

## **1.0 INTRODUCTION**

The Federal Ministry of Environment has developed a Procedural Guideline for Health Impact Assessment (HIA). These guidelines indicate steps to be followed in an HIA process for any developmental project with maximum consideration for the human wellbeing, especially those living in the ambient of a project area.

Health impact assessment is a multidisciplinary study which is aimed at predicting and assessing the health effects of policies, plans, and projects (including development) using quantitative, qualitative, and participatory techniques usually before implementation, and ideally early in the planning stage. Its aims is to facilitate the reduction or avoidance of negative impacts on human health and enhancement of the positive impacts, and in so doing promoting sustainable development in which human health is of significance.

The purpose of HIA is to identify the most critical environment and social determinants of health that may be affected by a project and provide information in order to prioritize prevention and control strategies. It also addresses health issues that may influence the overall existing objectives. This may involve both direct and indirect effects. Direct effects on the health of a population can be observed, for example, through exposure to pollutants (including noise) that may be released in air, water and soil as a result of project activities, whereas indirect effects can be observed through a proposal's influence on the determinants of the health; for example, the effects on the accessibility to basic amenities required in day-to-day life.

HIA should identify and assess both the potential positive and negative health impacts of a proposal. The primary of the assessment is to enhance the potential positive effects while mitigating the negative effects to the extent possible.

## **2.0 WHO CONDUCTS HEALTH IMPACT ASSESSMENT?**

The proponent shall conduct the Health Impact Assessment of his proposed project with the involvement of relevant stakeholders such as public health professionals, environmental health experts, participation of the community and other relevant decision making agencies.

### **3.0 Steps in HIA**

There are 6 stages to a full Health Impact Assessment:

- i. Deciding whether to undertake an HIA (screening)
- ii. Deciding how to undertake the HIA (scoping)
- iii. Identifying and considering the evidence of health impact (appraisal)
- iv. Formulating and prioritizing recommendations
- v. Further engagement with decision-makers
- vi. Ongoing monitoring and evaluation.

## **4.0 PRINCIPLES TO BE CONSIDERED WHEN UNDERTAKING HIA**

### **4.1 Community Participation**

The Proponent shall consider Community Participation as a critical and integral part of the HIA process. The members of the host communities of the proposed project should know the actual, predicted and /or potential impacts the proposed project on their health (positive or negative) and environment.

Members of the community should be willing to work with the proponents and involved agencies on the management of health risks posed by the proposed projects.

### **4.2 Scope, Relevance and Timelines of Health Impact Assessment**

- a. The scope and detail of the HIA should be in proportion to the scale of the potential health impacts of a proposed development. Scoping should identify only those impacts which have significant potential to occur.
- b. The level of risk assessment should be in accord with the nature, scale and significance of the actual or potential effects of the proposed activity. Where there is insufficient information or uncertainty about the risks to health, this should be clearly stated.
- c. Positive and negative health impacts should be identified as a possible concern. Likely health problems should be remedied before they can occur as it is likely to lessen the additional financial costs for both industry and government bodies if action is taken at the design stage.

### **4.3 Health and its Determinants**

It is useful when examining the scope of HIA in general to consider what health is and what are its determinants. According to WHO definition of health; it is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. A specific approach is to examine the key determinants of health and consider which are susceptible to change and by what means. Key factors of health determinants are presented in Annex F.

### **4.4 Integration of HIA and EIA**

HIA should be explicitly integrated when studying the impact of a proposed project on the environment to ensure that any actual or potential impacts or risks to public health are adequately addressed in the developments' approval process.

### **4.5 Monitoring and Review**

- a. In appropriate areas, monitoring shall be carried out by FMEnv to assess whether modification to the proposal has actually been implemented. HIA process should be evaluated to assess the outcomes, if anticipated or unanticipated health impacts had occurred.
- b. Environmental and health controls as conditions in approvals shall be reviewed regularly.

## **5.0 HIA PROCESS`**

There is a growing international consensus that potential health impacts of programs, policies and projects must be taken into consideration prior to implementation of a project, and the results of the health impact assessment influences the decision to proceed with the development. The HIA process in this guideline is key to actualizing a concise and complete assessment of the potential impact a proposed development will have on human health. They are;

### **5.1 Project proposal**

As soon as the proponent decides to embark on any significant developmental project contained in Annex A, the Federal Ministry of Environment shall be notified in writing. An outline of information content required in the project proposal, with its short and long term adverse and beneficial impact on human health shall be submitted. Consultations shall occur

between the proponent, public health professionals and the necessary stakeholders in order for an HIA of the project to be carried out.

### **5.1.1 Project Description**

A Project description in the proposal shall include:

- a) The justification, objectives and goals of the project;
- b) Processes, materials and types of equipment to be used and the building layout;
- c) Sufficient detail of the planning, designing, construction, operating, maintenance and decommissioning phases;
- d) Types and quantities of inputs (energy, water and chemicals used in the industrial process) and outputs (products and waste materials) and a brief discussion of their treatment and disposal;
- e) Expected infrastructure, local facilities and services (e.g., electricity, water, sewage, roads);
- f) Advantages and drawbacks associated with the project; and
- g) Emergency procedures and response plans for incidents that may have the potential to cause negative impact on the surrounding population.

### **5.2 Screening**

Identifying projects with negative health impact early in the HIA process allows scarce resources of assessment to be properly managed. During screening, the relevant authority (FMEnv) shall:

- a. Filter out those projects that do not require HIA because their health effects are expected to be negligible or are well known and readily controllable through measures that are well understood and routinely applied, and so require no specific investigation or analysis.
- b. Determine what parameters, or determinants relating to health needs to be evaluated to understand the potential health impacts of the proposed project or policy. Category and examples of health determinants are illustrated in Annex F
- c. Review all categorized projects that are required to undergo HIA and identify those with possible significant health impacts.
- d. Use the screening tools that have been developed to provide objectivity, transparency and consistency in its processes. These tools shall be of use to health experts and other

stakeholders when considering human health issues and details of it are given in Annex E for ease of reference.

### **5.3 Scoping**

The proponent will carry out scoping exercise after receiving the screening report. Scoping shall set the framework for Profiling, Risk Assessment, Risk Management, Decision Making, Monitoring and Evaluation steps of an HIA. Scoping of project shall include:

- a. Identifying the potential health impacts that need to be addressed.
- b. Setting spatial and temporal boundaries.
- c. Demarcating any populations of special concern because of risk factors such as age, pregnancy, e.t.c.
- d. Identifying stakeholders that need to be involved, particularly those that will not already be involved in the routine impact assessment process.
- e. Agreeing on details of the risk assessment between the proponent, the public health experts and other stakeholders.
- f. Data on health status of the population, particularly of at risk groups, e.g. from mortality, disability and morbidity.
- g. Environmental conditions assessment of factors like air/water/soil quality of the population covered and ability to mitigate or consider alternate options if factors are affected
- h. Importance of periodic consultation with relevant agencies.
- i. Discussion on the need for monitoring that shall be required on health grounds during any phase of the development, or after completion.
- j. Identifying relevant standards that shall provide some benchmarks for planning, consultation and HIA.

Responsibility for these steps shall rest on the proponent. However, the Ministry of Environment shall generally work with the proponent to identify the level of detail and effort required which will be in proportion to the likely level of health risk based on the objective criteria.

## **5.4 Impact Assessment**

### **5.4.1 Profiling**

Profiling shall be done by the Proponent to identify and characterize the potential health effects of the proposed project on the community by providing a baseline against which possible health impacts can be assessed.

Information that shall be profiled includes:

- a. Characteristics of the population covered which will include size, density, distribution, age and sex, birth rate, ethnicity and socio-economic status.
- b. Health status and concentrated location data of the population, particularly of risk groups i.e. disability and morbidity.
- c. Health behaviour indicators, if relevant e.g. rates of alcohol use and alcohol-related harms;
- d. Their levels of employment/unemployment.
- e. Environmental conditions of the population covered which includes air/water/soil quality and ability to increase capacity e.g. of a water supply or effluent disposal; transport issues if relevant; and quality and quantity of affordable housing.
- f. General make-up of the population, particularly in relation to factors that are believed to be susceptible to change or that may act as indicators of anticipated health impact(s).

### **5.4.2 Risk Assessment**

Assessment of risk shall be done by the proponent by assessing against the health-based guidelines. It shall be a quantitative assessment, or qualitative assessment, or a mix of both approaches which shall entail details of what type of health hazards the impact of the proposed project will cause, the likelihood of it occurring and who might be exposed to such hazards (demography etc.). Criteria for assessing risks shall be:

- a. Magnitude and severity of each potential adverse effect.
- b. Geographical limits of potential impacts e.g. local, regional etc.
- c. Local sensitivity of the population in the community to the impact.
- d. Current institutional capacity in addressing the impact.
- e. Severity of impact across the population especially risk groups like children, pregnant women and elderly persons.

### **5.4.3 Alternative Methods to Risk Assessment**

Where sufficient data is not available for quantitative risk assessment (QRA) to be undertaken, the proponent shall use alternative methods of risk assessment. Such alternative methods shall include but is not limited to;

- a. Expert opinion and workshop.
- b. Views and perceptions of the community and other stakeholders.
- c. Published material on analogous situations.

### **5.4.4 Mitigation/ Risk Management of Identified Significant Health Impacts**

When possible health impacts have been identified, impacts are categorized into those of significance and those that are not. The impact shall be adequately analyzed by the proponent and proposed mitigation measures shall include:

- a. Identifying actions to maximize potential health benefits and minimize or prevent the potential risks to health.
- b. Evaluation of alternative actions, selecting options and implementing them in response to risk assessments shall be carried out. This shall be done by the proponent or through a community consultation process.
- c. Recommendations made to the proponent by the health experts or by other relevant stakeholders, in accordance with the regulatory or administrative arrangements in that particular jurisdiction.
- d. Recommendations to modify the proposal, consider alternatives where available, or impose conditions on its implementation.

The mitigation phase that involves substantial public consultation element includes:

- a. how impacts identified during screening and scoping shall be addressed; and
- b. demonstrating that impacts identified by the community as being important to them shall be adequately considered as well as what proper actions shall be taken.

## **5.5 Decision making**

This process shall incorporate all scientific, technological, social and economic information acquired. Decision making shall take into account the community concerns identified during the consultation process. Negotiations (where necessary) shall occur between the

environmental (FMEnv) and National planning authorities to ensure the coherent and workable set of changes or conditions are applied to any proposal. Recommendations and decisions and the reasons for them, should be publicly available.

## **5.6 Monitoring and Evaluation**

When a particular risk to health cannot economically be controlled to an extent that ensures no significant additional health risk, then monitoring of health status, or indicators of the risk thereof for example monitoring noise or dust levels rather than deafness or asthma, is necessary. Key steps in monitoring are:

- a. Identifying parameters to be monitored and
- b. Defining the correlation between those parameters and effects on health;
- c. Developing monitoring protocols;
- d. Ensuring monitoring is conducted; and
- e. Receiving and assessing results regularly

Evaluation is assessment of the actual health outcomes achieved (positive and negative) as a result of undertaking HIA. It is a view to know whether the process is effective in maintaining or improving the health status of the community. It shall be sub divided into;

- a. Evaluation of the efficiency of the HIA process.
- b. Evaluation of the health outcomes i.e. Is the HIA process effective and are health outcomes improved as a result of it? and
- c. Establishing follow-up to the HIA through monitoring and a plan for the management of a proposal's potential health impacts.

The administrative aspect of health monitoring and evaluation is it shall be:

- a. undertaken or paid for by the proponent and the report shall be submitted to the environmental regulatory agency;
- b. performed transparently and reliably (on time, using standardized equipment, trained operator, etc.);



- c. reported publicly, including advice to local residents. Communities should be involved in as many aspects of the monitoring as possible, including planning, sampling, analysis and interpretation; and
- d. conducted efficiently. It is important that monitoring costs be in proportion to the scale of a proposed development (which includes minimizing required monitoring) and that it be conducted as efficiently as possible.

## **6.0 HEALTH IMPACT MANAGEMENT PLAN**

The Proponent with consultations from health experts shall draw up a health impact management plan. This plan shall outline:

- a. What will happen if the impact(s) predicted by during the HIA occur or if unforeseen impacts not predicted by the HIA occur?
- b. actions that shall be taken in response to issues arising from evaluation and follow-up activities like; Safeguards put into place such as monitoring emissions from a freeway that can be hazardous to the health of nearby communities,
- c. Enhancement measures such as ensuring the needs of potentially disadvantaged populations that shall be met; and
- d. those who are assigned the responsibilities of the impact management. This group should be involved in the HIA process; the project team, steering committee, other stakeholders and potentially, external evaluators.

The plan shall be developed by the proponent in partnership with health experts and other stakeholders likely to be affected by the proposal.

## **7.0 PRECAUTIONARY APPROACH**

This approach is taken by the proponent and measures based on it shall;

- a. Have an objective risk assessment identified at each stage and its degree of scientific uncertainty.

- b. Identify stakeholders involved in the study of the various management stages that shall be envisaged once the results of the risk assessment are available.
- c. Be able to establish responsibility as to who should furnish the scientific proof needed for a full risk assessment.
- d. Be of a provisional nature, pending the results of scientific research performed to furnish the missing data and performance of a more objective risk assessment.

## **8.0 RESPONSIBILITIES OF INVOLVED STAKEHOLDERS**

### **8.1 The Proponent**

The proponent shall satisfy the requirements of the impact assessment process set out in the EIA Act. The process includes the need to explicitly address potential impacts on human health. If proponents are in any doubt as to what to do especially when identifying a potentially detrimental human health impact, the Federal Ministry of Environment should be consulted to discuss acceptable means of preventing or ameliorating the impact.

### **8.2 Health Experts**

The health experts are engaged by the proponent. They shall facilitate the development of the Health Impact report by the proponent. The Health experts shall:

- a. review the HIA process, methodology, specific health concerns, sources of data, resources and cost recovery (if applicable) as required which is a key focus to ensure that the overall level of effort is in proportion to the level of risk;
- b. provide or identify potential sources of relevant health and demographic data, where available;
- c. participate in the screening and scoping processes, including visiting the site of the development if practicable;
- d. review the health components of the draft impact assessment report;
- e. provide advice to the proponent when they address the concerns raised during public consultation. The HIS may need to be modified, or otherwise changed and monitoring conditions imposed to address the community concerns (depending upon the process used to manage public comments in the jurisdiction);

- f. make recommendations to the approving authority (Federal ministry of environment) ; concerning the potential health impacts of a development and participating in the health monitoring and evaluation, as appropriate; and
- g. liaise with the decision-making agency.

### **8.3 Decision Making Authority (Federal Ministry of environment)**

The decision making authority is the federal ministry of environment. They shall:

- a. Consider human health as an issue to be addressed in the guidelines and standards that prescribe and describe the impact assessment process.
- b. Encourage proponents to make contact with the relevant public health professionals early in the process.
- c. Refer development applications requiring assessment to the health expert for consideration in a timely fashion.
- d. Provide the health expert with the results of monitoring and evaluation related to public health, when provided by the proponent or other agency.
- e. Provide feedback to the health experts on HIA procedures as they impact on the overall assessment process and
- f. Liaise with the health professionals as required.

## **9.0 HEALTH IMPACT ASSESSMENT REPORT**

The project proponent shall submit at least ten (10) draft copies of the HIA report to the Federal Ministry of Environment for review.

In preparing the HIA report, the proponent shall consider the level of details and range of issues canvassed that depend upon the health impacts identified during the scoping stage. The proceedings of consultations with communities and other stakeholders shall be documented as an appendix to the report.

To aid in writing the HIA report, significant sectors and subsectors relevant to health impact in FMEnv. stated mandatory activities shall be identified and incorporated. A structured HIA writing format is presented in Annex D.

## **10.0 REVIEW PROCESS**

The HIA report prepared by the proponent shall be evaluated by all the relevant stakeholders.

There shall be;

- a. In house review by the public health expert and visitation of site and ;
- b. Panel review which may be in public.
- c. Public review (public display and review of documents for a period of 21 days). Venues of display will include the LGAs, relevant state environmental agencies and Federal agencies and authorities, and Federal Ministry of Environment.
- d. Mediation

Site visits shall be initiated by the ministry at this stage. FMEnv shall inform the proponent in writing of the selected method(s) of review within twenty one (21) working days from the date of acknowledgement of the HIA draft report.

The final HIA report must include all issues raised at the review process and answers proffered to them by the proponent and the public health professional, including any amendments to the report of HIA study.

### **10.1 Approval**

The Federal Ministry of Environment shall in consultation with the proponent set a number of conditions. The conditions shall provide for the establishment of mitigation compliance and monitoring plan with specified health assessments to be undertaken in the construction, operational and decommissioning phases of the development. In agreement, monitoring strategy and health impact audit may be determined at this stage which the proponent shall make the necessary budgetary provisions in advance.

### **10.2 Disapproval**

The criteria for disapproval shall be the non-compliance to the Federal Ministry of Environment HIA guidelines and stipulated health- based rules and regulations. If comments from the review process are not favorable, the issues raised shall be addressed and a revised draft shall be submitted to the ministry. In the event of a “no project” option, the ministry shall communicate such decision to the proponent.

## **11.0 FINAL HIA REPORT**

After reviewing, a copy of the HIA report should be submitted to the ministry of environment within 6 months of the receipt of the ministry's comments. If this is not done, the ministry shall request for a revised and upgraded HIA report.

## **12.0 TECHNICAL COMMITTEE**

The Federal Ministry of Environment is the decision making authority on approval and disapproval of the HIA report. On receipt of satisfactory comments from the review process, an acceptable final HIA report is submitted; the technical committee shall approve the issuance if a Health Impact Statement (HIS). The HIS shall be issued as appropriate within a minimum of one (1) month of the receipt of the final report.

## **13.0 CERTIFICATION**

Upon receipt of the HIS, the minister of environment shall issue a certificate. Upon receiving the HIS, the proponents of public sector projects shall submit copies of the HIS to the National Planning Commission prior to the admission of such projects into the National Rolling Plan. The ministry shall publish its decision on a public platform so members of the public are notified in accordance to the decree.

## **14.0 PROJECT IMPLEMENTATION**

After certification, the proponent shall proceed to implement the project in accordance to measures in the final HIA report. The proponent in implementing the project shall also conform with the stipulated specifications in the HIA report.

## **15.0 COMPLIANCE MONITORING**

During project implementation, enforcement agencies i.e. NESREA, (depending on type of project); and the ministry of environment shall monitor the progress from the phase of site preparation to commissioning to ensure compliance with mitigation measures and specifications of health impacts.

## **16.0 HEALTH IMPACT AUDITING**

Periodic assessment of the positive and negative impacts of the project on human health shall be done. This shall be carried out by the ministry with the participation and consultation of health professionals.

## **17.0 PROCESSING AND CERTIFICATION FEE**

The Federal Ministry of Environment will charge as appropriate.

## ANNEXES

### ANNEX I: Category Project

#### Significant study activity

**1. Food , beverages and tobacco processing**

Construction of food processing plants.

**2. Airport**

- a) Construction of airports (having an airstrip of 2.500 meters or longer).
- b) Airstrip development in state and national parks.

**3. Power generation and transmission**

- a) Construction of steam generated power station burning fossil fuel having a capacity of more than 10 mega-watts.
- b) Construction of combined cycle power stations.
- c) Construction of nuclear- fuelled power stations.
- d) Dams and hydroelectric power schemes with either or both the following:
  - i. Dams over 15 meters high and ancillary structures covering a total area in excess of 40 hectares;
  - ii. Reservoirs with a surface area in excess of 400 hectares.

**4. Petroleum**

- a) Oil and gas fields' development.
- b) Construction of off-shore, on-shore and overland pipelines.
- c) Construction of oil and gas separation, processing, handling and storage facilities.
- d) Construction of oil refineries.
- e) Construction of product depots for the storage of petrol, gas or diesel which are located within 3 kilometers of any commercial, industrial or residential areas and which have a combined storage capacity of 60, 000 barrels or more.

**5. Mining**

- a) Mining of materials in new areas where the mining lease cover a total area in excess of 250 hectares.
- b) Ore processing including concentrating on aluminum, copper etc.

c) Sand dredging involving an area of 50 hectares or more.

**6. Quarries**

Quarrying of aggregate limestone, silica quartzite, sandstone, marble and decorative building stone within 3kilometers of any existing residential, commercial or industrial area or any area for which license permit approval has been granted for residential, commercial or industrial development.

**7. Brewery**

Construction of brewery plant.

**8. Waste treatment and disposal**

a) Toxic and Hazardous waste

- i. Construction of incineration plant
- ii. Construction of recovery plant
- iii. Construction of waste treatment plant
- iv. Construction of landfill facility
- v. Construction of storage facility

b) Municipal solid waste

- i. Construction of incineration plant
- ii. Construction of composting plant
- iii. Construction of recovery/recycling plant
- iv. Construction of municipal solid waste landfill facility

c) Municipal sewage

- i. Construction of waste water treatment plant
- ii. Construction of marine outfall

**9. Water supply**

- a) Construction of dams, impounding reservoirs with a surface area of 200 hectares or more;
- b) Ground water development for industrial, agricultural or urban water supply of greater than 4500 cubic meters per day.

**10. Industry (Manufacturing)**

- a) Chemical (where production capacity of each product or of combined products is greater than 100 tonnes/day.)
- b) Petrochemicals ( All sizes)



- c) Non-ferrous (Primary smelting)
  - i. Aluminium – all sizes
  - ii. Copper – all sizes
  - iii. Others – producing 50 tonnes/day and above of product.
- d) Non-metallic
  - i. Cement – for clinker throughput of 30 tonnes/hour and above
  - ii. Lime – 100 tonnes/day and above burnt lime rotary kiln or 50 tonnes/day and above vertical kiln.
- e) Iron and steel – requires iron ore as raw materials for production greater than 100 tonnes/day or using scrap iron as raw materials for production greater than 200 tonnes/day.
- f) Shipyards – dead weight tonnages greater than 5000 tonnes.
- g) Pulp and paper – production capacity of industry greater than 50 tonnes/day.

## ANNEX II

### Checklist of information Required for Project Proposals

#### 1. A concise description of the project

##### a) Preliminary Information

- Project title
- Proponent
- Contact details (name/telephone/email)
- Nature of the project
- Location (include plan if possible)

##### b) Comment on any activities involved in construction/operation which may result in the following

- Gaseous emission
- Particulate emission (dust)
- Odour
- Noisy operations
- Liquid effluent/discharges
- Traffic generation
- Waste and/or by-products generated
- Storage/disposal of hazardous goods
- Disposal of spoil materials
- Risk of accidents resulting in pollution or hazard
- Visual impact

##### c) This section should include an outline of the processes involved, process flow diagrams, site plans, general arrangement plan, elevations and storage, and emission inventories (both point source and fugitive with source and location).

## **2. Outline of the planning and implementation programme**

- a) How will the project be planned and implemented? e.g. consultant/contractor/in-house
- b) What is the project schedule?
  - For appointing consultant/authorized person
  - For initiating submission to Government
  - For finalizing designs
  - For implementation
  - For completion/commencing operation
- c) Are there any interaction with other projects which should be considered?

## **3. Outline of major elements of the surrounding environment which might be affected by the project**

- Human activities
  - Residential development
  - Demographics
  - Schools, hospitals, homes for the aged
  - Cultural features
  - Sites of specific interest
  - Site of archaeological interest (woodlots, fung shui)
  - Cultural features
  - Ground water resources
  - Fisheries/ Mari-culture areas
  - Population
  - Industries sensitive to pollution
- b) This section should identify environmentally sensitive areas and should include plans showing the location of community elements which may be affected.

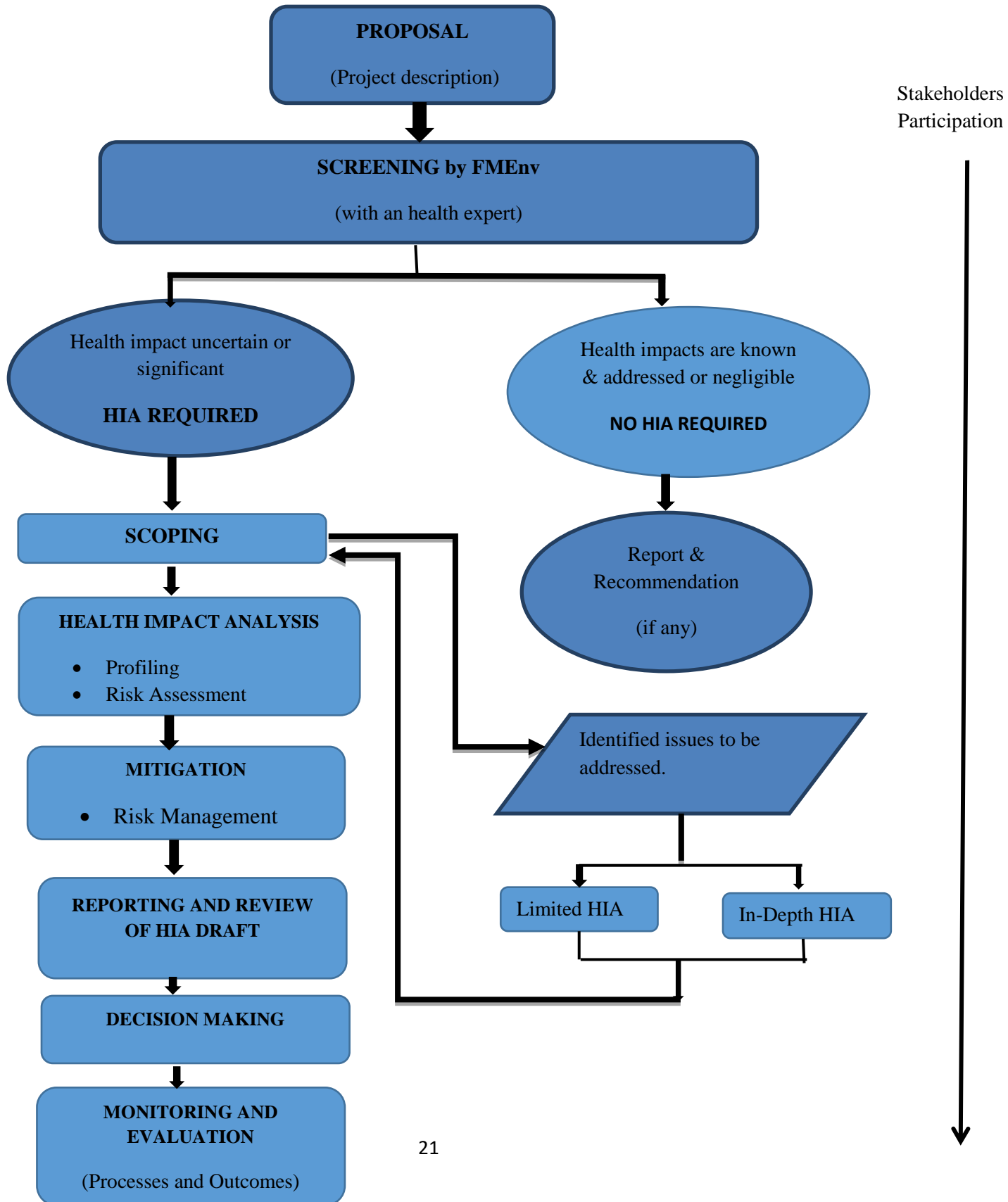
**4. Environmental protection measures incorporated in the design and any further environmental implications**

- Contractual controls
- Beneficial/adverse effects
- Short/long term effects
- Secondary/induced effect
- Cumulative effects
- Magnitude and distribution of effects
- History of similar projects
- Public consultation to date
- Sensitivity/public interest

**5. Proceeding of consultations with comments and other stakeholders in public forum**

ANNEX III

Flow Chart of Health Impact Assessment Process



## **ANNEX IV**

### **H.I.A. Report Writing Format**

#### **1. Table of Contents**

- a) Chapters and titles
- b) List of figures
- c) List of tables
- d) List of acronyms
- e) HIA preparers

#### **2. Executive summary**

#### **3. Acknowledgement**

#### **4. Introduction**

- Background information, Administrative and Legal framework, Term of reference

#### **5. Assessment justification**

- Need to undertake the assessment
- Value of the assessment
- Envisaged sustainability

#### **6. Project description**

- Type
- Input and output of raw materials and products
- Geographical location
- Production process
- Project operation , maintenance and schedule

#### **7. Details of the proponent and the development**

- Details of the affected or interested communities
- Demographic data
- Health data
- Special populations

#### **8. Environmental health data and impacts on them**

- Air quality
- Food

- Water (not including wastewater)
- Wastewater
- Government-controlled infrastructure
- Transport
- Storage, handling and disposal of hazardous materials

**9. Socio- economic Impact**

- level of intervention proportional to the degree of risk and potential impact of that risk.
- Economic impacts need only be mentioned where they are also important health impacts; their analysis should be independent from the HIA.

**10. Actual assessment of the health impact**

- Weighing of the positive and negative health effects

**11. Possible means of mitigating the unacceptable health impacts of a development.**

- Site alternative, locations/routes
- No project option
- Insert a table listing potential impacts and possible mitigation measures
- Compliance with health and safety hazard requirements
- Liability compensation/resettlement

**12. Health Management Plan**

- Scope of monitoring
- Health determinants to be monitored
- Methodology
- Monitoring schedule

**13. Conclusions and recommendation.**

**14. Bibliography**

**15. Appendixes.**

**ANNEX V**  
**HIA SCREENING TOOLS**

**1. Investigating the parameters of the proposals**

Important parameters to consider are listed below.

For each parameter it is recommended that officers identify a set of levels or thresholds for the following situations:

- a) do not conduct HIA;
- b) conduct a rapid appraisal;
- c) conduct an intermediate appraisal;
- d) conduct a comprehensive appraisal.

As HIA becomes a regular feature of decision-making, processes and outcomes are monitored and evaluated, it will be possible to develop screening guidelines relevant to, and appropriate for, the type of proposals an organization/ partnership regularly implements.

Parameters for all types of proposal (policies, programs or projects):

- a) The relative importance of the proposal within the organization's/partnership's priorities;
- b) The extent of the population affected by the proposal;
- c) The existence of at-risk groups within the population affected (because of age, nutritional status, etc.);
- d) Stage of development of proposal (i.e. the potential to make changes).

Parameters for proposals about programs and projects:

- a) The size of the proposal;
- b) The cost of the proposal;
- c) The nature and extent of the disruption to the population affected.



## 2. A checklist of questions about the nature of potential health impacts

<b>To your Knowledge</b>	<b>Bias towards HIA</b>	<b>Bias against HIA</b>
Are the potential negative health impacts likely to be serious? Yes/don't know	Yes/don't know	No
Are the potential negative health impact likely to be disproportionately greater for some groups in the population, e.g. because of age	Yes/don't know	No
Are there community concerns about potential health impacts	Yes	No
Is there a robust evidence or experience base readily available to support appraisal of the impacts?	No/don't know	Yes
The recommendations that could be made to ameliorate those impacts?	No/ don't know	Yes
Could any of the actions to ameliorate the potential negative health impacts of the proposal actually have a negative effect on health?	Yes don't know	No
If allowed to occur, could the potential negative health impacts be easily reversed through current service provision?	No/ don't know	Yes
Is there a need to increase social capital in the community or population or population affected?	Yes	No

## 3. A checklist of questions about the circumstances in which the HIA must be conducted.

<b>To your Knowledge</b>	<b>Bias against HIA</b>	<b>Bias towards intermediate or comprehensive appraisal</b>
Is there only limited time in which to conduct a HIA?	Yes	No
Is there only limited opportunity to influence the decision?	Yes	No

Is the time frame the decision making process set by external factors beyond your control?	Yes	No
Are there only very limited resources available to conduct an HIA?	Yes	No

**4. A short checklist of questions about the capacity within an organization or partnership to conduct the HIA**

<b>To your Knowledge</b>	<b>Bias towards commissioning the assessor(s)</b>	<b>Bias towards appointing an internal assessor(s)</b>
Do personnel in the organization or the partnership have the necessary skills and expertise to conduct the HIA?	No	Yes
Do personnel in the organization or partnership have the time to conduct the HIA?	No	Yes

## ANNEX VI

### Category of Health determinants

Category of Health determinants	Examples of specific health determinants
Environmental Factors (including living and working conditions).	<ul style="list-style-type: none"> <li>• Housing conditions and location</li> <li>• Working conditions</li> <li>• Quality of air</li> <li>• Quality of water (surface, groundwater, drinking water)</li> <li>• Quality of soil</li> <li>• Waste disposal</li> <li>• Energy</li> <li>• Urban design</li> <li>• Land use</li> <li>• Biodiversity</li> <li>• Sites of cultural significance</li> <li>• A change in the emission of greenhouse gases</li> <li>• Public transport and communications networks</li> <li>• Noise</li> <li>• Exposure to pathogens</li> </ul>
Population-based services	Access to, and quality of: <ul style="list-style-type: none"> <li>• Employment and education opportunities</li> <li>• Workplaces</li> <li>• Housing</li> <li>• Public transport</li> <li>• Health care</li> <li>• Disability services</li> </ul>

	<ul style="list-style-type: none"> <li>• Basic amenities</li> </ul>
Individual and behavioural factors	<ul style="list-style-type: none"> <li>• Personal behaviours (e.g. diet, physical activity, smoking, alcohol intake, drug use).</li> <li>• Educational attainment</li> <li>• Level of income and disposable income</li> <li>• Stress levels</li> <li>• Self-esteem and confidence</li> <li>• Access to employment</li> </ul>
Biological factors	Sex, Biological age, Race, Disability
Equity factors	Distribution of health impacts based on existing health status, environmental quality, capacity to cope with health pressures, etc.

## GLOSSARY OF TERMS

**Assessment:** the evaluation of the environmental consequences (positive and negative) of a plan, policy, programme or concrete projects prior to decision to move forward with the proposed action as conducted by a proponent, technical panel, Review panel.

**Environment:** the components of the Earth, and includes: (a) land, water and air, including all layers of the atmosphere; (b) all organic and inorganic matter and living organisms; and (c) the interacting natural systems that include components referred to in (a) and (b).

**Baseline conditions:** refers to conditions existing before development against which subsequent changes can be referenced.

**Decision-makers:** The people who have control over the final content of the proposal and/or are responsible for its implementation, including the extent to which it is influenced by the HIA.

**Effect:** These guidelines use the word impact rather than effect when referring to how ecological resources might be affected by a project

**Environmental Impact:** An estimate or judgement of the significance and value of environmental effects for natural, socio economic and human receptors.

**HIA:** Health Impact Assessment

**HIS:** Health Impact Statement

**Health:** A state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity.

**Health Determinants:** The ‘causes of the causes of health’ that are found outside the traditional health sector, often referred to as social or environmental determinants of health.

**Health Hazards:** An agent with a potential to create ill health (e.g., bacteria, toxins, chemicals).

**Health Impact:** A tool to assess the impacts of a proposal prior to the implantation of that proposal

**Health Impact Statement:** The report which presents the findings of a Health Impact Assessment.

**Health Risk:** Indicates the extent to which the potential of a hazard may be realized.

**Impact:** The way in which an ecological resource/receptor is affected by a project

**Mitigation measures:** Measures to reduce the likelihood or severity of negative impacts.

**Proponents:** Those responsible for developing the proposal under assessment

**Proposal:** A draft policy, plan, program, or project

**Risk Assessment:** The process of estimating the potential impact of a chemical, physical, microbiological or psychosocial hazard on a specified human population or ecological system under a specific set of conditions and for a certain timeframe.

**Screening:** The process by which a decision is taken on whether or not HIA /EIA are required for a particular Project.

**Scoping:** The process of identifying the content and extent of the Environmental Information to be submitted to the Competent Authority under the HIA / EIA procedure

**Stakeholder:** People involved in or affected by proposal development and implementation, drawn from public, private and voluntary sectors, and the communities or groups affected

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