

Environmental Risk Management Policy

December, 2011

UCB

United Commercial Bank Ltd.

Table of Contents

Particulars	Page
Chapter – 1: Introduction	03 – 08
Chapter – 2: Organizational Requirement	09 – 12
Chapter – 3: Environmental Risk Review	13 – 15
Annexure – 1: General and Sector-wise Environmental Due-Diligence Checklists	16 – 24
Annexure – 2: An Overview: Categorization of Industries	25

Chapter – 1

Introduction

December, 2011

Environmental Risk
Management Policy

Chapter – 1: Introduction

1.1. Definition

Environment means the surroundings within which humans exist and that are made up of land, water, air, micro-organisms, plant and animal life; any part or combination of any of those elements and the interrelations among and between them; the physical, chemical, aesthetic and cultural properties and conditions of the above that influence human health and well-being.

Environmental risk may be defined as “an actual or potential threat of adverse effects on living organisms and environment by effluents, emissions, wastes, resource depletion, etc., arising out of an organization's activities”. These affects increase risks as they bring an element of uncertainty or possibility of loss in the context of a financing transaction.

Environmental Risk Management is the process of identification, analysis, assessment, control, and avoidance, minimization, or elimination of unacceptable environmental risks. An organization may use risk assumption, risk avoidance, risk retention, risk transfer, or any other strategy (or combination of strategies) in proper management of future events having impact on the environment.

1.2. Purpose

The overall purpose of Environmental Risk Management of the Bank is to understand and manage risks arising from environmental concerns. This will bring a focus on planning and implementing policies and procedures to mitigate environmental risks associated with financing decisions.

The specific purposes are to:

- i. Examine the environmental issues and concerns associated with potential business activities proposed for financing,
- ii. Identify, evaluate and manage the environmental risks and the associated financial implications arising from these issues and concerns,
- iii. Enhance the credit risk appraisal process.

1.3. Applicability

The Bank's Environmental Risk Management will be applicable across all financing transactions undertaken by it as all of those occur within the context of environmental concerns. The main determinants of environmental risk are the nature of a borrower's business activity and the vulnerability of the location of the business activity.

Environmental risks will vary according to different forms of transactions, e.g. risks associated to a short-term financing is considerably less compared to a long-term financing to support the establishment of a large chemical or power plant.

1.4. Stages

There are different stages in Environmental Risk Management as applied to financing transactions: identifying, evaluating / rating, mitigating and monitoring & controlling.

Identifying risks

At the time of identifying the financing, all environmental issues that can pose environmental risks relevant to the proposed business activity needs to be determined.

Rating risks

Once identified, the evaluating or rating of environmental risks is usually done using simple methods that estimate risk as a product of the likelihood/probability and the impact of the negative consequence.

Mitigating risks

After evaluation of the risks, mitigation of these environmental risks needs to be planned in the design and/or plans of the proposed business activity. It is only after assurance that these risks can be mitigated will the Bank proceed further with the financing process.

Monitoring & controlling risks

During the implementation, the Bank will monitor these environmental risks as a part of its credit monitoring. The outcome of this monitoring will be used as feedback to tighten controls of these risks.

1.5. Sources of Risk**Land location**

Business activities may be dislocated/closed through strict enforcement of law for being located on land prone to environmental impacts for its geographical position, in the flood plain or along the coastal belt, in highly polluted area, adjacent to natural or local habitation or protected habitat, in a declared (though degraded) forest area etc.

Regulatory non-compliance

Non-compliance of the prevailing environmental laws may compel the business running sans technologies (e.g. Effluent Treatment Plants) or management systems to face closure by the Department of Environment (DOE).

Labor/social risks

Ensuring ergonomic environment for the employees/labors may eliminate the exposure to occupational health issues as well as potential for accidents, injury and even death.

Apart from occupational health & safety, labor/social issues such as child labor, forced labor, gender discrimination, disciplinary practices, working hours and wage compensation etc. tend to get combined to create conflicting conditions causing clashes between the workers and the management and thus leading to closures as well as increasing non-performing loans (NPLs).

Community/public opposition

Borrowers' inadequate environmental management practices in their operations, for instance excessive water abstraction, effluent releases, emissions and improper waste management, etc. may affect people living in the vicinity of the borrower's premises.

Changing export market conditions

Borrowers not upgrading their operating practices to meet stringent and tightened environmental requirements of importing country are exposed to the likelihood of their export contracts being cancelled and hence may not be in a position to repay the Bank. The risk may also arise through the supply chain, since a borrower who produces as a part of the supply chain is exposed to changes in the market for the end product as well.

Climate change impacts

Climate change is a global physical phenomenon with adverse environmental, social and human consequences. Bangladesh is already experiencing extreme and recurrent climate-induced weather events, e.g. cyclones, floods and droughts, periodically. Borrowers whose operations are vulnerable to such events are likely to be affected and not being able to continue the business activity and hence unable to repay the financing taken from the Bank.

1.6. Types of Risk

Environmental risks can be classified as follows:

Direct Risk

This risk can occur when the Bank exercise operational control over a borrower's business or where the Bank takes possession of disputed/contaminated land held as security. In such cases, the Bank may not only lose its original advance, but may also be forced to meet substantial clean-up costs.

Indirect Risk

This risk may incurred by the Bank due to borrower's inability to repay because of environmental or climate change reasons. As Bangladesh strengthens enforcement of environmental regulations and public interest groups grow, pressure increases on business to minimize their environmental impacts. This may increase companies' capital and operating costs to comply with environmental regulations. This can affect the borrower's cash flow and consequently the borrower's ability to repay. Alternatively, climate change induced events, e.g. cyclones, may impact business activities affecting the ability of the borrower to repay.

Reputation Risk

Reputation and image are important for the Bank to conduct business. It is important to demonstrate that the Bank always acts responsibly and this is particularly important when providing finance for major business activities. Not considering environmental impacts arising from a borrower's operations can result in negative publicity for both the borrower and the Bank.

Reputation risk is present in financing transactions particularly where the Bank is considering a large exposure. The Bank's reputation can be damaged if there is a failure of the business activity due to environmental reasons. The Bank will be seen as engaging in irresponsible business practices that do not adequately address the environmental issues. Thus, the more responsibility the Bank demonstrates, the less reputation risk it will face.

Environmental risks can also be classified in the context of principal risk components of credit risks:

Business/industry risk

Borrower's capacity to meet the obligation to repay may be affected by the changing environmental conditions and/or requirements. This is an indirect risk.

Management risk

Poor management may result in closures and public protests can adversely impact the business and the borrower's capacity to repay. This is an indirect risk.

Security/collateral risk

Risk that the Bank might be exposed to poor quality of the security/collateral, e.g. contaminated land or disposal of hazardous chemicals, in case of a default. This is a direct risk.

Legal Risk

This risk can take in various forms. Most obviously, the Bank will be at risk if it doesn't comply with relevant environmental legislation. More specifically, it is at risk of lender liability for clean-up costs or claims for damages if it takes possession of property that contaminates or pollutes, as a result of realizing security. This is a direct risk.

1.7. Inter-relationship between Environmental risk & credit risk

Environmental risk & credit risk

Environmental risk is one of the several risks that the Bank must take into account while assessing financing opportunities as it affects credit risk to a great extent.

Minor environmental issues carry less or minor risk having a marginal or incremental impact. However, major environmental issues may enhance the level of risk that they become the most prominent credit risk. It is therefore, not to underplay the importance of environmental risks.

Integrating with credit risk management

As environmental risk is a facilitating element of credit risk, the Bank will integrate Environmental Risk Management with Credit Risk Management in all aspects. No separate Environmental Risk Management

systems are required as having two parallel systems may be counter-productive and will hinder effectiveness.

1.8. Financial Threshold

The ERM policy will necessarily be used for the Bank's all individual customers (corporate, institutional, personal, small and medium enterprise) whose aggregate facilities are above the following financing thresholds:

- i. For Small and Medium Enterprises (SMEs), financing > BDT 2.5 million
- ii. For Corporate, financing > BDT 10 million. and
- iii. For Real Estate, financing > BDT 10 million.

The Policy need not be used for the purpose of arriving at an associated Environmental Risk Rating (ERR) for financing below this threshold as the environmental impacts are likely to be minor, and hence unlikely to cause risks. This waiver applies, however, only to the calculation of an ERR and does not apply to other regulatory requirements and due diligence checks (industry, client or location specific, as the case may be) as may be required. This will be used for both financing required for new projects as well as for existing facilities, e.g. renovation and expansion.

1.9. Benefits

The Bank will derive the following benefits by adopting this Policy:

- i. Awareness on environmental issues within the employees of the Bank will grow substantively.
- ii. Ability and capacity to address environmental risks in a structured and systematic manner will be established. And, this will lead to reducing NPLs arising directly or indirectly due to environmental issues.
- iii. Borrowers will be encouraged to adopt better management practices that will lead to an overall better environmental performance and preparedness for climate change induced events. This will be a particularly useful contribution in the context of country's deteriorating environmental conditions and its particular vulnerability to climate change.
- iv. Last but not the least, the Policy will help the Bank demonstrate a higher level of commitment to addressing environmental issues and a focus on the environmental/sustainability sector.

1.10. Amendment of the Policy

In view of the dynamic nature of the banking business and the changing pattern of the environment, the Bank's Environmental Risk Management Policy will be subject to ongoing review, modification and revision. This Policy will be amended, revised as and when warranted to accommodate the changes in the market condition, the changing condition of the environment, government policy, central bank regulation and experience of the Bank while dealing with Environmental Risk Management. For this purpose, Audit committee of the Board of Directors of the Bank will review the Environmental Risk Management Policy as and when necessary.

1.11. Recommendations for the future

By implementing the Policy, the Bank will consider environmental risk as a part of its Credit Risk Management Policy. As more implementation experience is obtained, the following initiatives will be required to further support the Bank in general and/or to establish these approaches across the financial sector in Bangladesh:

Updating these Guidelines

The Policy will be revised as and when required, and at least once in every three years.

Further integration with CRM

As and when the Bank will update their CRM Guidelines, Environmental Risk Management is to be fully integrated within the text of that Guideline.

Environmental risk rating

In this Policy, a qualitative approach to risk rating has been adopted to keep it simple and easy-to-use.

Database of external consultants

The Bank needs to have access to a database of external consultants along with their technical expertise so that they can be called upon to provide the necessary support. Such a database may be developed once implementation experience is obtained in the introductory phase of the Policy.

Environmental insurance

Environmental insurance is a specialist form of insurance providing cover against losses that could be incurred as a result of action arising due to environmental conditions, environmental/pollution impacts and climate change impacts. Insurance products are an effective mechanism to transfer risks associated with financing transactions and can be developed and used by the Bank.

1.12. Access to the Policy

This policy document is categorized as a confidential one and will be officially distributed to the executives/officers working in the Corporate Banking Division, Recovery Division, Retail Banking Division, SME Division, Structured Finance Division as well as the Credit Risk Management Division of both Branch and Head Office. It will also be distributed to the Managing Director, all the Additional and Deputy Managing Directors, Head of Internal Control and Compliance and Head of International Division and Senior Executive Vice Presidents. Anybody other than the above will have to apply to collect this document from Credit Risk Management Division, Corporate Head Office through proper channel.

Chapter – 2

Organizational Requirement

December, 2011

Environmental Risk
Management Policy

Chapter – 2: Organizational Requirement

1.1. Principles

The Bank commits “in principle” to Environmental Risk Management in general and to the following in specific:

- i. Integration of Environmental Risk Management in their credit policies and procedures.
- ii. Building awareness and providing constant training and capacity building of their employee relevant to Environmental Risk Management.
- iii. Adoption of a value adding approach to Environmental Risk Management with their potential borrower and aim to facilitate the borrower in addressing environmental issues that could lead to risks.

1.2. Requirements

On an annual basis, the Bank will undertake a top management review to determine whether Environmental Risk Management is being effectively practiced in its operations. No organizational structure is required for the execution of Environmental Risk Management.

1.3. Roles, responsibilities and authorities

Relationship banking/marketing function

The responsibilities of this function will be:

- i. To be aware of environmental issues confronting the various sectors,
- ii. To communicate to the potential borrower that environmental information is sought to avoid unexpected situations in future,
- iii. To assess the potential borrower and the proposed business activity using a due-diligence checklist and provide an Environmental Risk Rating (EnvRR), and
- iv. To provide environmental information to the credit risk management function.

Credit risk management function

The responsibilities of this function will be:

- i. To be aware of environmental issues confronting the various sectors,
- ii. To review the completed due-diligence checklist and the EnvRR,
- iii. To integrate environmental risk considerations into the credit risk assessment and
- iv. To specify financing conditions /covenants, if any, are required.

Credit processing and approval function

The Environmental Risk Management responsibility of this function is to ensure that the additional financing conditions/covenants, if any, are included in the agreements.

Credit administration function

The Environmental Risk Management responsibility of this function is to ensure that additional financing conditions/covenants, if any, in the financing agreements are met prior to initiating disbursement.

Credit monitoring function

This function is to ensure that environmental risk monitoring will also be undertaken as a part of monitoring credit risks.

Overall responsibility

The Managing Director of the Bank will be responsible for ensuring the integration of Environmental Risk Management Policy into Credit Risk Management Policy. The operational onus will be with the Head of Credit or any of the senior management team member nominated by the Managing Director.

1.4. Procedures

i. Relationship banking/marketing: Identifying and planning for Environmental risks

Whenever a potential borrower approaches for financing, the Bank has to assess environmental risks taking a holistic approach and to look at the inherent risks posed by the overall activities of the client as opposed to constraining themselves to the specific project.

The Bank providing credit to the same client, in a consortium or discretely, needs to ensure that all the parties involved have shared information and risk ratings of the client so that the parties involved have identified and evaluated all the environmental risks involved and arrived at the same conclusion regarding the level of risk associated with the financing.

As part of the Relationship Banking function, the Environmental Due- Diligence (EDD) checklist given in the Annexure and the Environmental Risk Rating (EnvRR) given in Part 3 are to be completed prior to forwarding the proposed financing to the credit risk management for consideration.

ii. Credit risk management: Integrating Environmental risks

The Bank has Credit Risk Management procedures that need to be modified to integrate Environmental Risk Management considerations.

Financing business activities

In this credit risk management function, it will verify whether the EnvRR has been correctly done. If not, the Relationship Banking function will be asked to redo the EDD checklist. Wherever the EnvRR is “High”, the credit risk management function will ensure that additional conditions/covenants are included.

Examples of Environmental risk-related financing conditions/covenants are as follows:

- i. The borrower will conduct business and maintain property in compliance with all environmental laws
- ii. The borrower will provide environmental clearance certificates as and when obtained or renewed
- iii. The borrower will have emergency response procedures in place
- iv. The borrower will take immediate and necessary remedial action in the event of a hazardous spill or release.
- v. The borrower will not use the property for disposing of, producing, treating, storing or using contaminants, pollutants, toxic substances or hazardous materials or wastes.
- vi. The borrower will employ a separate environmental manager with required background and skills to address environmental problems.
- vii. The borrower will ensure adequate preparedness to climate change induced extreme events such as floods and cyclones.

Portfolio management

On an ongoing basis, the Bank will also estimate the environmental risks on their financing portfolio and consider approaches to managing them annually. At a portfolio level, the Bank will classify their financing of business activities across the Department of Environment (DOE)’s Categories of Red, Orange A, Orange B and Green (As per Schedule 1 of the Environment Conservation Rules, 1997). The Bank will estimate the number and financial exposure to each of these categories.

In addition, the Bank will classify their financing of business activities based on their environmental risks, i.e. “High”, “Moderate” or “Low”, and estimate the number and financial exposure to each. Based on these risk estimates, the Bank will review their asset composition and the environmental risk in their portfolio to have an accurate prioritization of risks and appropriate risk management efforts. Using the outcomes, the Bank can re-balance and take counter-balancing approaches.

iii. Credit processing and approval process: Incorporating Environmental risk covenants

- i. The Bank needs to modify credit processing and approval processes to include Environmental Risk Management considerations.
- ii. Wherever the EnvRR is “High”, the credit approval decision will be taken by the Executive Committee/Board. For all other ratings of the EnvRR, there is no separate requirement for approval decision.
- iii. All credit agreements will include the standard condition/covenant about meeting the regulatory requirements.
- iv. At the time of approving the financing, it needs to be ensured that the appropriate, additional condition/covenant have been included wherever EnvRR is “High”.

iv. Credit Administration: Verifying Environmental risk considerations

When EnvRR is “High”, the Bank has to verify that the conditions/covenants (e.g. obtaining Environmental Clearance Certificate) are met prior to disbursement. Documented evidence of adhering to the conditions/covenants will be provided.

v. Credit Monitoring: Carrying out Environmental risk monitoring

To minimize credit losses, the Bank’s existing monitoring procedures in systems need to be modified to include environmental risk considerations wherever EnvRR is rated as high in the following manner:

- i. The Bank will carry out periodic inspections using EDD checklists as guidance to ensure adoption of proper environmental management. Whenever the monitoring requires more than the usual management expertise, e.g. specific technical expertise, the Bank will use external consultants. Evidence of the periodic monitoring will be maintained.
- ii. The Bank will follow-up with the borrower on the findings of the inspections and send written documentation to the Borrowers informing the action taken. The Bank will maintain record of the same and take cognizance of the commitment to follow-up on these findings in taking decisions to deal with the borrower.

vi. Credit recovery

No new procedures are required in relation to environmental risk management.

vii. Database on Non-Performing Loans (NPLs) due to Environmental risks

The Bank will establish and maintain a database of NPLs that are due to environmental reasons, either in partial or full. If the borrower has indicated environmental factors as one of the reasons for delays in making repayments, then this will be noted in the database. The purpose of this database is to ensure that the Bank streamline their own institutional knowledge for better decision-making in their future financing.

viii. Reporting system

The Bank will have a reporting system, to intimate management, shareholders, and other stakeholders on the implementation of the policy. This reporting will be done on an annual basis and will form a part of their Annual Report.

Chapter – 3

Environmental Risk Review

December, 2011

Environmental Risk
Management Policy

Chapter – 3: Environmental Risk Review

1.5. Environmental Regulations

Environmental Conservation Act (ECA), 1995 and Environment Conservation Rules (ECR), 1997 issued by the Government of Bangladesh provide the framework of environmental regulations. The Department of Environment (DOE), established under the auspices of ECA 1995, is authorized to issue Environmental Clearance Certificate (ECC) by its Director General for any business activity (i.e. industrial unit or project) intended to establish or undertake as prescribed by the accompanying Rules.

For issuing the ECC, the DOE classifies the industrial unit and projects on the basis of their location and impact on the environment into the following four categories: (i) Green, (ii) Orange – A, (iii) Orange – B, (iv) Red. Here Green and Red indicates least polluting and most polluting respectively, with the two orange categories regarded as having medium-scale impacts. Different levels of documents are to be submitted to DOE for the ECC for the each category of industries.

Environment Conservation Rules 1997 prescribes various performance standards requirements (both general and industry specific) which have to be met to ensure legal compliance while operating the industries.

1.6. Preliminary Environmental Risk Review

On receiving the proposal for financing, the Bank will conduct a preliminary environmental risk review using Environmental Due Diligence (EDD) checklists.

The Bank will obtain copies of documents from the potential borrowers – both new and existing business activities – submitted to the DOE for obtaining the ECC as the background for completing the EDD checklists. However, discussions with the potential borrower will form the basis for administering the EDD checklists.

1.7. Cross-cutting aspects

There are environmental issues that tend cut-across all sectors. The cross-cutting aspects covered in the General EDD checklist include the possible sources of risks – legal compliance or compliance to environmental laws, appropriateness of land for the intended purpose, climate change impacts, if any – and also the management systems of the potential borrower to manage these risks. To determine whether these will become environmental risks, the General EDD checklist will be used. Administering of the General EDD checklist concludes with determining the Environmental Risk Rating (EnvRR) of the proposal for financing.

1.8. Sector-specific aspects

Proposals for financing in different sectors are prone to different kind of environmental risks.

Sector EDD checklists will additionally be used by the Bank if the proposal for financing is in any of the ten sectors. Administering of the Sector EDD checklist concludes with determining the overall Environmental Risk Rating (EnvRR), which combines both the outcomes of the General and Sector-specific EDD checklists, of the proposal for financing and will be applied as per the table below:

General EDD	Sector-specific EDD	Overall ERR
Low	Low	Low
Moderate/Low	Low/Moderate	Moderate
If any one or both the General and Sector-specific EDD checklists is indicated as “High”		High

1.9. Deciding next steps based on EnvRR

Based on administering the General EDD checklist and the sector-specific EDD checklist, if applicable, the EnvRR for the proposal for financing is known. The following three possibilities need to be ensured:

- i. If the EnvRR is high, then the proposal for financing will have to be approved by the Board or its Executive Committee.
- ii. If the EnvRR is low or moderate, then the financing decision can be undertaken on the basis of the usual credit risk management guidelines.
- iii. If the EnvRR is unclear, then it is required for the Bank to collect more information from the borrower so as to gain an understanding of the inherent risks and arrive at a high/moderate/low decision. If a risk factor is not applicable, it may be excluded from the total number of questions used in calculating

1.10. Detailed Risk Review

The detailed environmental risk review will be required for all business activities identified in the Red Category under the ECR 1997 being implemented by the DOE. The Bank will engage external consultants to do a detailed Environmental Risk Review on the basis of the Environmental Impact Assessment and associated environmental management plans prepared. The detailed Environmental Risk Review will consider all sources of environmental risk, the likelihood of their occurrence and assess the implications for the Bank. Based on this detailed review, the external consultant, approved by the Bank, will advise whether the overall EnvRR will be “High”, “Moderate” or “Low”.

1.11. Linking EnvRR with the Credit Risk Rating

When presenting the credit risk rating of the proposal for financing, the EnvRR will also be provided along with the overall credit risk rating.

Annexure

December, 2011

**Environmental Risk
Management Policy**

Annexure – 1: General and Sector-wise Environmental Due-Diligence Checklists

1. General EDD Checklist

This checklist is to be used for all proposals for financing being considered by the Bank. If there are no specific checklists for the particular sector under consideration, the General EDD checklist alone, is to be used to determine the EnvRR rating.

Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR. If a question does not apply to the sector under consideration, it should be excluded by deducting from the total number of questions used to calculate the percentages in determining the EnvRR. The justification for any exclusion is to be documented separately and retained on file with the EnvRR checklists.

Particulars	Yes / No / NA
Possible sources of environmental risk	
1. Environmental Clearance: * In the <i>proposal for financing</i> , have all the applicable compliances to environmental laws, i.e. site clearance certificate and environmental clearance certificate, been obtained from the Department of Environment (DOE)?	
* Have these clearances been obtained after submitting the appropriate documents for the different pollution category of industries (Green, Orange – A, Orange – B, and Red)?	
2. Land location/site: <i>Is the land location/site free from vulnerability from an environmental perspective? Vulnerability can arise due to the issues such as the location being on the river bank (floods) and on national parks/ forests (non-compliance)?</i>	
3. Climate change: <i>Is the proposal for financing protected against climate change related impacts such as cyclones, storm, surges, floods and droughts if relevant?</i>	
Borrower’s Environmental Management Systems	
4. Commitment: Is the potential borrower’s top management committed to environmental management?	
5. Manpower: Has the potential borrower planned for manpower resources to address environmental issues?	
6. Skills: If so, is the manpower skilled to address environmental issues?	
7. Labor/social issues: <i>Does the management adopt good practices vis-à-vis occupational health and safety and associated issues such as child labor, forced labor, wage compensation, discrimination and working hour?</i>	

Determining overall EnvRR

The italicized questions are the more important / critical ones. The EnvRR is determined as follows:

Criteria	EnvRR
If answers to any one of the italicized questions is “No”	“High”
If answers to all italicized questions is “yes” but 50% or more of the non italicized questions is “No”	“High”
If answers to all italicized questions is “yes” and if answers to more than 25% and less than 50% of the remaining questions is “No”	“Moderate”
If answers to all italicized questions is “yes” and if answers to less than 25% of the remaining questions is “No”	“Low”

2. Sector-wise EDD Checklist

The following sector-wise EDD checklist has been furnished below for ready reference:

- i. Agri-business (Poultry & Dairy)
- ii. Cement
- iii. Chemical (Fertilizers, Pesticides and Pharmaceuticals)
- iv. Engineering and Basic Metal
- v. Housing
- vi. Pulp and Paper
- vii. Sugar and Distilleries
- viii. Tannery
- ix. Textile and Apparels
- x. Ship breaking

2.1. Agri-business (Poultry and Dairy)

2.1.1. Agri-business (Poultry)

This checklist should be used for all proposals for financing in the poultry subsector of the agri-business.

Legal classification

As per ECR 1997, this is Orange A category up to 250 birds in urban areas and up to 1000 in rural areas. And, this is Orange B category for above 250 birds in urban area and above 1000 in rural areas.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Avian influenza: <i>Does the business activity take adequate management measures to protect from animal diseases / pathogens such as Avian influenza (strain HN51)?</i>	
2. Solid waste: * Is there provision for appropriate management of solid waste including waste feed, animal waste, carcasses, sediments and sludge from wastewater treatment facilities?	
* Are there responsible methods to dispose the solid waste / sludge from the ETP been included in the design?	
3. Wastewater / ETP: * Is there an Effluent Treatment Plant (ETP) or appropriate waste-water management processes to treat the waste-water discharges?	
* Does the design ensure that there is no bypass arrangement for the ETP or wastewater management processes?	
4. Hazardous materials: Are there adequate systems for the handling, storage and transport of hazardous materials? And, is there adequate check to ensure only permissible hazardous materials are in use?	
5. Monitoring: <i>Has environmental monitoring, particularly protection from disease causing pathogens, been planned?</i>	

2.1.2. Agri-business (Dairy)

This checklist should be used for all proposals for financing in the dairy subsector of the agri-business.

Legal classification

As per ECR 1997, for dairy farm, this is Orange A category for 10 cattle or below in urban areas and 25 or below in rural areas. And, this is Orange B category for above 10 in urban areas and above 25 numbers in rural areas. And, for dairy processing, this is Orange B category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Wastewater / ETP: * <i>Is there an Effluent Treatment Plant (ETP) to treat the wastewater discharges in the design?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
2. Solid waste: * Are there responsible methods to dispose the solid waste/ sludge from the ETP been included in the design?	
* Have proper provisions been made for the management of organic solid waste in dairy processing facilities?	
3. Air emissions: Are air emission prevention and control measures systems installed from the combustion of fuel in turbines, boilers, compressors and other engines for power and heat generation?	
4. Monitoring: Has environmental monitoring, particularly effluent characteristics, been planned?	

2.2. Cement

This checklist should be used for all proposals for financing in the cement sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Air emissions: <i>Are air emission prevention and control measures systems installed in all point sources of emissions in operational processes and also in the handling and storage of intermediate & final goods?</i>	
2. Wastewater / ETP: * Is there an Effluent Treatment Plant (ETP) to treat the wastewater discharges?	
* Does the ETP design ensure that there is no bypass arrangement?	
3. Solid waste: * Are there responsible methods to dispose the solid waste/ sludge from the ETP been included in the design?	
* Have proper provisions been made for the management of solid waste - including clinker production waste and kiln dust?	
4. Noise: Have noise control measures been put in place in grinding, handling and transportation?	
5. Monitoring: <i>Does environmental monitoring for continuous monitoring equipment on all dust emission lines?</i>	

2.3. Chemical (Fertilizer, Pesticides and Pharmaceuticals)

2.3.1. Chemical (Fertilizer)

This checklist should be used for all proposals for financing in the fertilizer sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Hazardous chemicals: Does the design provide for handling, storage and transportation of hazardous chemicals in the manufacture of fertilizers?	
2. Wastewater / ETP: * <i>Is there an Effluent Treatment Plant (ETP) to treat the wastewater discharges in the design?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
3. Solid waste: * Are there responsible methods to dispose the solid waste/ sludge from the ETP been included in the design?	
* Does the business activity include an approach towards handling and disposal of spent catalyst / toxic metals, if any?	
* Have provisions been made for the management of these hazardous wastes?	
4. Air emissions: <i>Are air emission prevention and control measures in place for ammonia, nitric oxides and nitrous oxides in nitrogenous fertilizer manufacturing, and in utilities such as boilers?</i>	
5. Noise: Are noise control measures in place for the large-sized rotating machines?	
6. Monitoring: <i>Does environmental monitoring include continuous monitoring systems of storm water for pH, fluoride & ammonia?</i>	

2.3.2. Chemical (Pesticides)

This checklist should be used for all proposals for financing in the pesticides sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Guidelines: <i>Is the pesticide manufacturing been carried out in line with the WHO Guidelines, Stockholm Convention and Rotterdam Convention?</i>	
2. Hazardous chemicals: Does the design provide for handling, storage and transportation of hazardous chemicals in the manufacture of pesticides?	
3. Wastewater / ETP: * <i>Is there an Effluent Treatment Plant (ETP) to treat the wastewater discharges in the design?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
4. Solid waste: * Are there responsible methods to dispose the solid waste/sludge from the ETP been included in the design?	
* Has provision been made for the proper management of solid waste (e.g. chemical residues and filtrates) and liquid waste (e.g. spent solvents)?	
5. Air emissions: Are proper air pollution control devices included to tackle emissions during pesticide manufacturing, formulating and packaging?	
6. Fire / explosions: <i>Have proper design provisions been made to prevent fire and explosion hazards that may arise from solvent use, handling and storage?</i>	
7. Monitoring: Is environmental monitoring, particularly the effluent characteristics, proposed on a periodic / regular basis?	

2.3.3. Chemical (Pharmaceuticals)

This checklist should be used for all proposals for financing in the pharmaceutical sector.

Legal classification

As per ECR 1997, this is Orange B category. This is classified as life saving drugs.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Hazardous chemicals: <i>Have methods been included for the safe storage and use of hazardous chemicals?</i>	
2. Wastewater / ETP: * <i>Is there an Effluent Treatment Plant (ETP) to treat the wastewater discharges in the design?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
3. Solid waste: * Are there responsible methods to dispose the solid waste/sludge from the ETP been included in the design?	
* Are there responsible methods to dispose off-specification drugs/damaged medicines?	
4. Air emissions: <i>Have methods to manage the hazardous air pollutants (e.g. benzene and carbon tetrachloride and toluene) and odorous compounds (e.g. mercaptans)?</i>	
5. Genetic resources: Have proper procedures been followed if there is the use of particular genetic resources that have threats to biodiversity?	
6. Bioethics: Are good bioethics management approaches been adopted if genetically modified foods or related new areas of work are involved?	
7. Monitoring: Is environmental monitoring, particularly of the air emissions (stack and fugitive), proposed on a periodic / regular basis?	

2.4. Engineering and Basic Metal

This checklist should be used for all proposals for financing in the engineering and basic metal sector.

Legal classification

As per ECR 1997, this is Orange B category for engineering works up to BD Tk. 10, 00,000 and re-rolling. And, this is Red category for engineering works above BD Tk. 10, 00,000.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Air emissions: <i>Have appropriate air pollution control equipment at the emissions points and also exhaust provisions in the various metal manufacturing processes?</i>	
2. Wastewater / ETP: * Has an ETP for the cleaning and rinsing streams included in the design?	
* Does the ETP design ensure that there is no bypass arrangement?	
3. Solid wastes: * Are there responsible methods to dispose the solid waste/sludge from the ETP been included in the design?	
* Is proper management of the different types of solid wastes been undertaken?	
4. Noise: Are measures to control noise from the mechanical equipment and physical activities?	
5. Fire / explosions: <i>Have proper design provisions been made to prevent fire and explosion hazards that may arise from operations?</i>	
6. Monitoring: Is environmental monitoring, particularly of the air emissions (stack and fugitive), proposed on a periodic / regular basis?	

2.5. Housing

This checklist should be used for all proposals for financing in the housing sector.

Legal classification

As per ECR 1997, this is not applicable.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Sewage: * <i>Has a Sewage Treatment Plant (STP) of a size appropriate to the requirements been included in the design? Is there a justification for the chosen size?</i>	
* Does the STP design ensure that there is no bypass arrangement?	
2. Dust: Does the proposed business activity have appropriate measures to control the dust pollution during construction?	
3. Noise: Are measures to control noise from the large construction activities?	
4. Debris: Are there measures to manage the construction debris?	
5. Monitoring: Is environmental monitoring, particularly of the air emissions and effluent discharges, proposed on a periodic/regular basis?	

2.6. Pulp and Paper

This checklist should be used for all proposals for financing in the pulp and paper sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Wastewater / ETP: * <i>Has an ETP of a size appropriate to the requirements been included in the design? Is there a justification for the chosen size?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
2. Air emissions: Does the proposed business activity have appropriate air pollution control equipment at the emissions points, particularly the pulp processing and utilities?	
3. Solid waste: * Are there responsible methods to dispose the solid waste/sludge from the ETP been included in the design? * Are there measures to manage the large quantities of solid waste (though non-hazardous)?	
4. Odour: <i>Are measures for preventing and controlling odour been planned?</i>	
5. Noise: Are measures to control noise from the large mechanical equipment and physical activities?	
6. Monitoring: Is environmental monitoring, particularly of the effluent's characteristics, proposed on a periodic/regular basis?	

2.7. Sugar and distilleries

This checklist should be used for all proposals for financing in the sugar and distilleries sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Wastewater / ETP: * <i>Has an ETP of a size appropriate to the requirements been included in the design? Is there a justification for the chosen size of the ETP?</i>	
* Does the ETP design ensure that there is no bypass arrangement?	
2. Solid wastes: * Are there responsible methods to dispose the solid waste/ sludge from the ETP been included in the design? * Have methods to store and dispose solid wastes (generated from the treatment of raw material) been planned in the design?	
3. Water: <i>Are water consumption reduction approaches been adopted to reduce the overall water intake?</i>	
4. Air emissions: Does the proposed business activity have appropriate air pollution control equipment at the emissions points, particularly the steam boilers?	
5. Odour: Are measures for preventing and controlling odour been planned?	
6. Monitoring: Is environmental monitoring, particularly of the effluent's characteristics, proposed on a periodic/regular basis?	

2.8. Tannery

This checklist should be used for all proposals for financing in the tannery sector.

Legal classification

As per ECR 1997, this is Red category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Hazardous chemicals: <i>Does the business activity include appropriate hazardous chemicals management methods in pretreatment, dyeing and other processes?</i>	
2. Wastewater / ETP:	
* <i>Does the proposed business activity have its own ETP?</i>	
* <i>If it is to a Common ETP, is this in working order?</i>	
* <i>Does the ETP design ensure that there is no bypass arrangement?</i>	
* <i>Does the proposed business activity include a chrome recovery unit in its design?</i>	
* <i>Is the post-ETP treated wastewater discharged into a water body from where water is drawn for other applications?</i>	
3. Solid Wastes: * <i>Are there responsible methods to dispose the solid waste/sludge from the ETP been included in the design?</i>	
* <i>Is the management of solid wastes properly planned and methods of disposal identified?</i>	
4. Odour: <i>Are there methods to control the odour from leather tanning as these constitute a nuisance to the surrounding community?</i>	
5. Monitoring: <i>Is environmental monitoring, particularly Chromium VI, proposed on a periodic / regular basis?</i>	

2.9. Textile and apparels

This checklist should be used for all proposals for financing in the textile and apparels sector.

Legal classification

As per ECR 1997, this is Orange B category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Hazardous Chemicals: <i>Does the business activity include appropriate hazardous chemicals management methods in pretreatment, dyeing and other processes?</i>	
2. Wastewater / ETP: * <i>Does the proposed business activity have an ETP?</i>	
* <i>If business activity uses specific dyes (e.g. chrome dyes, sulphur dyes or phenolic compounds) in dying process, is there a method to check the limits of particular compounds in the effluent discharged?</i>	
* <i>Has the ETP design ensured that there is no bypass arrangement?</i>	
3. Solid Wastes: <i>Is the management of solid wastes properly planned and methods of disposal identified? The wastes include trials, trimmings, cuttings of fabrics, spent dyes, pigments, and printing pastes; and ETP sludge containing mainly fibres and grease.</i>	
4. Air emissions: <i>Are air pollution control devices planned in the finishing processes such as coating and dyeing to manage air emissions that may contain toxic compounds?</i>	
5. Fire and explosions: <i>Have proper design provisions been made to prevent fire and explosion hazards that may arise from operations?</i>	
6. Monitoring: <i>Is environmental monitoring, particularly effluent characteristics, proposed on a periodic basis?</i>	
7. Export requirements: <i>If it is an export-oriented business or part of the supply chain, have all the buyer environmental requirements been met?</i>	

2.10. Ship breaking

This checklist should be used for all proposals for financing in the ship breaking sector.

Legal classification

As per ECR 1997, this is Orange B category.

Key issues and proposed technologies / approaches (Please complete a response to each of these questions as Yes or No or Not Applicable (NA), and determine the EnvRR)

Particulars	Yes / No / NA
1. Certificate: Do the management methods include obtaining a certificate from the exporting country?	
2. Hazardous Chemicals: Does the business activity include appropriate hazardous chemicals management methods during sorting, storage and reuse?	
3. Wastewater / ETP:	
* Does the proposed business activity have an ETP in its design?	
* Has the ETP design ensured that there is no bypass arrangement?	
4. Solid Wastes: Is the management of solid wastes properly planned and methods of disposal identified?	
5. Monitoring: Is environmental monitoring, particularly effluent characteristics, proposed on a periodic / regular basis?	

Annexure – 2: An Overview: Categorization of Industries

Sl. No.	Type of Industry	Size / Amount	Area	Category as per ECR, 1997
01.	Agri-Business (Poultry)	≥ 250	Urban	Orange A
		≥ 1000	Rural	
		> 250	Urban	Orange B
		> 1000	Rural	
02.	Agri-Business (Dairy)	≤ 10	Urban	Orange A
		≤ 25	Rural	
		> 10	Urban	Orange B
		> 25	Rural	
	Dairy Processing			Orange B
03.	Cement			Red
04.	Chemical (Fertilizer)			Red
05.	Chemical (Pesticides)			Red
06.	Chemical (Pharmaceuticals)			Orange B
07.	Engineering & Basic Metal	\leq BDT 10,00,000		Orange B
		$>$ BDT 10,00,000		Red
08.	Housing			Not Applicable
09.	Pulp & Paper			Red
10.	Sugar & Distilleries			Red
11.	Tannery			Red
12.	Textile & apparels			Orange B
13.	Ship Breaking			Orange B