-style-type: none"> a) corrective action (action to eliminate the cause of a detected non-conformity) b) preventive action (action to eliminate the cause of a potential non-conformity) 3. Has the root cause investigation, corrective actions and preventive actions being recorded? 4. Has the organization conducted review the effectiveness of corrective actions and 		

Requirements	Yes/No	Remarks
<p>preventive actions taken?</p> <p>5. Are there any mechanism to track the completion of the corrective actions and preventive actions taken?</p>		
<p>4.5.4 <u>Control of records</u></p> <p>1. Has the organization adequately identified the list of records necessary for the implementation of the EMS?</p> <p>2. Verify the identification, collection, indexing, filing, storage, maintenance, retrieval, retention and disposition of these records by sampling.</p>		
<p>4.5.5 <u>Internal audit</u></p> <p>1. Has the organization established a plan and programme to conduct the internal audit(s)?</p> <p>2. Has the audit programme considered the following: a) environmental importance of the operation(s) concerned b) results of previous audits</p> <p>3. Have the auditors complied with the auditor competency as defined in the procedure?</p> <p>4. Has the audit covered areas and elements as planned?</p> <p>5. Are the audit notes/checklist being retained?</p> <p>6. Are the audit findings appropriate and acceptable?</p> <p>7. Has a management of audit follow-up being established?</p> <p>8. Are the corrective actions effectively and timely?</p> <p>9. Has the audit been effectively carried out?</p>		
<p>4.6 <u>Management review</u></p> <p>1. Has the organization established a plan to conduct the management review?</p> <p>2. Has the management review been conducted in accordance to the established procedure?</p>		

Requirements	Yes/No	Remarks
3. Has the review discussed all of the agenda defined in the procedure? 4. Has all the decision and actions related to the review agenda been recorded in the minutes of meeting? 5. Are the reviews adequately assessing the continuing suitability, adequacy and effectiveness of the system?		
5. <u>Others</u> 1. Are the uses of Certification marks being used in accordance to the guide? 2. Have all of the previous audit findings been satisfactorily closed out?		