

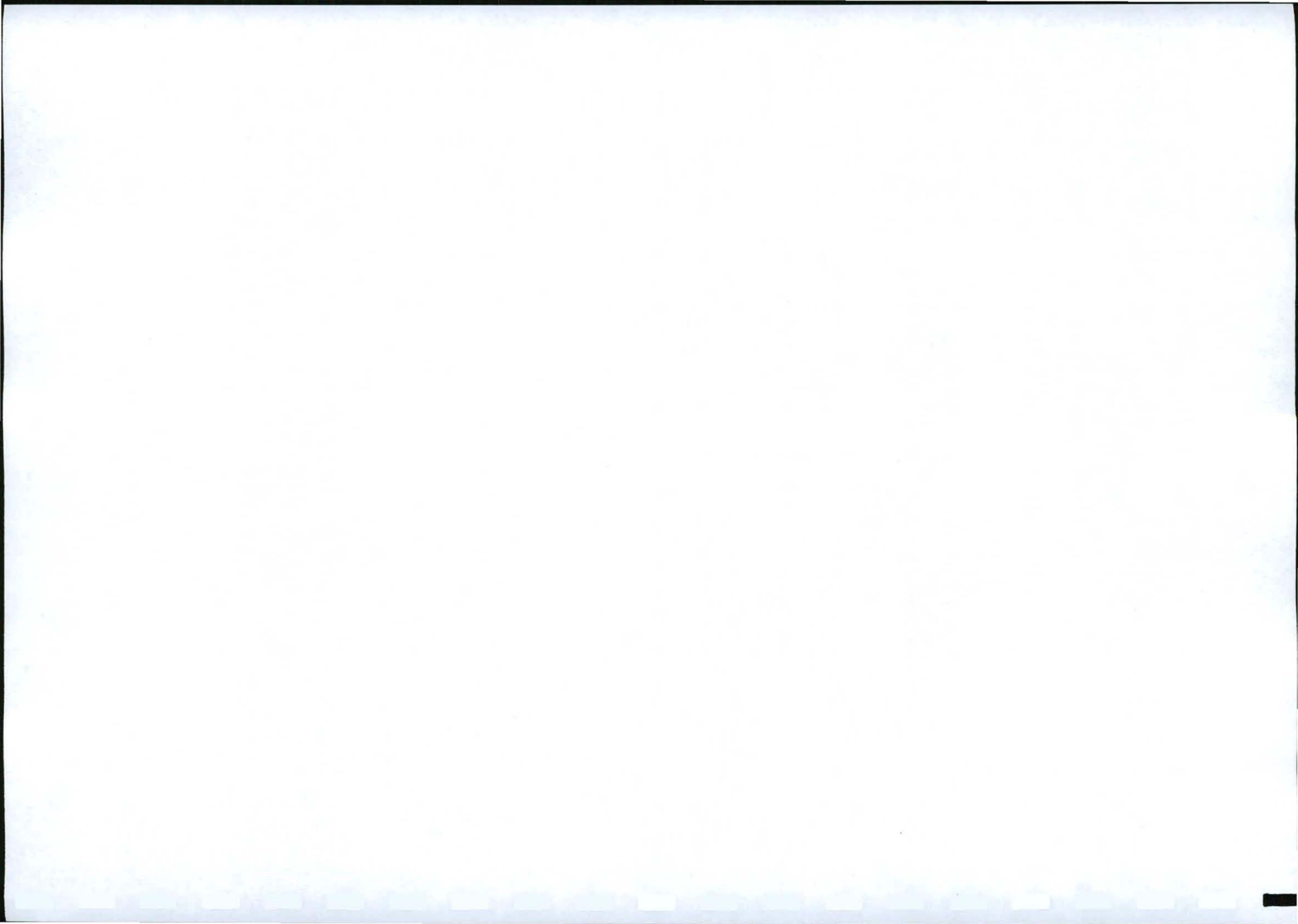
The primary impact in this regard is considered to be the effect on the grazing and habitat potential in the area through destruction of habitat on all sites of development and the mining area. However the site is highly disturbed and does not appear to be inhabited by any rare or endangered species. The nature of the mining method is such that animals that fall into open pits will be able to escape.

Animal species that may occur are mobile animals and the proposed mining activities should not impact negatively on the survival or dynamics of the species. The effect of the mine itself on any animals is regarded as minimal in terms of their long-term survival.

Poaching by employees in surrounding areas may constitute a thread to wildlife.

Action Plan:

- One side of the open pit shall be of an angle that allows for game and livestock to traverse these slopes.



- No poaching shall be permitted on the site or surrounding area and the perimeter fences shall be checked regularly for snares and gin traps.
- No fires will be permitted, other than in designated areas for this purpose to prevent the possibility of veldt fires.

Time frame:

Continuously and for one year after mining has lapsed

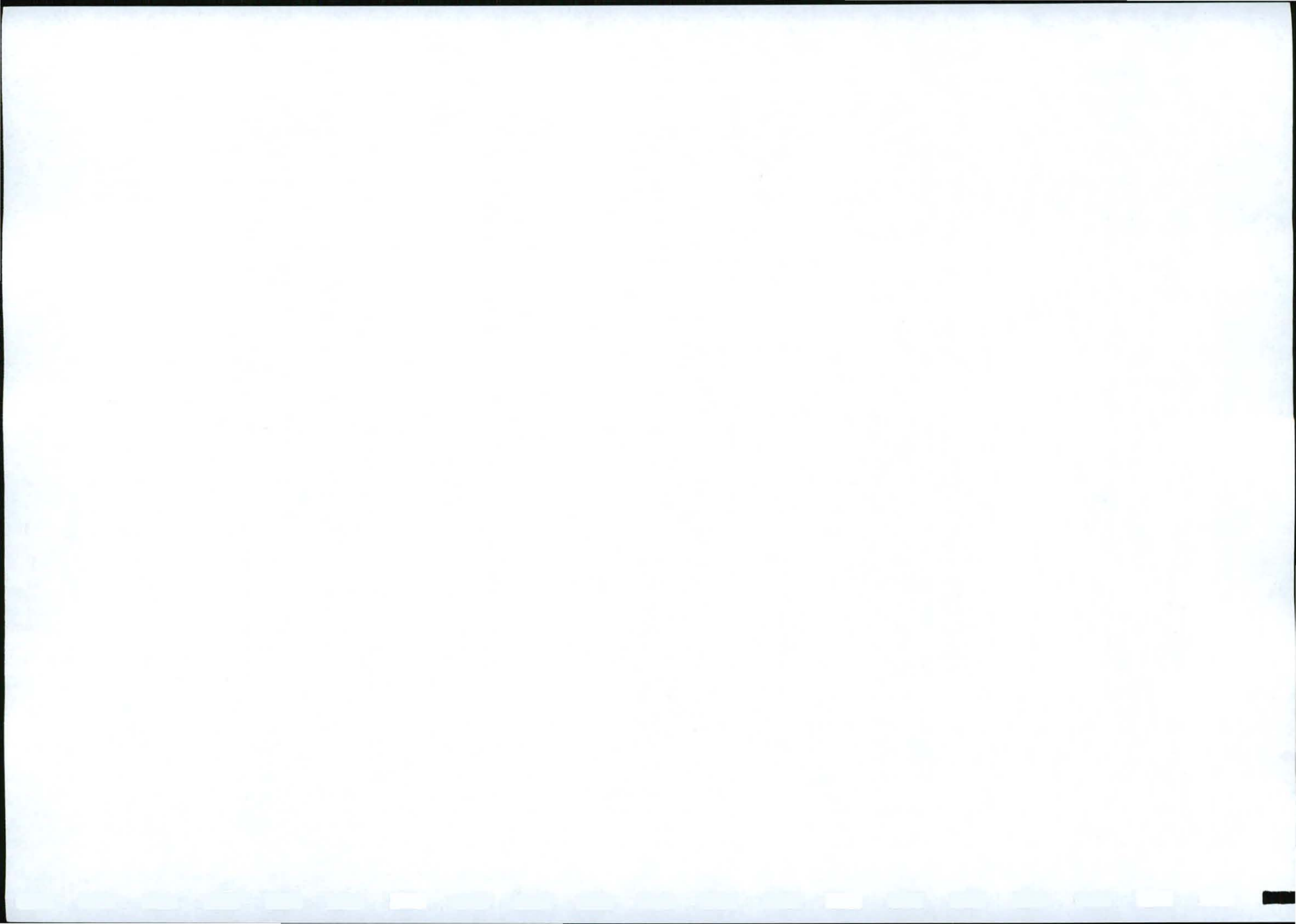
ARCHAEOLOGICAL AND CULTURAL RESOURCES

Graves are found on the farm, but outside the boundaries of the proposed mining area.

A Glazier floor is found near the river, this area is also outside the planned mining area, and will be protected in all cases.

No material of archaeological nature was noted.

Aspect: Destruction of artifacts and archaeological sites due prospecting related activities.



Impact: Destruction of artifacts and archaeological sites

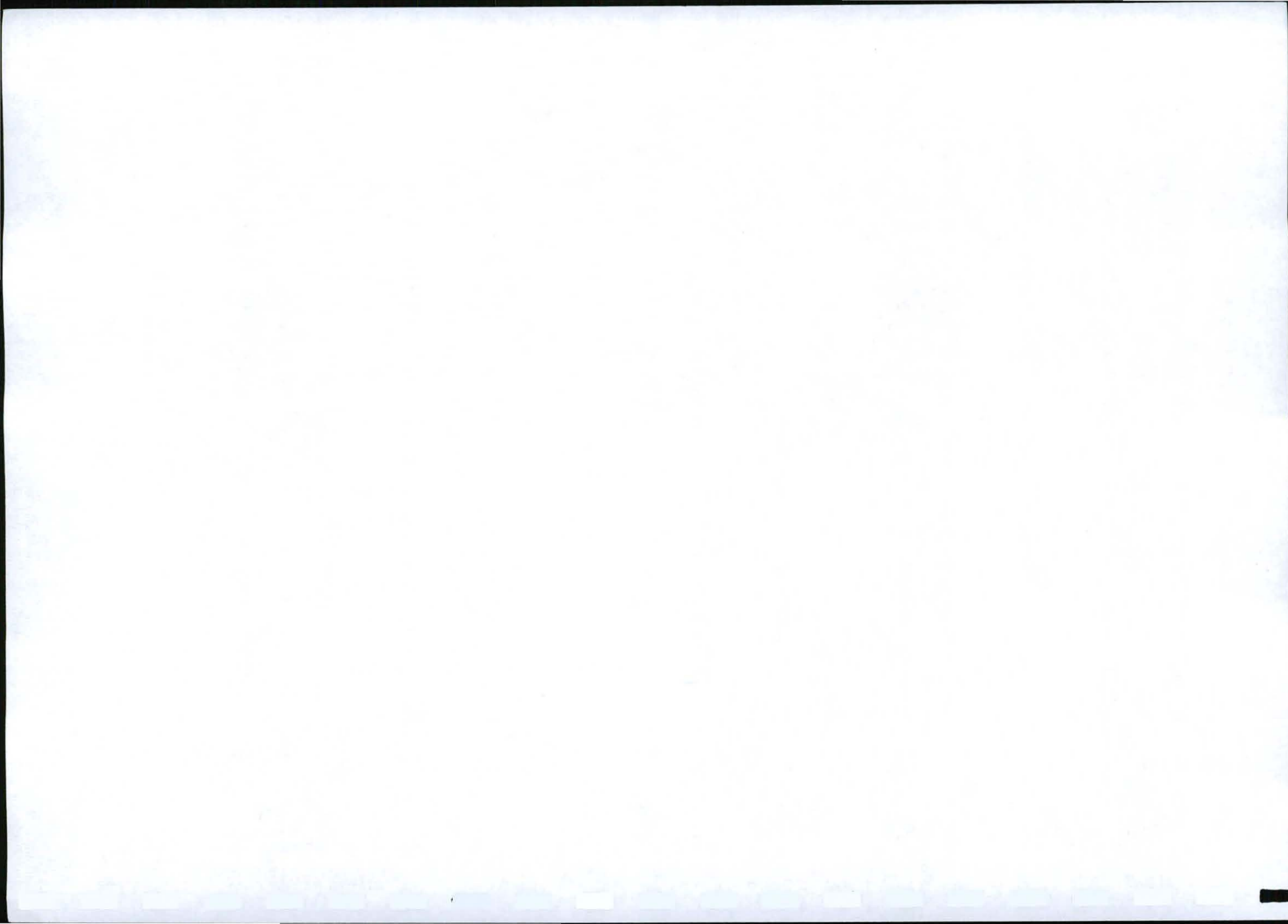
- If any archaeological find is uncovered, the archaeologist of the National Museum, Pretoria shall be informed and actions that could damage the find will be halted. Under no circumstances shall the artifacts be removed. The Museum's telephone number is 012 324 6082

VISUAL ASPECTS

Aspect: Infrastructure and mining related structures e.g. dumps

Impact: Visual impact

After rehabilitation the visual impact will be minimal, although the tree and shrub strata will have been removed. Structures on the site will be noticeable over a short distance, but not as horizon elements. All structures on the site, except the Escom lines, are non-permanent structures. While the visual impact is of significance in terms of the natural visual character of the region, farmers and the community of Farm Harrisdale No 226, District Barcly West will feel the impact.



Action Plan:

- The waste rock dumps; sand piles, topsoil and the overburden will all be returned to the open pits. The operation can be screened off by progressive rehabilitation.
- All structures related to the mine activity will be removed
- If possible operations will be confined to small areas
- Mining operations will be conducted in stages

Time Frame:

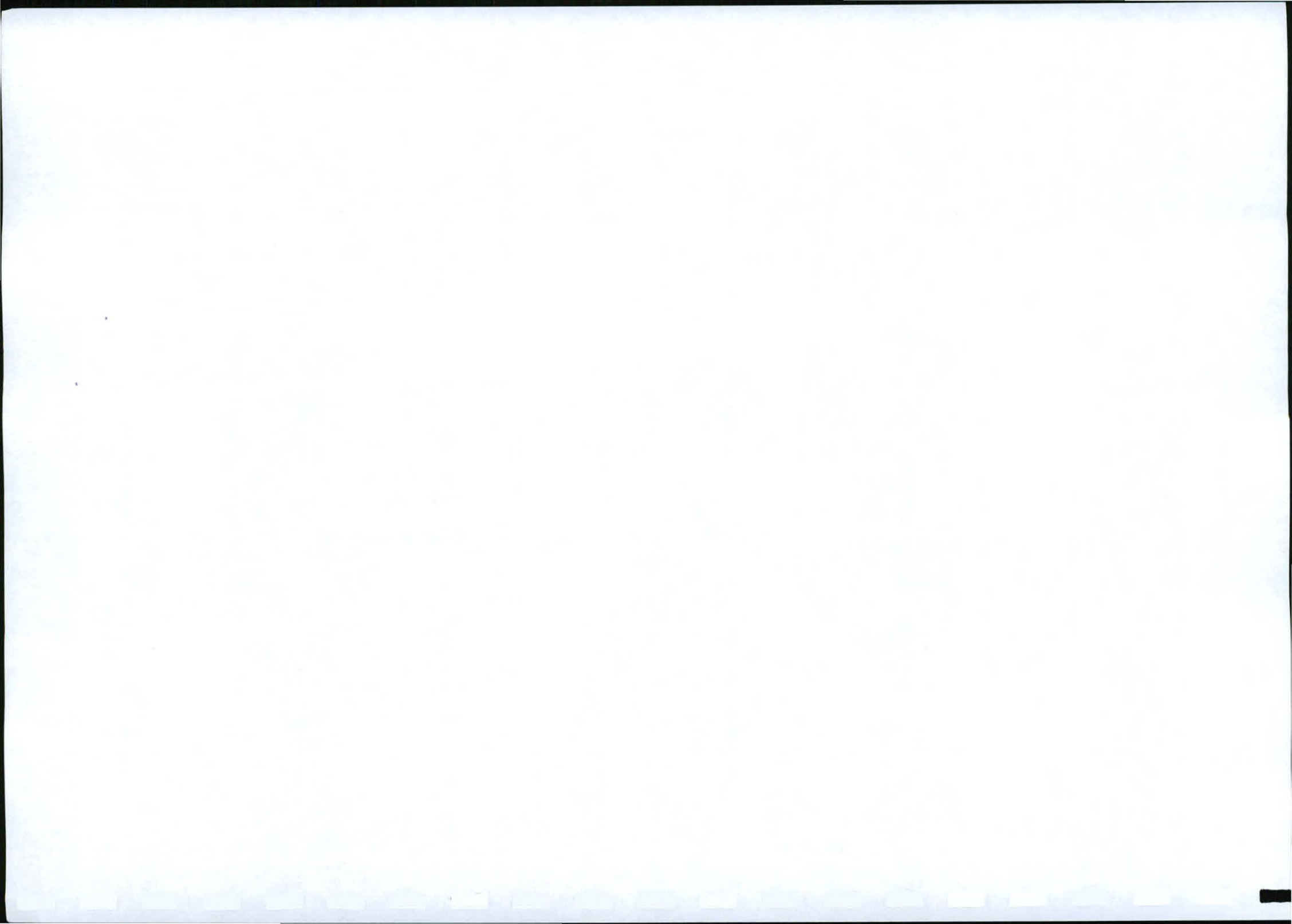
Continuously

NOISE

Aspect: Noise generated during transport, prospecting and mining (use of equipment)

Impact: Effects on Humans

Noise is subjective. Different people respond differently to the same noise and this creates a difficulty when attempting to assess



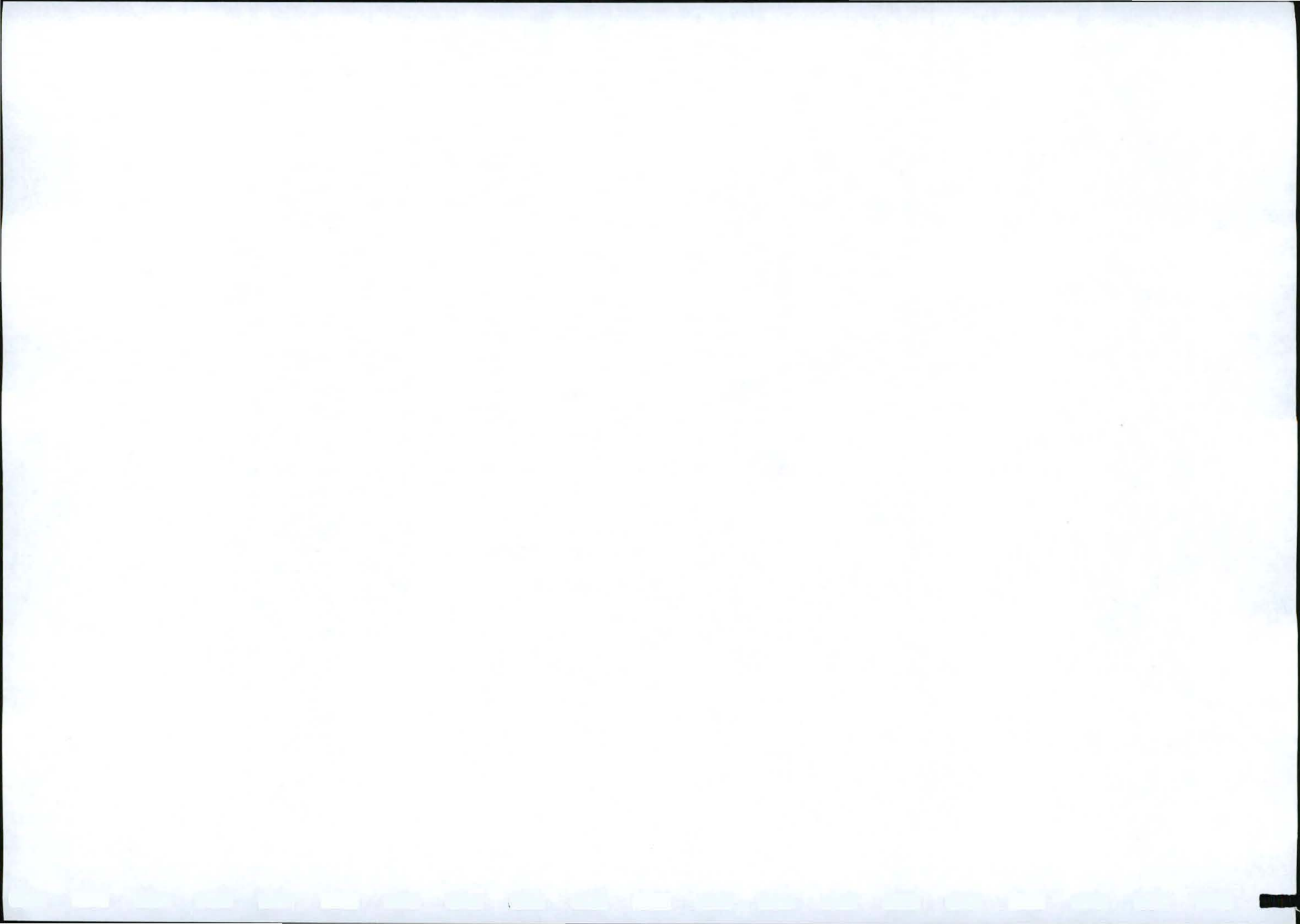
the impact of a given noise. General levels beyond which most reasonable people would complain determine noise levels.

Noise may have following effects:

- (I) Physical effects: trauma in humans and material fatigue
- (ii) Physiological effects: loss of hearing
- (iii) Effects on productivity and communication - distraction, unheard instructions, missed conversations
- (iv) Psychological effects: causing annoyance, negative community reactions and loss of concentration, mental stress

The effects of noise or undesirable sound may be significant to both employees and local residents. Noise emanating from the operation will be caused by heavy machinery. The primary impact will be the effect of noise on the personnel at the operating site, specifically close to the crushers and the heavy machinery. Noise levels at places of work and on the mining property will be kept below 85 Db (A) as far as possible. Where this becomes impractical employees will be issued with SABS approved hearing protection.

Noise impact on the general public will be insignificant.



Action Plan:

- Maintain the machinery and lubricate conveyor system regularly to avoid unnecessary noise.
- Monitor the noise levels
- Restrict operations to daylight hours
- Control noise levels within statutory limits
- Maintain audio buffers

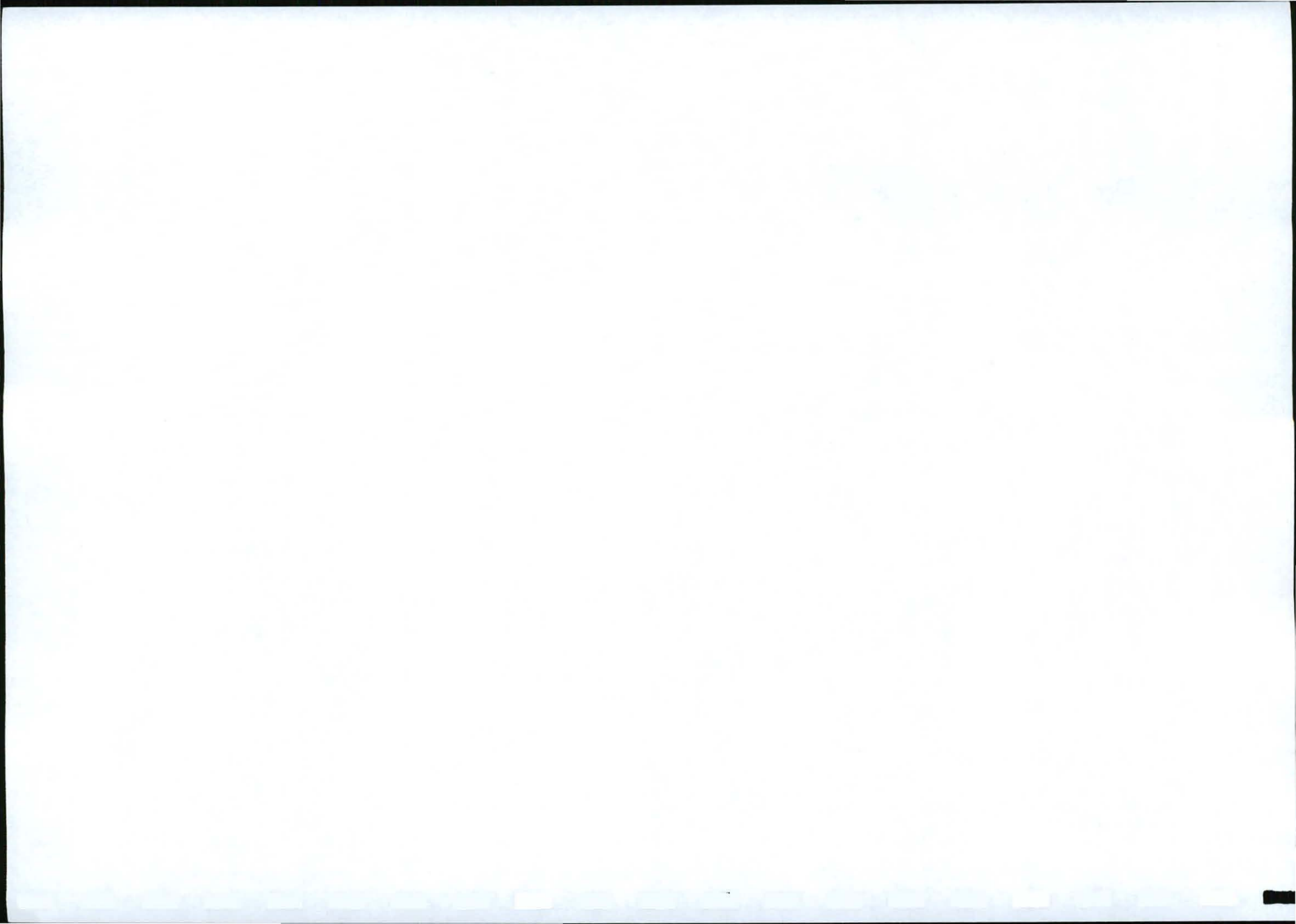
Time Frame

Continuously

1 Year after mining has stopped.

SURFACE WATER AND DRAINAGE

Drainage lines will only carry water during exceptional rainfall events such as a big cloud burst, experience a flash run off and be dry again after, except for possible hollows in the drainage lines.



- If storm water run-off threatens to enter areas where it could be polluted by oils, chemicals or other pollutants, the necessary earthworks will be done by prevent such eventuality.

All risk parameters below is not applicable

Aspect: Spillage during the handling, storage and transport of chemicals

Impact: Water pollution

Aspect: Spillage during the handling, storage and transport of fuels, lubricants and oils

Impact: Water pollution

Aspect: Ineffective separations and disposal of waste

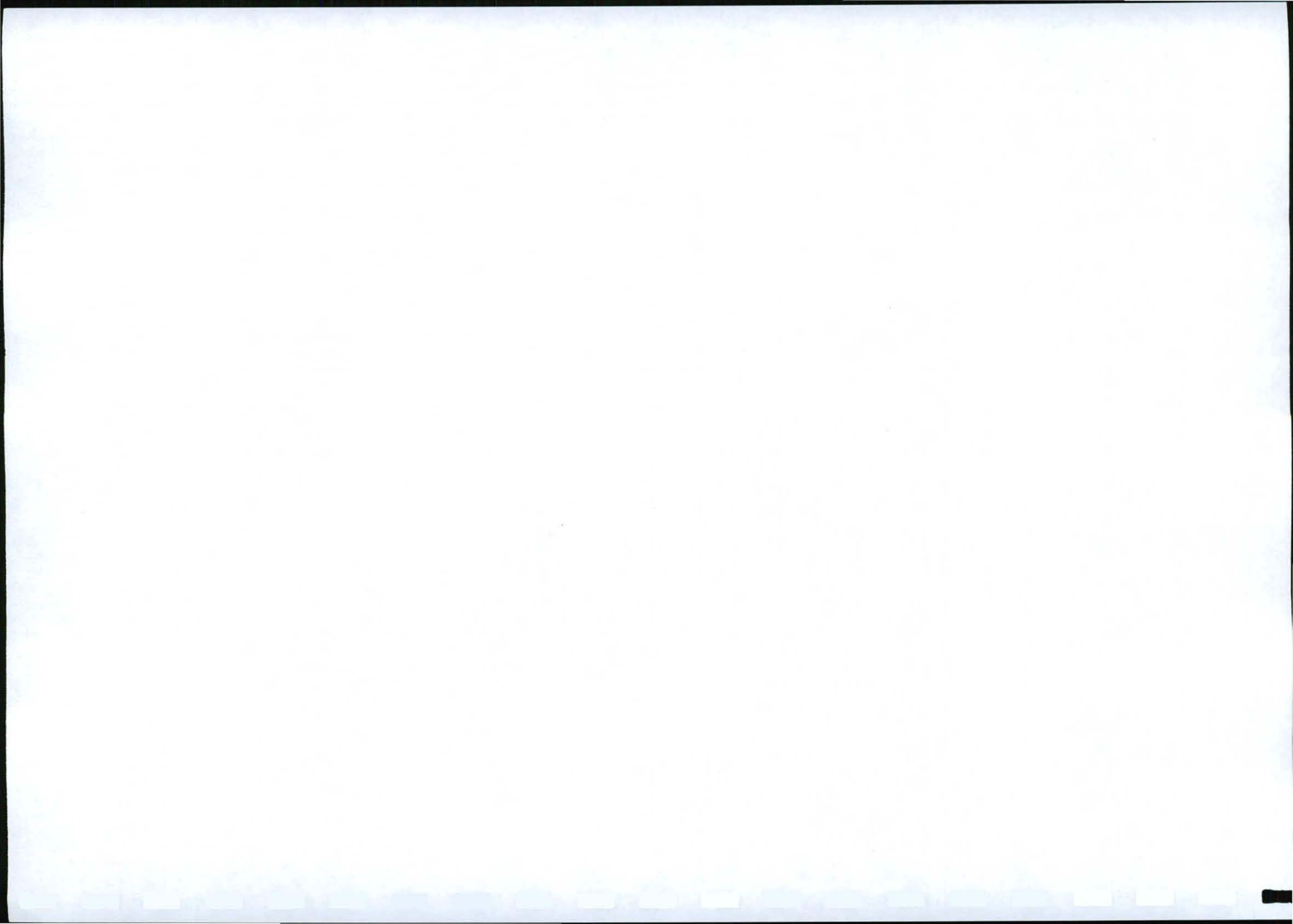
Impact: Water pollution

Aspect: Spillage from slimes piping and other structures in processing area

Impact: Water pollution

Aspect: Ineffective storm water management

Impact: Water pollution



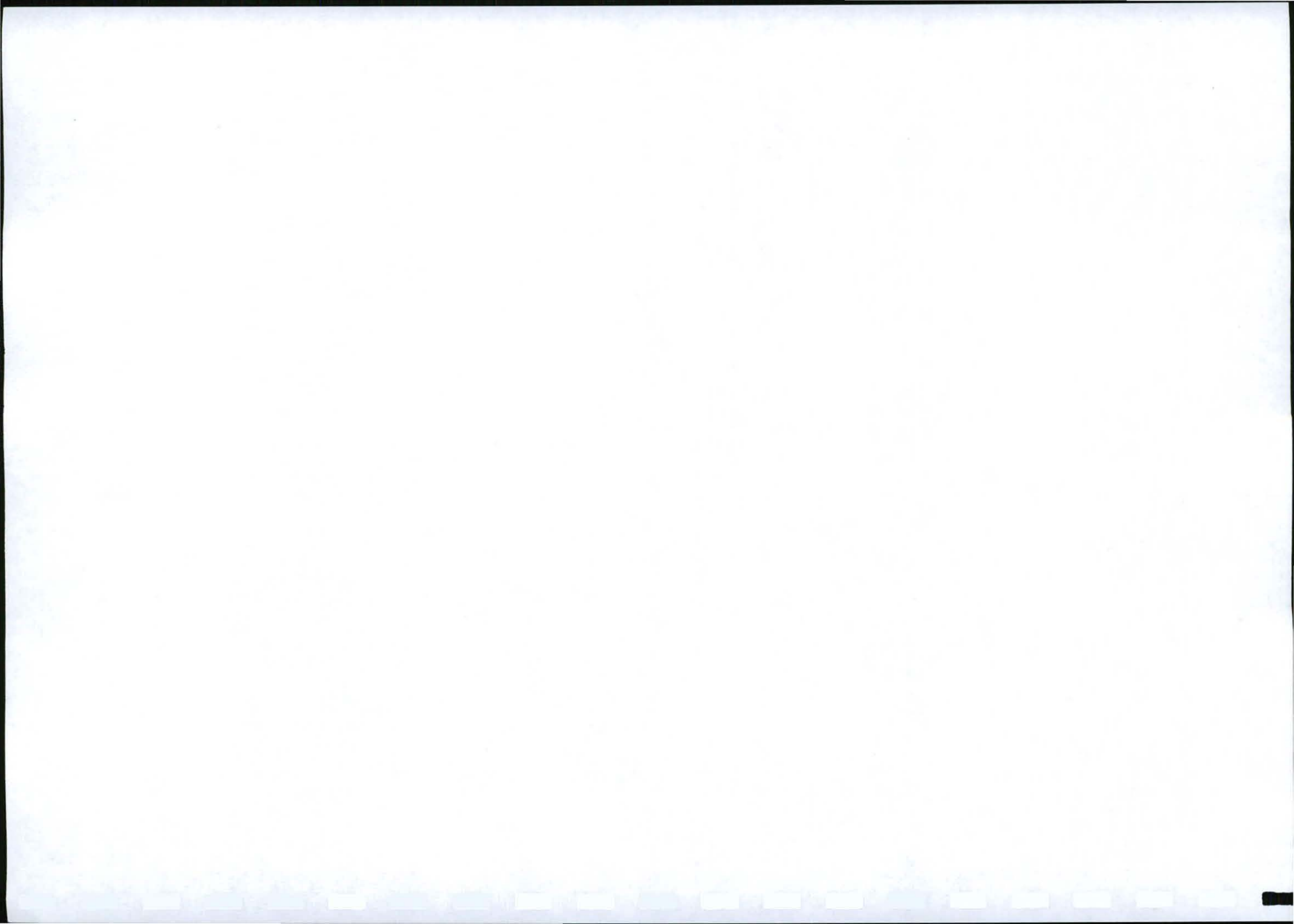
Action Plan

- Provide the necessary infrastructure, including storm water drains and beams to divert and control water runoff.
- Ensure that the process water does not escape from the process and contaminate areas.
- Maintain "clean" and "dirty" water system at the plant to minimize the water on the dumps and to prevent the ingress of contaminants to the ground water
- Ensure back-up equipment such, as pumps, pipes, tanks etc, are available in case of emergency response situation.
- Ensure that existing tailings dams are never used for overflow from the plant

Time Frame

Continuously

1 Year after mining has stopped.



GROUND WATER

The ground water level is approximately 25 to 55 meters. Channel water will be used for mining.

Aspect: Spillage during handling, storage and transport of chemicals.

Impact: Groundwater pollution

Aspect: Spillage during the handling and storage of oils, lubricants and Fuels.

Impact: Groundwater pollution

Aspect: Leach ate from waste management areas to ground water aquifers

Impact: Groundwater Pollution

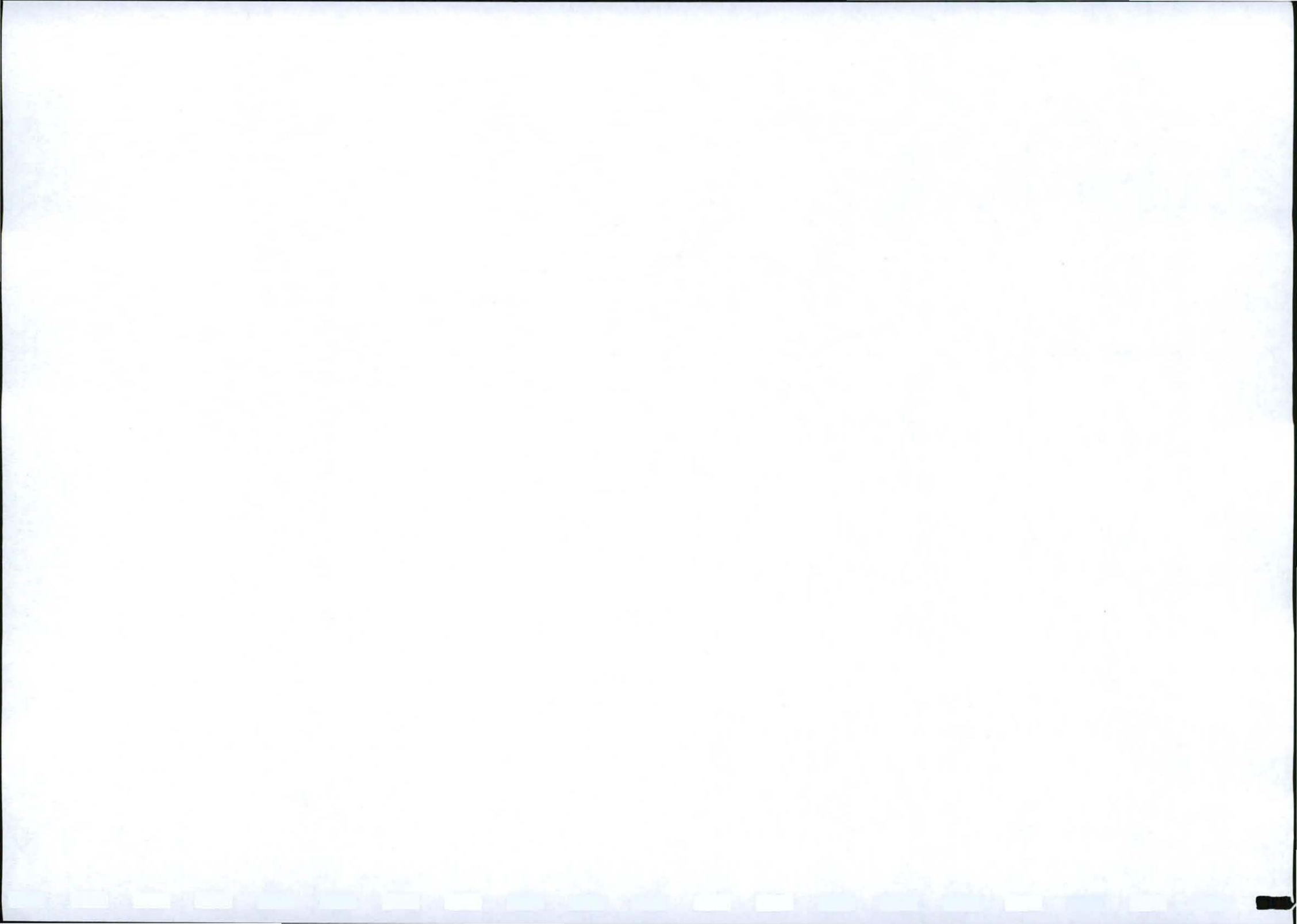
Aspect: Leach ate from material disposed in pits

Impact: Groundwater pollution

Aspect: Leach ate from material disposed in pits

Impact: Groundwater pollution

Aspect: Potential dewatering of the aquifers



Impact: Depletion of groundwater aquifers

The mining does not impact on the groundwater.

Time Frame

Continuously

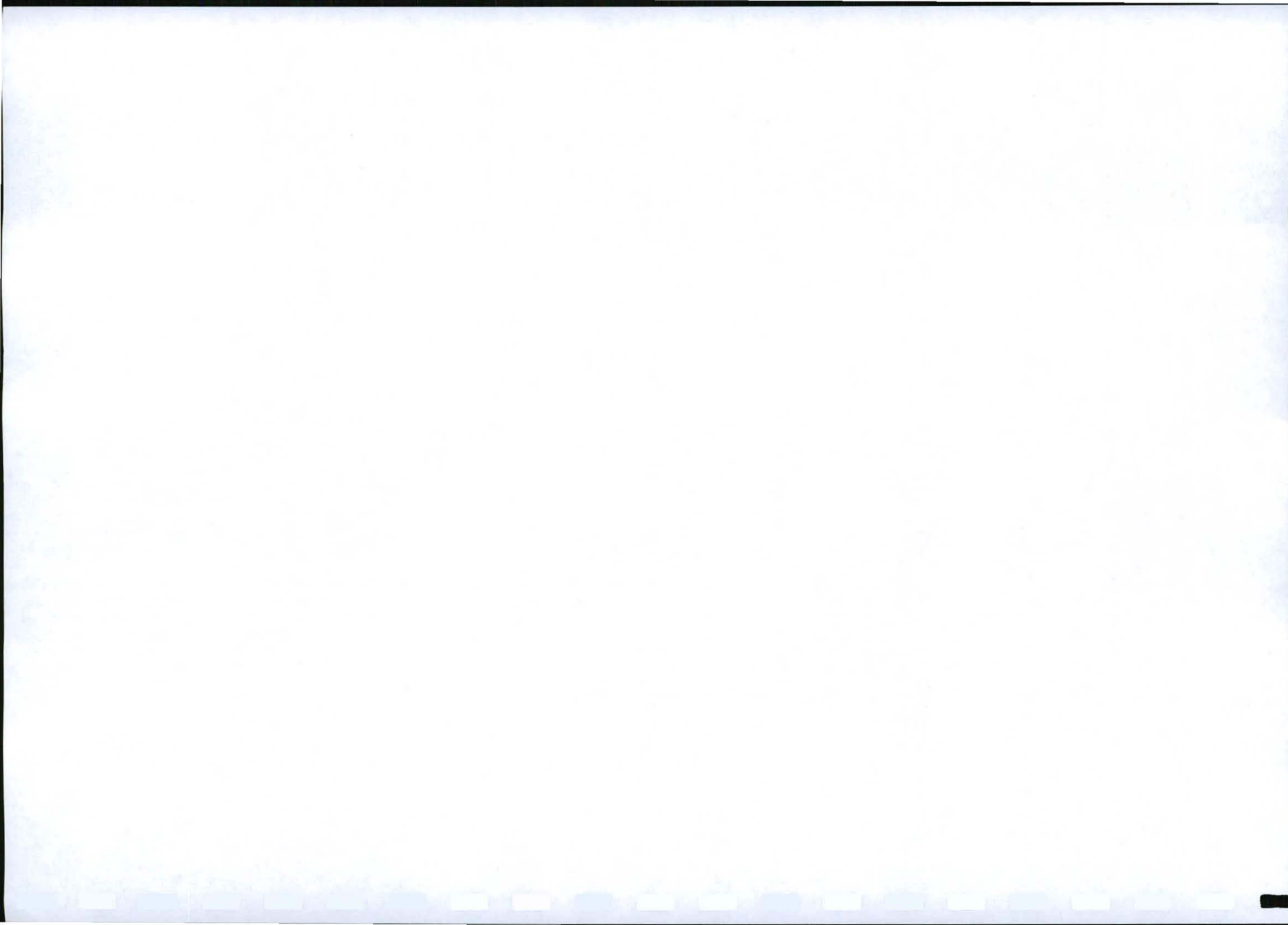
1 Year after mining has stopped.

SENSITIVE AREAS

The overall veldt type is not considered to be sensitive. The river and associated vegetation will not be impacted by the mining activity to such an extent that it cannot be rehabilitated.

Action Plans

- Office and campsites will be established outside the flood plain above the 1m50 flood level within the boundaries of the mining area



- The area chosen for these purposes will be the minimum reasonably required and which will involve the least disturbance to the vegetation
- No office site or camp shall be located closer than 100m from any river or sprout or 100m from repairing vegetation
- As a minimum requirement, the holder of the mining right will at least provide pit latrines
- All components of the water management system will be designed to retain runoff from a 24 hours duration storm event with 100-year recurrence interval plus freeboard.

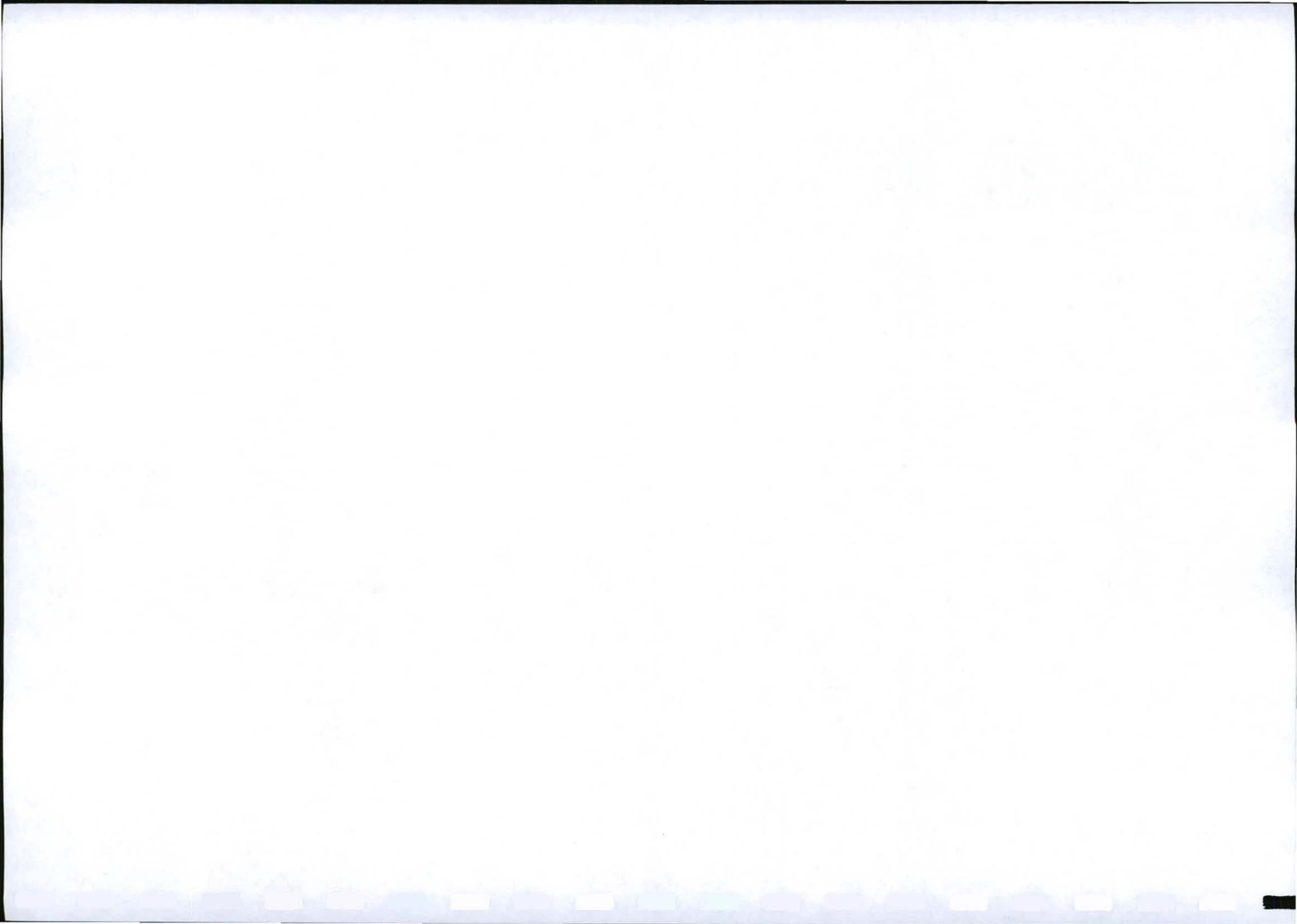
Time Frame

Continuously

1 Year after mining has stopped.

LAND CAPABILITY

Aspect: Construction of mineral related infrastructure e.g. dams, dumps, buildings etc.



Impact: Potential negative effect on capability of land for future use.

The main activity on the property is mining. Limited farming activities are taking place.

Action Plans

- The rehabilitation methods that will be used will return the area to its previous land capability to be used for grazing land.
- Dust suppression shall be exercised through re-vegetation of exposed areas.
- Thus the land capability will initially be negatively affected by the mining activity, it will return to its original capability as soon as rehabilitation has been done.

Time Frame

Continuously



LAND USE

Aspect: The building of roads, dams buildings etc.

Impact: Potential negative effect on the land use for future activities. After rehabilitation the land use possibilities remain unchanged, except for the fact that mining for alluvial diamonds will not be possible. Thus after closure of the mine, grazing will be the main farm activities.

Action Plans

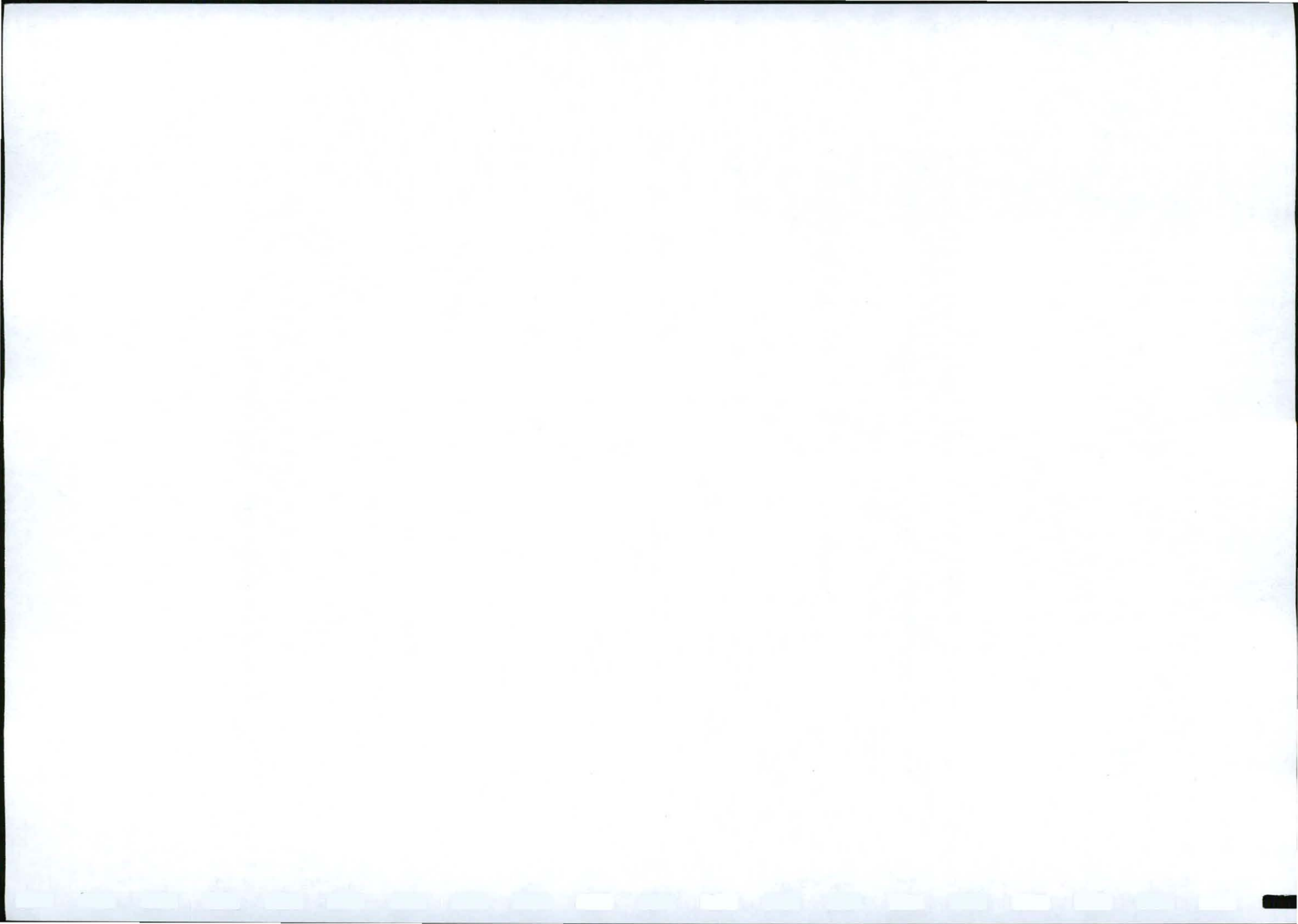
Proper rehabilitation

Time Frame

Continuously

AIR POLLUTION – DUST

The primary point source of dust liberation will be the gravel during the reclamations. Earth-moving plant such as back-actors, dozers, front-end loaders and tipper trucks will be use to reclaim the alluvial gravels.



Aspect: Dust generated from the driving roads.

Impact: Air pollution

Aspect: Dust generated from handling / processing and transport.

Impact: Air pollution

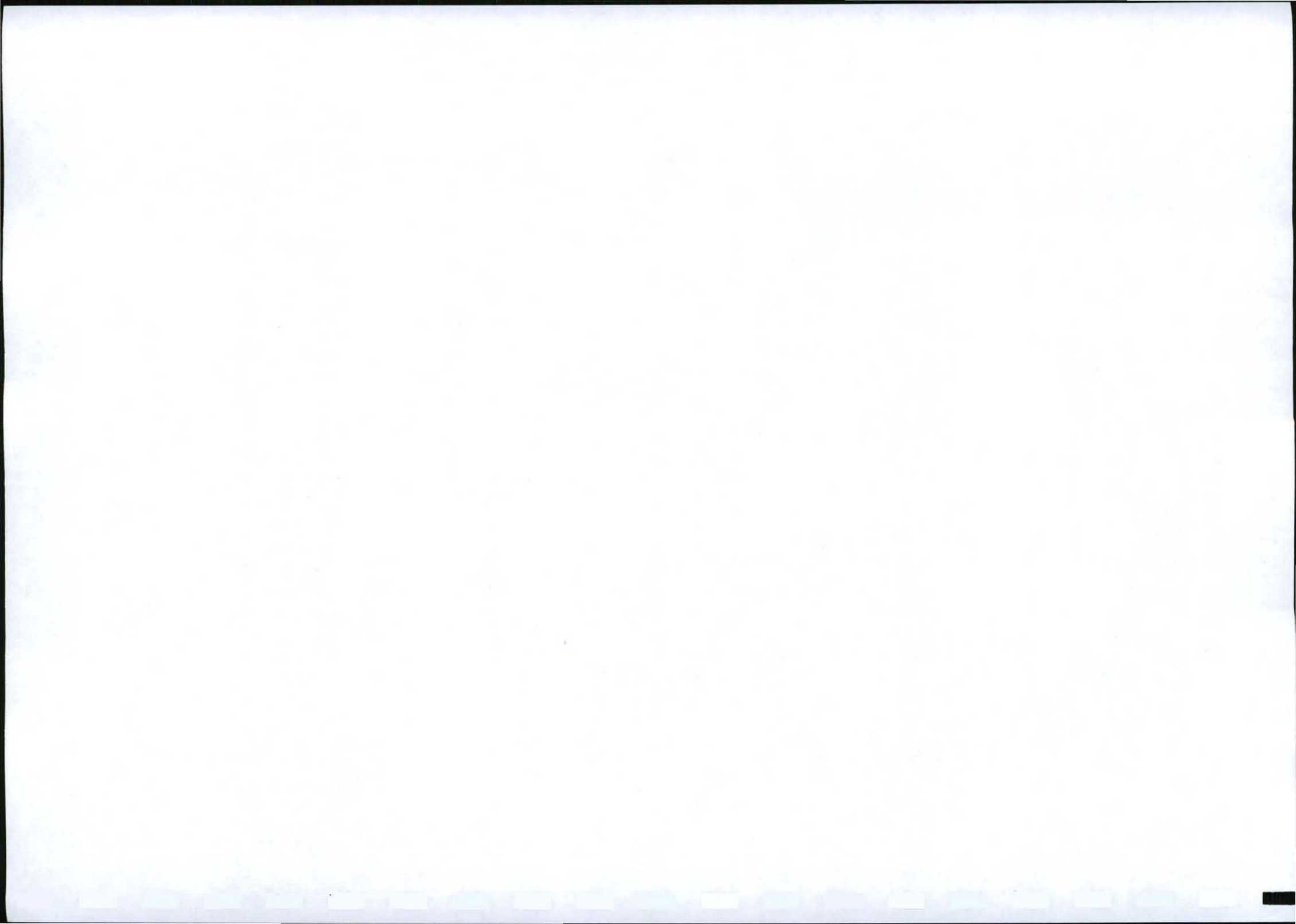
Aspect: Generation of dust from emissions during drilling and
blasting.

Impact: Air pollution

Aspect: Dust generated from tailing dump, slime dams, stock dams,
stockpiles and rock dump.

Impact: Air pollution

The alluvial gravel size-reduction process in the screening units will be an additional major joint source of dust pollution. This is a dry process and dry material will be conveyed to the unit, where dust may be liberated as the gravels is discharged into the wet screening wet. Water sprays will be used for dust suppression. The treatment process is an entirely wet process from this stage. Although the bulk of the discard material may have moisture content of up to 5% when it leaves the pre-treatment process, much of this water evaporates.



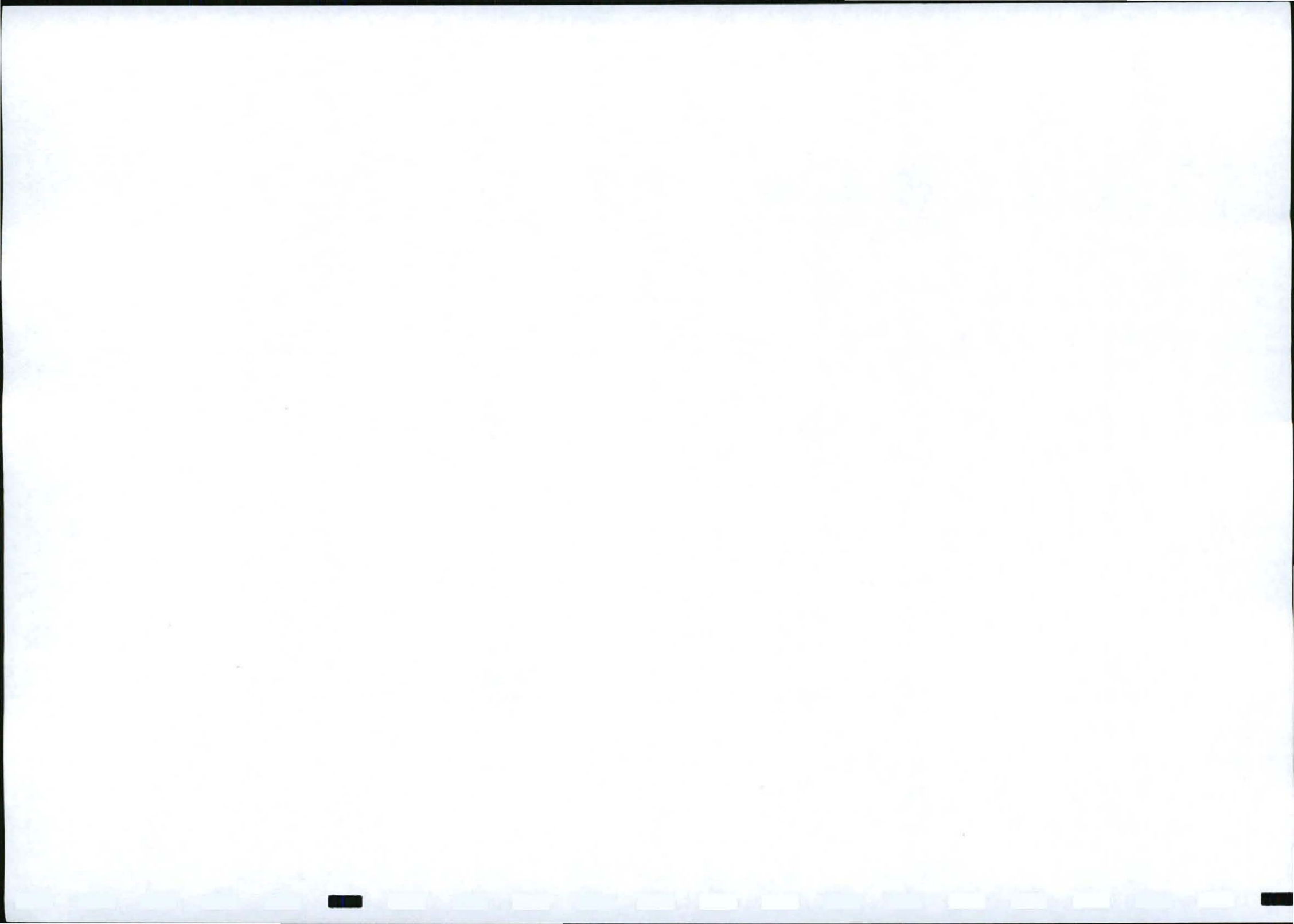
Dust presents a nuisance problem and it reduces visibility and a localized scale. However should large areas of ground be exposed, a strong wind will enhance the problem, increasing the nuisance factor and reducing visibility over a large area.

Poor visibility at the point of reclamation will be dangerous for the plant operators, and could result in accidents. Particulates of more than 10Um also present a health hazard at certain concentrations.

The cumulative and long term influence of exposure to moderate atmospheric pollution on health of both animals and plants is not entirely known, although the potential impact cannot be ignored. Abnormal concentrations of pollutants however often have an immediate impact and are therefore noticeable.

Diffuse atmospheric dust may be responsible for irritation of the eyes and mucous membranes and intensification of respiratory disorders in man and other fauna.

In addition dust may cause damage to the machinery as it enters hydraulic moving parts of fuel systems. Visibility is often reduced which may result in accidents between vehicles or earth moving equipment on site. Dust generally creates nuisance to residence,



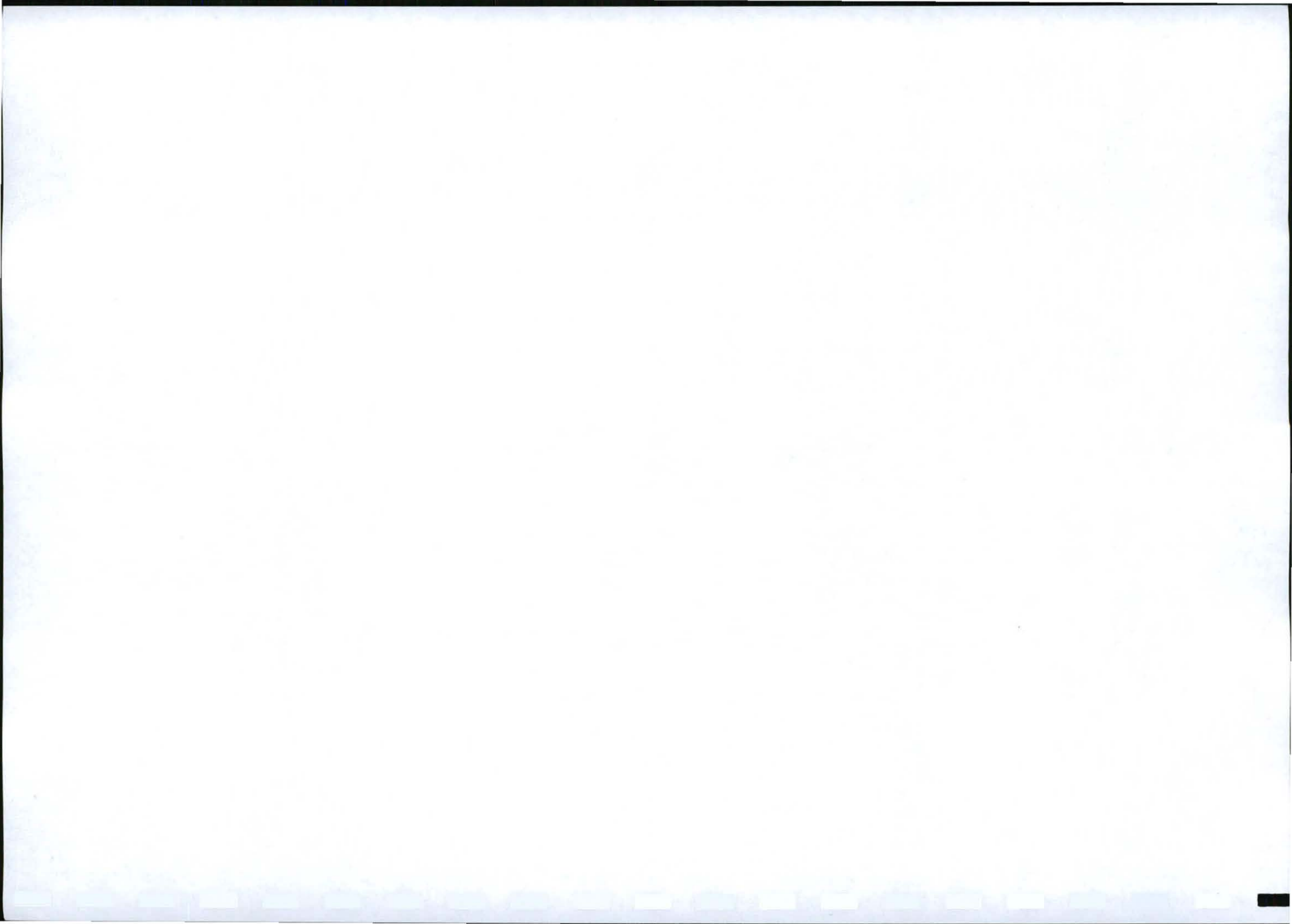
business and industry and health facilities as it settles on surfaces throughout.

High concentration of atmospheric dust is most likely to develop in stable air that has the tendency to form temperature inversions.

Dust could impact primarily on the existing plant, the proposed pre-treatment plant and the local community.

Action Plan:

- Regulations concerning atmospheric pollutions must be adhered to
 - e.g.
 - Atmospheric Pollution Prevention Act No 45 of 1965
 - The Health Act No 63 of 1977
 - The Machinery and Occupational Safety Act No 6 of 1983 (to become the new OSH act in 1993)
 - Mine Health and Safety Act of 1996
- Reinsure that the heights safety and health standards are adhered to



- Reduce dust levels by water spraying

- (i) The roads
- (ii) Working and operations areas
- (iii) Gravel reclamation area

Wet process should be used wherever possible to reduce dust generation.

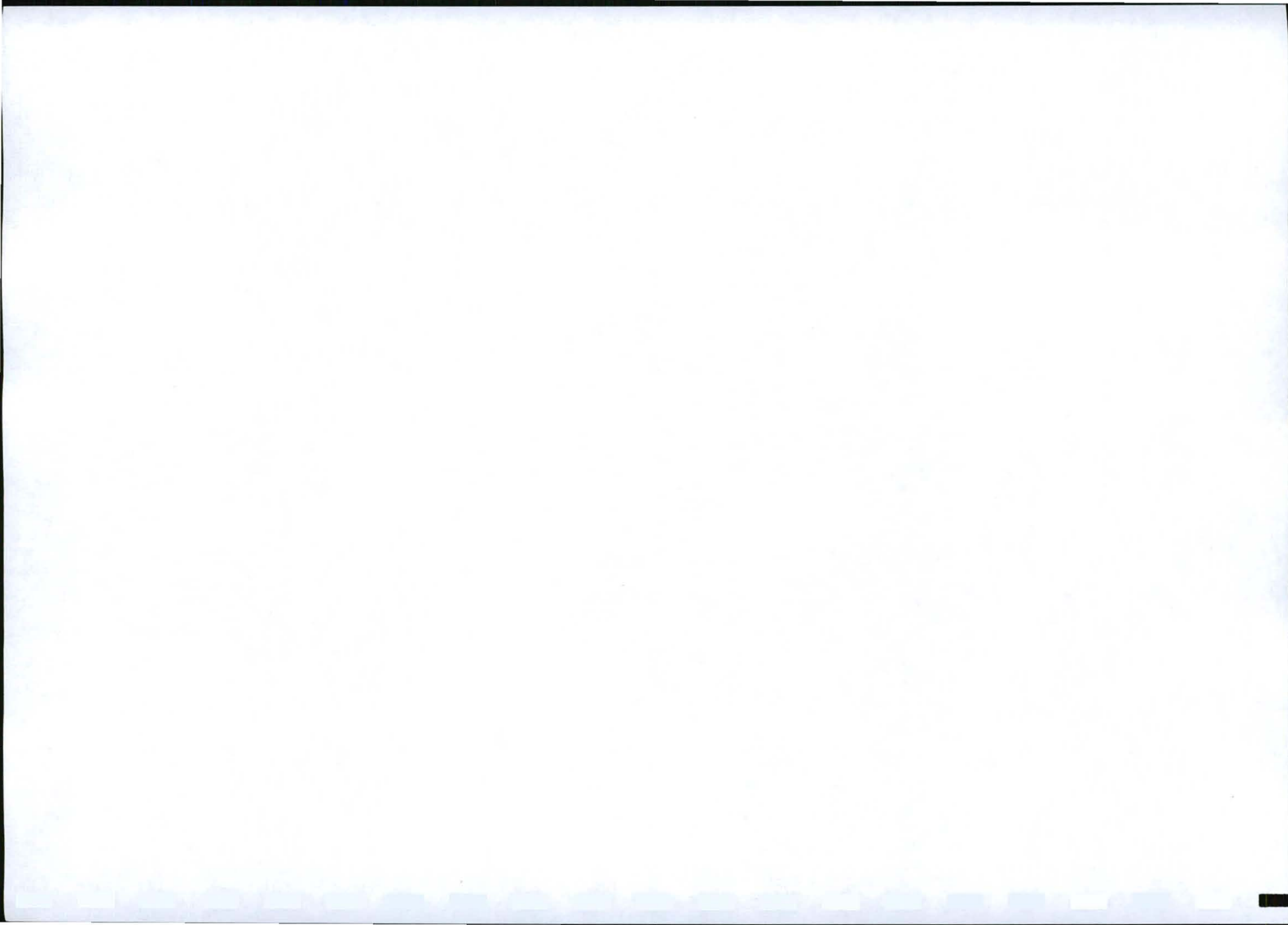
- All machinery must be maintained on an ongoing basis.
- Ongoing spraying of exposed areas of ground with water to prevent wind from carrying dust particles

- Re-vegetation of exposed areas should commence as soon as an area has been completed. Grasses and shrubs should be established to stabilize the soil

Time Frame:

Continuously

1 Year after mining ended.



AIR QUALITY EMISSIONS

Aspect: Emissions from machines, vehicles and other equipment
e.g. welding.

Impact: Air pollution

Aspect: Emissions from chemicals e.g. spillages, use of chemicals

Impact: Air pollution

Aspect: Emissions from burning of waste and other for fire e.g.
warming staff in winter

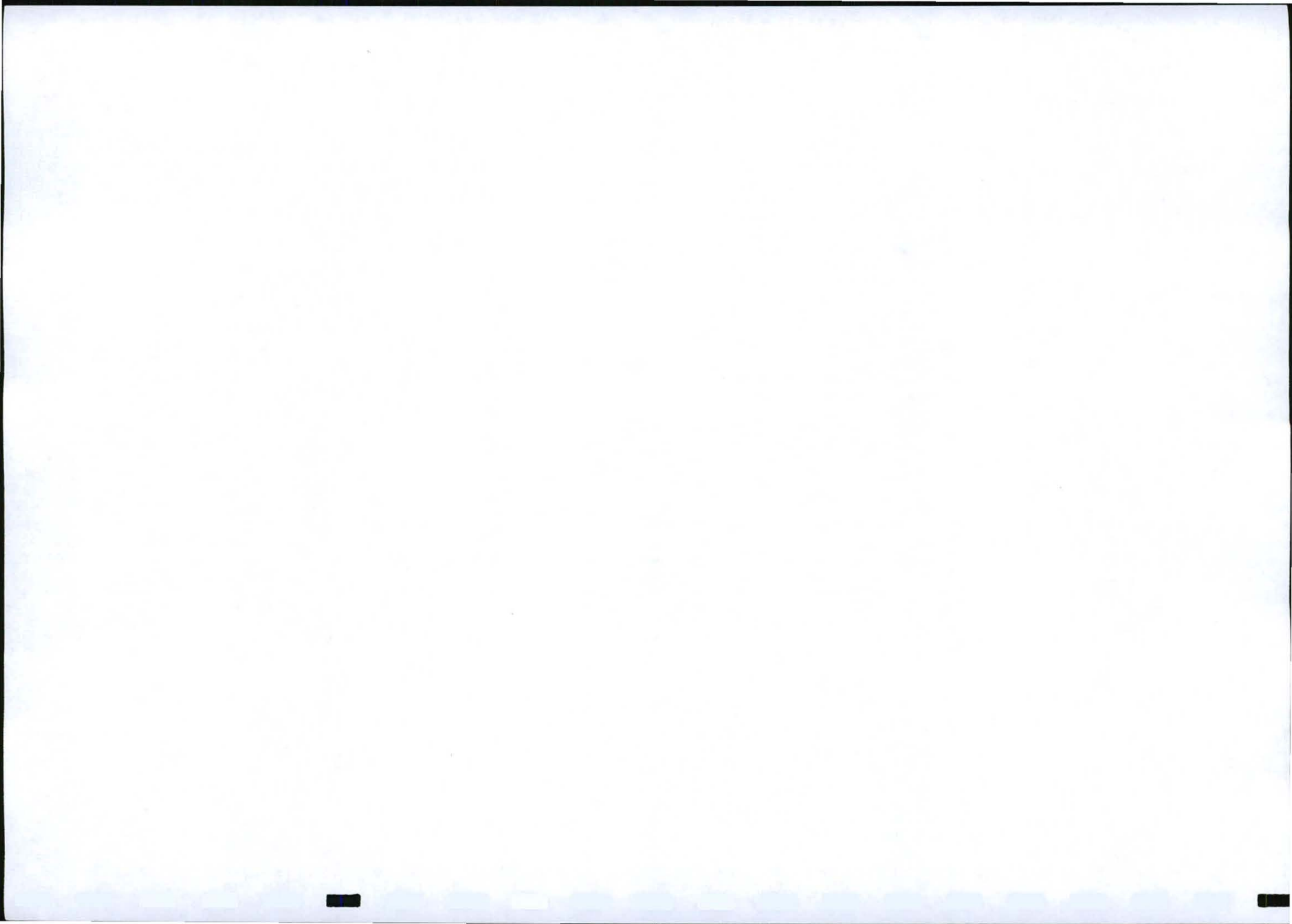
Impact: Air pollution

Action Plan:

- All machinery must be maintained on an ongoing basis
- Waste must be separated only household waste shall be burnt.

Time Frame:

Continuously



SOCIO-ECONOMIC

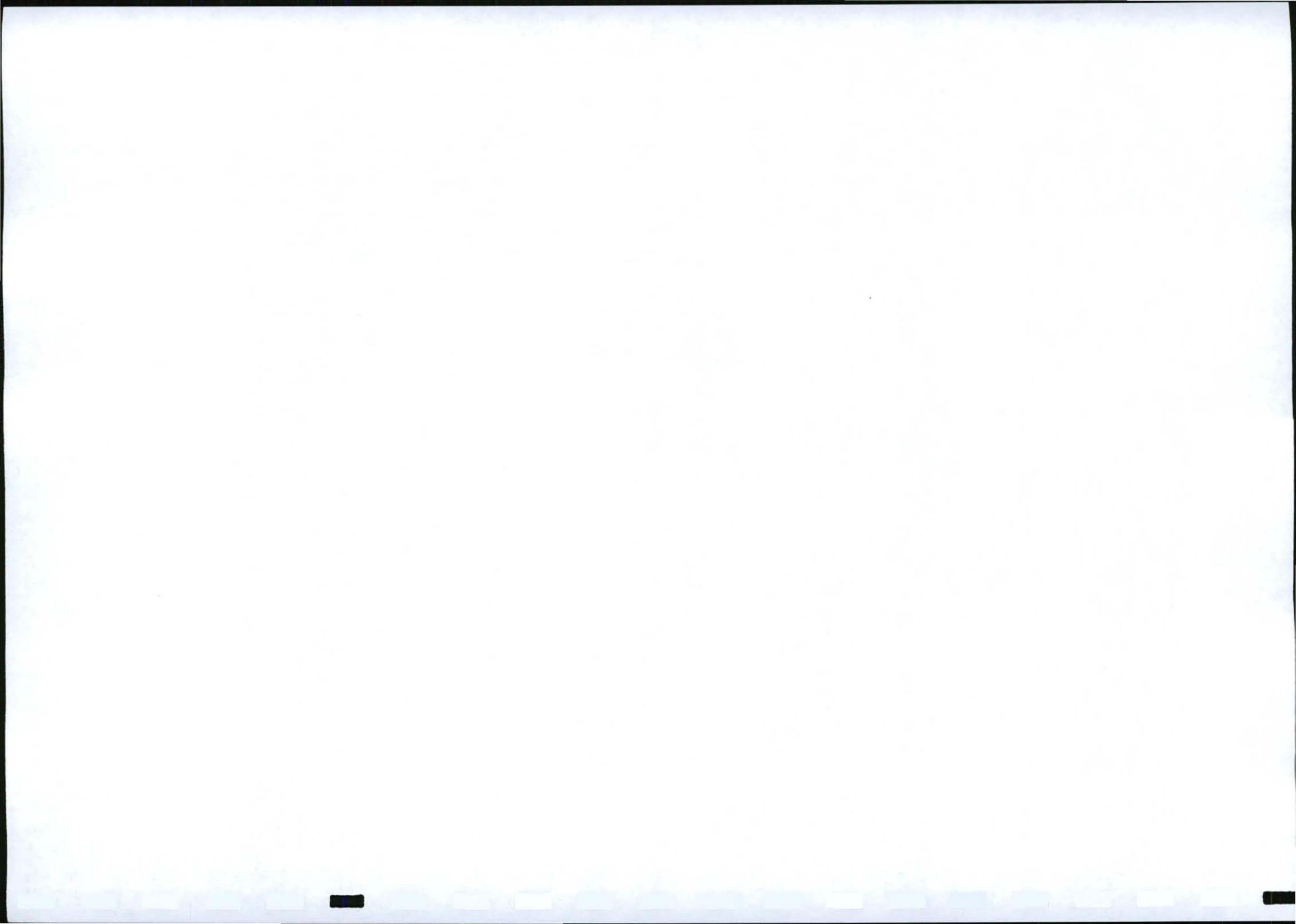
Aspect: Effect of the mining operations on the socio-economic structures in the region.

Impact: Change in the socio structures of region.

Positive impacts:

- Township development stimulation
- Creation of 20-30 direct job opportunities
- Creation of 200 indirect job opportunities
- Duration of career opportunities
- Skills development related to manufacturing and processing
- Local economy stimulation
- Regional economy stimulation Export of value added products
- Sustain the current low crime levels (LDO information)
- Applicant takes control of resource

Management will be done as stipulated in the Social and Labour plan and BEE plan.



INTERESTED AND AFFECTED PARTIES

Aspect: Effects in interested and affected parties, complaints - dust and noise.

Impact: Potential impact on all affected parties as a result of the mining activities.

The relevant parties will be contacted if and when need arises.

Aspect: Light from the mine buildings

Impact: Potential impact to all interested and affected parties due to illumination from the mine.

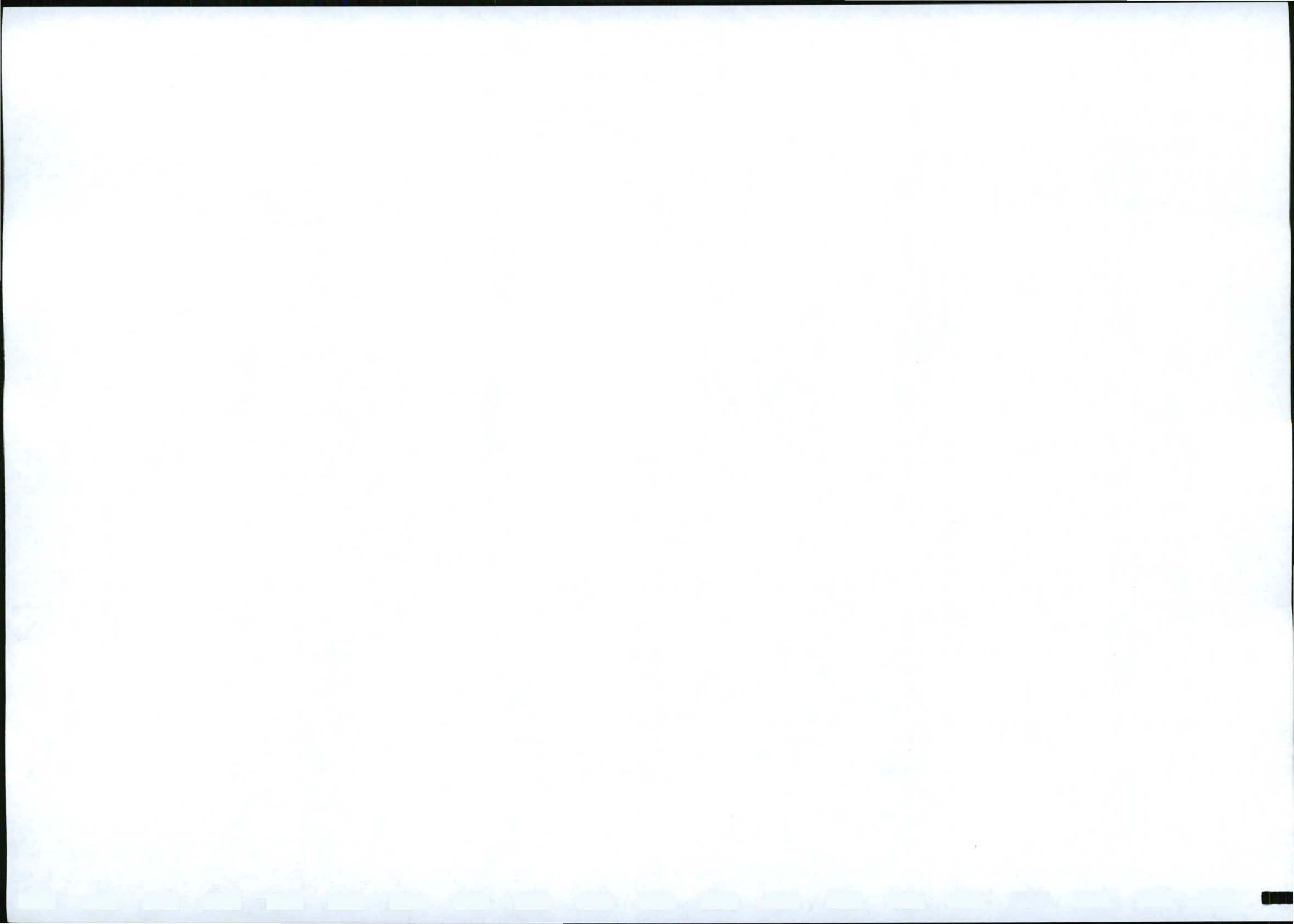
The relevant parties will be contacted if and when need arises.

Aspect: Air Quality Dust Generated from mine activities

Impact: Potential impact to all interested and affected parties due to dust generating that caused air pollution.

Action Plan:

The relevant parties will be contacted if and when need arises.

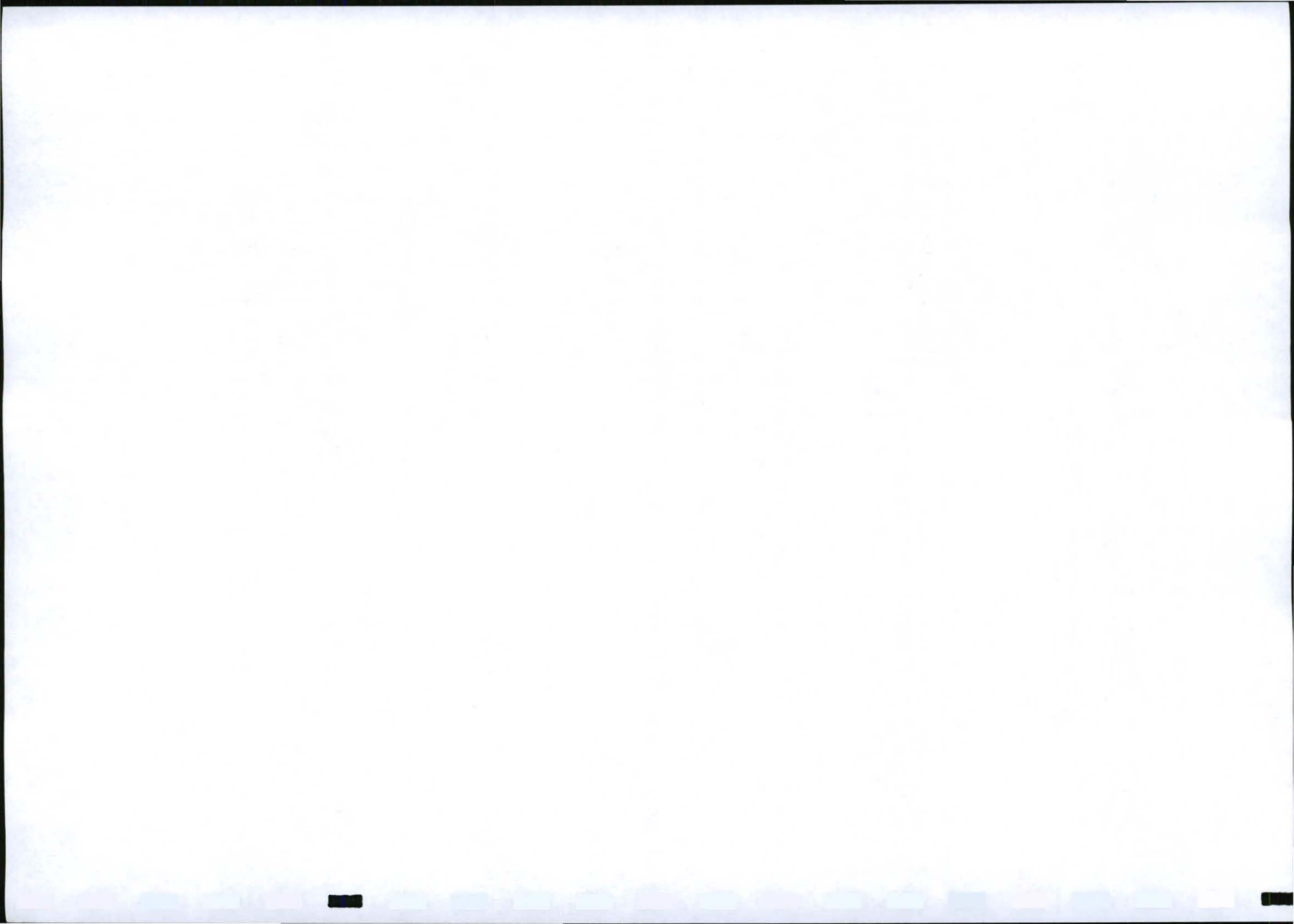


3.2.3 Planned monitoring and environmental management programme performance assessment;

Regulation 55 of the mineral and Petroleum resources Development Act, 2002 (Act 28 of 2002) clearly describes the process and procedure as well as requirements for monitoring and auditing of the performance of this plan to adequately address environmental impacts from the operation.

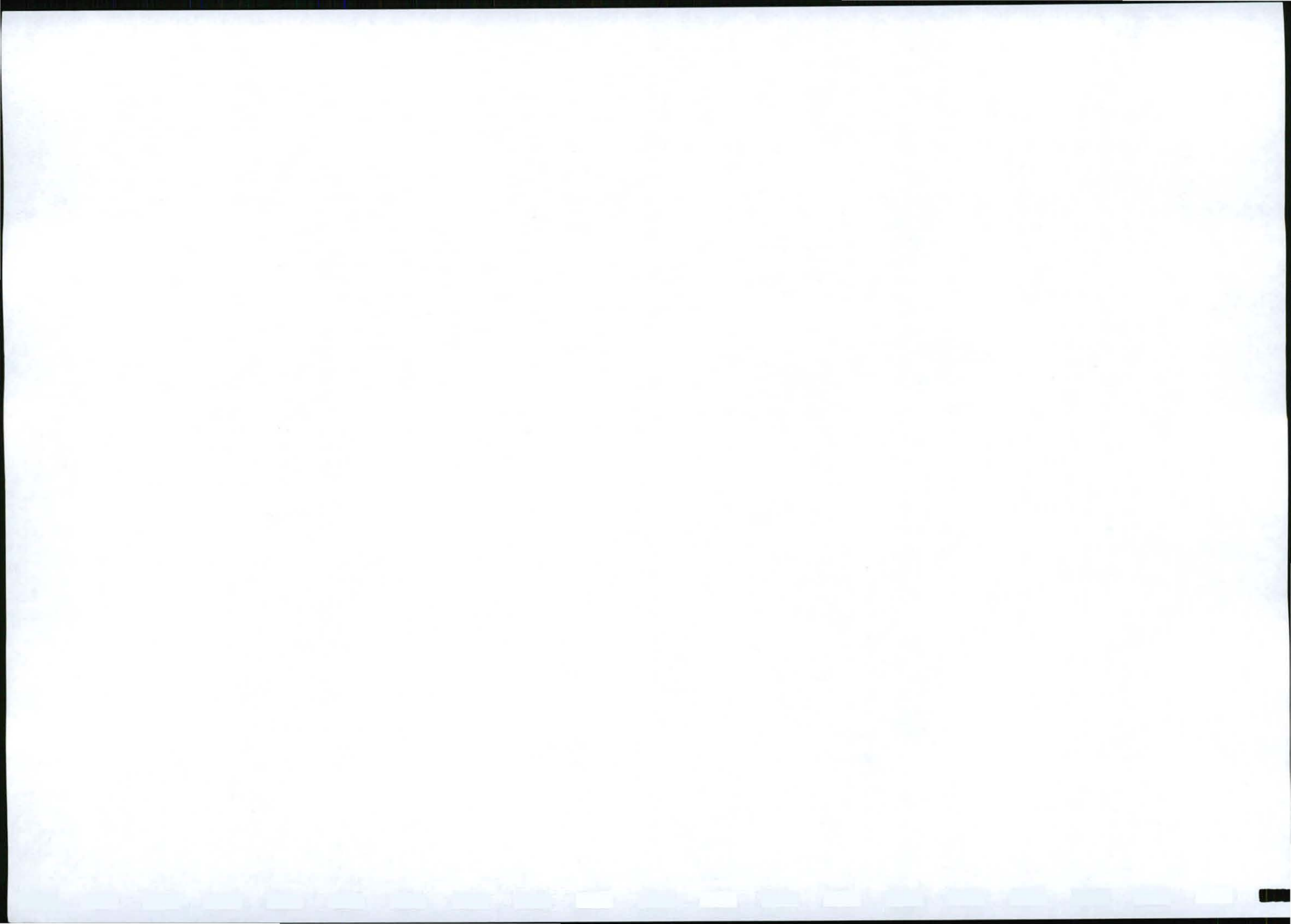
The applicant will conduct monitoring on a continuous basis. As part of the monitoring performance assessments will be conducted. All the information that is gathered will be compiled in a report and submitted to the minister. The information will be obtained and subjected to writing on a monthly basis. It will be submitted to the minister every two years.

The monitoring will be in accordance with the requirements as stipulated in the environmental management programme. During monitoring the Department and affected parties will be consulted. Any scientific and meaningful inputs will be incorporated in the EMP and in the reports. An amount of R3000-00 has been set a month to make provision for the ongoing monitoring. A list of authorized monitoring officers and / or their representatives will be available in the site offices. All monitoring officers will complete the



activity register and will record their record of decision in this register. The foreseen tasks are tabulated hereunder:

TASK	ACTIVITY	TIME / SCHEDULE / RESPONSIBLE PERSON
Attendance register:	All the interested and affected parties must identify themselves and complete the attendance register for record keeping purposes.	Visitors must note the purpose of their visit, comments, and remarks.
Rainfall register	Gauge will be emptied every day at 08H00. Rainfall will be recorded.	Updated by the mine manager and or staff on regular basis.
Daily incidence and activity register	Recording of all the noteworthy incidents and activities on the site, relevant to the parameters of the environment.	Must be completed by the designated official.
Mining register	Must be completed by mine manager	To calculate the tons mined
Operational / Mining plan	Must be updated as the mining activities proceed.	Must be updated on monthly basis and progress



Maintenance	As stipulated in the EMP.	Conducted every month.
Rehabilitation	Rehabilitation of the mining site will be conducted on a daily basis.	The rehabilitation official will conduct rehabilitation on weekly basis.
Ongoing environmental monitoring	Monitoring of all the impacts as identified in the EMP and the mitigation procedures.	On a daily basis. Min manager.

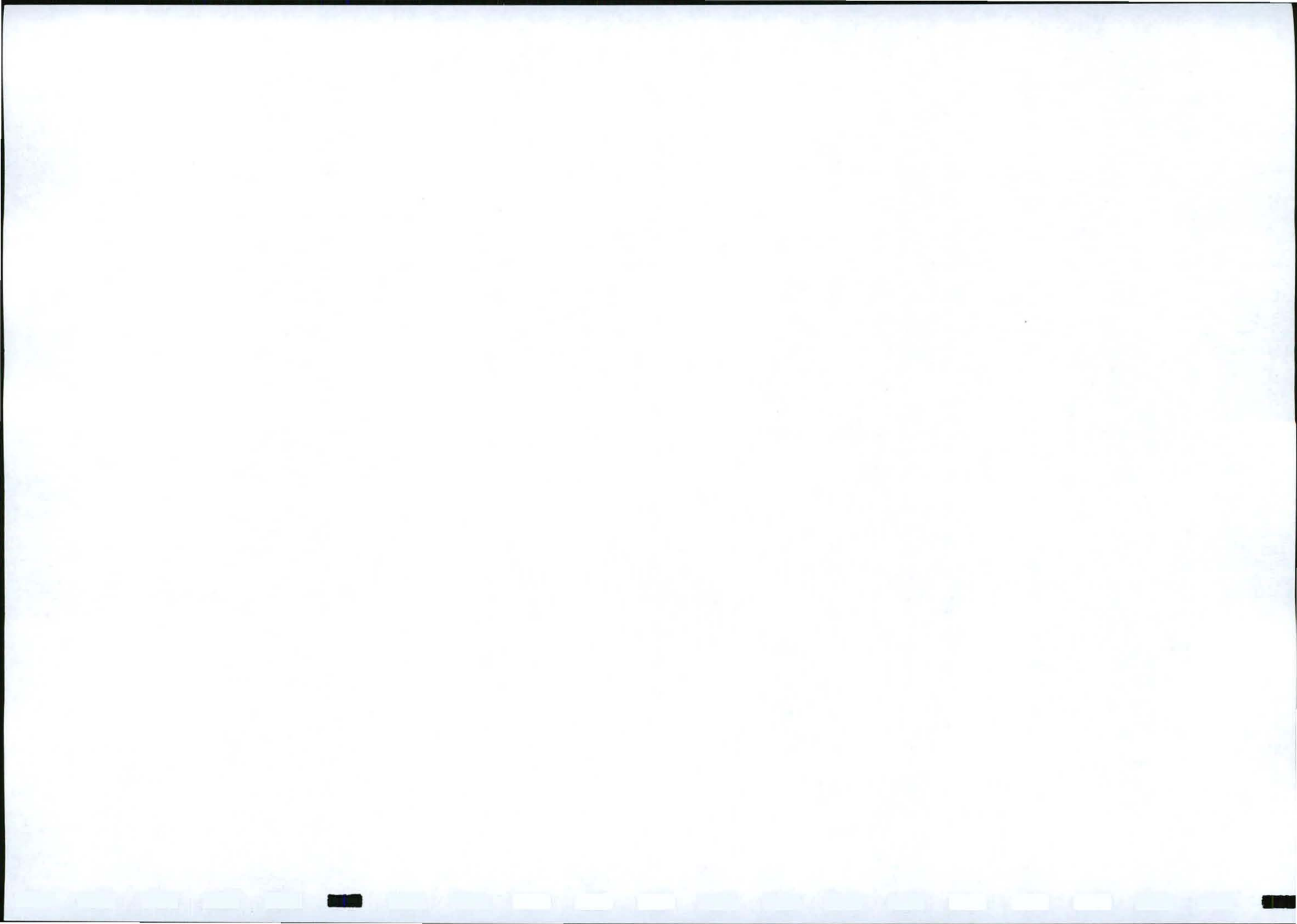
Proper task giving and delegation will address any inadequacies.

11.2.4 Financial provision in relation to the execution of the environmental management programme which must include-

11.2.4.1 The determination of the quantum of the financial provision contemplated in regulation 54;

See annexure for the determination of the quantum.

11.2.4.2 Details of the method providing for financial provision contemplated in regulation 53;



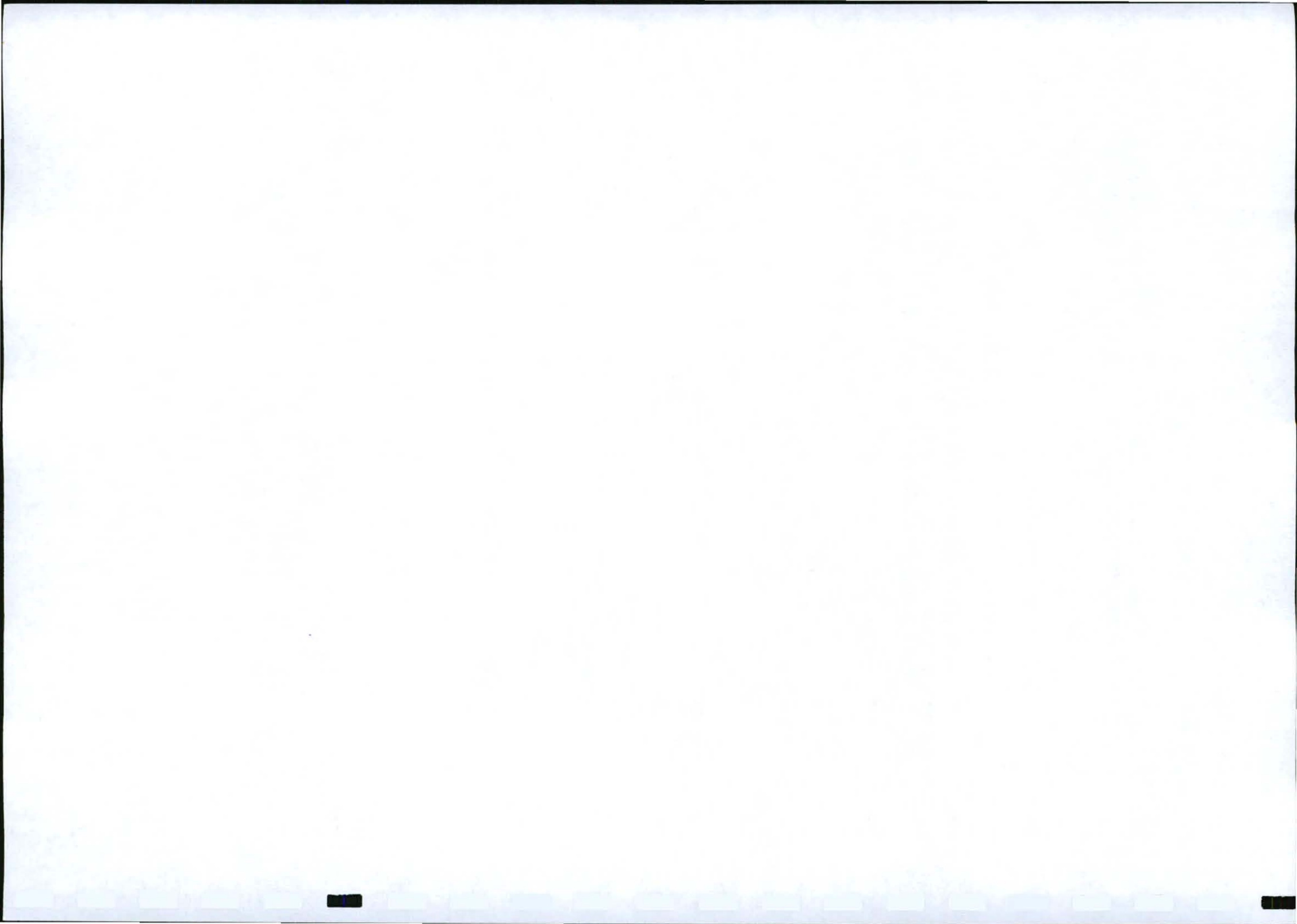
The amount that is necessary for the rehabilitation of damage caused by the operation, both sudden closures during the normal operation of the project and at final, planned closure will be estimated by the regional office of the DME, based on the information supplied in this document. This amount will reflect how much it will cost the Department to rehabilitate the area disturbed in case of liquidation or abscondence.

The amount of financial provision required is: R114 340-00
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What method will be used to furnish DME with this financial provision?

Cash deposit	
Bank guarantee	X
Trust Fund	
Other: (specify) (Note: other methods must be approved by the minister)	

See annexure for the calculations



11.2.5 An environmental awareness plan contemplated in section 39(3) (c) of the Act;

Rehabilitation of the environment is of the utmost importance for the applicant. Mining activities has been conducted in such a way in the past by alluvial miners that no environmental awareness has been taught. The applicant has therefore developed the following awareness plan:

1. Monthly assessments of the current state of the environment that all the employees attend;
2. Six monthly training, incorporated with the skills development training of the employees in terms of the Social and Labour plan;
3. The training of an environmental official for the applicant;
4. 2 monthly lectures regarding environmental degradation;
5. Proper rehabilitation procedures
6. A monthly risk assessment



7. The monthly assessment of environmental risks to avoid pollution and degradation.

The effectiveness of the awareness plan will be assessed every 6 months. If it is found to be inadequate the plan will be revised to address these issues.

11.2.6 All supporting information and specialist reports that must be attached as appendices to the environmental management programme;

See annexure.

12. GENERAL REQUIREMENTS

12.1 MAPPING AND SETTING OUT

12.1.1 LAY OUT PLAN

- A copy of the layout plan as provided for in Regulation 2.2 are annexed to this programme and will be available at the mining site.
- The plan will be updated on a regular basis with regard to actual progress of the establishment of surface infrastructure, mining



operations and rehabilitation. (A copy of the updated plan will be forwarded to the Regional Manager on a regular basis).

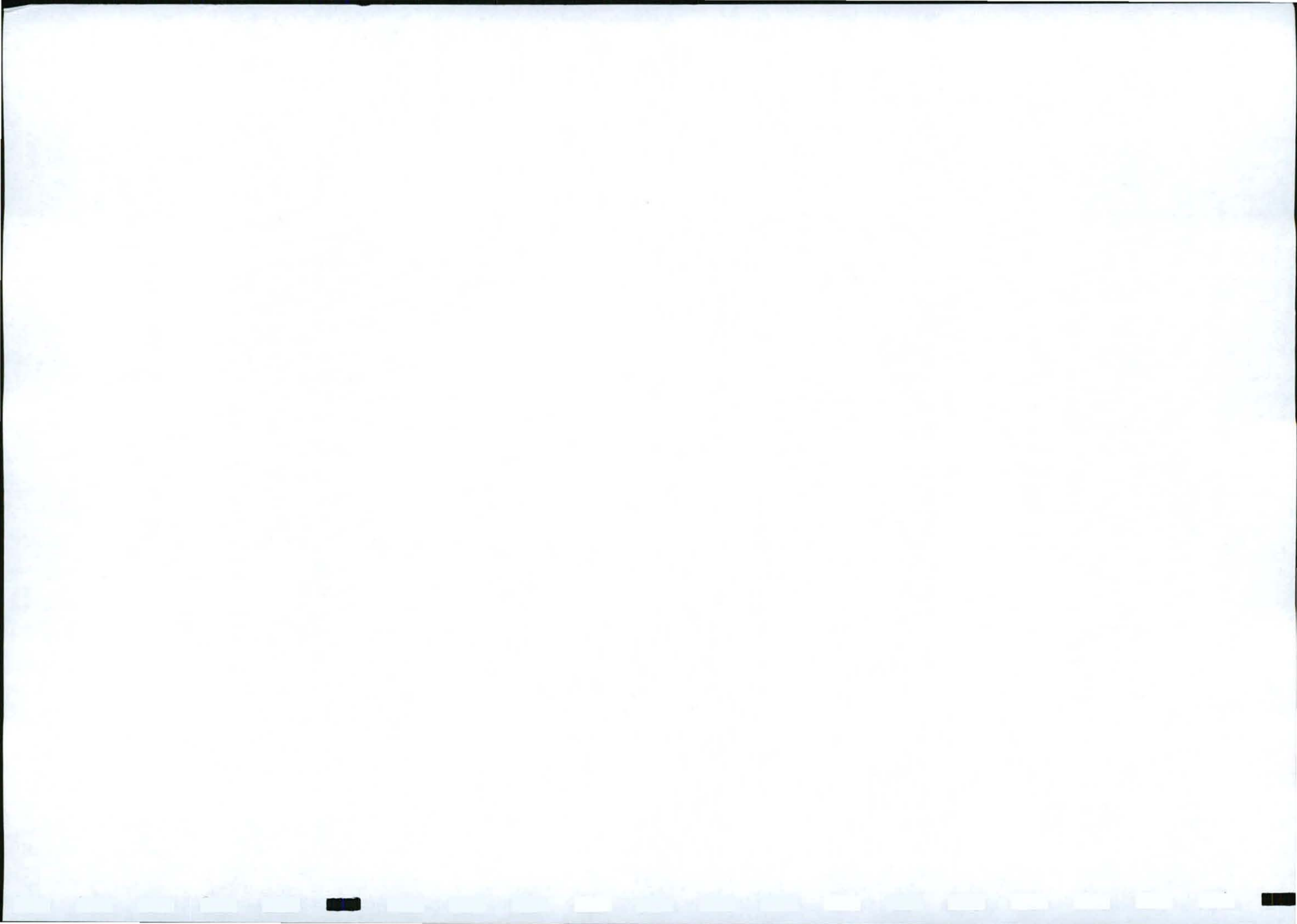
- A final layout plan will be submitted at closure of the mine or when operations have ceased.

12.1.2 DEMARCATING OF THE MINING AREA

- The mining area will be clearly demarcated by means of beacons at its corners, and along its boundaries if there is no visibility between corner beacons.
- Permanent beacons as indicated on the layout plan or as prescribed by the Regional Manager will be firmly erected and maintained in their correct position throughout the life of the operation.
- Mining and resultant operations will only take place within this demarcated area.

12.2 RESTRICTIONS ON MINING

- The applicant will not conduct of mining operations in vegetated areas or over portions of vegetates areas. No operations shall be conducted within 5m of these areas.



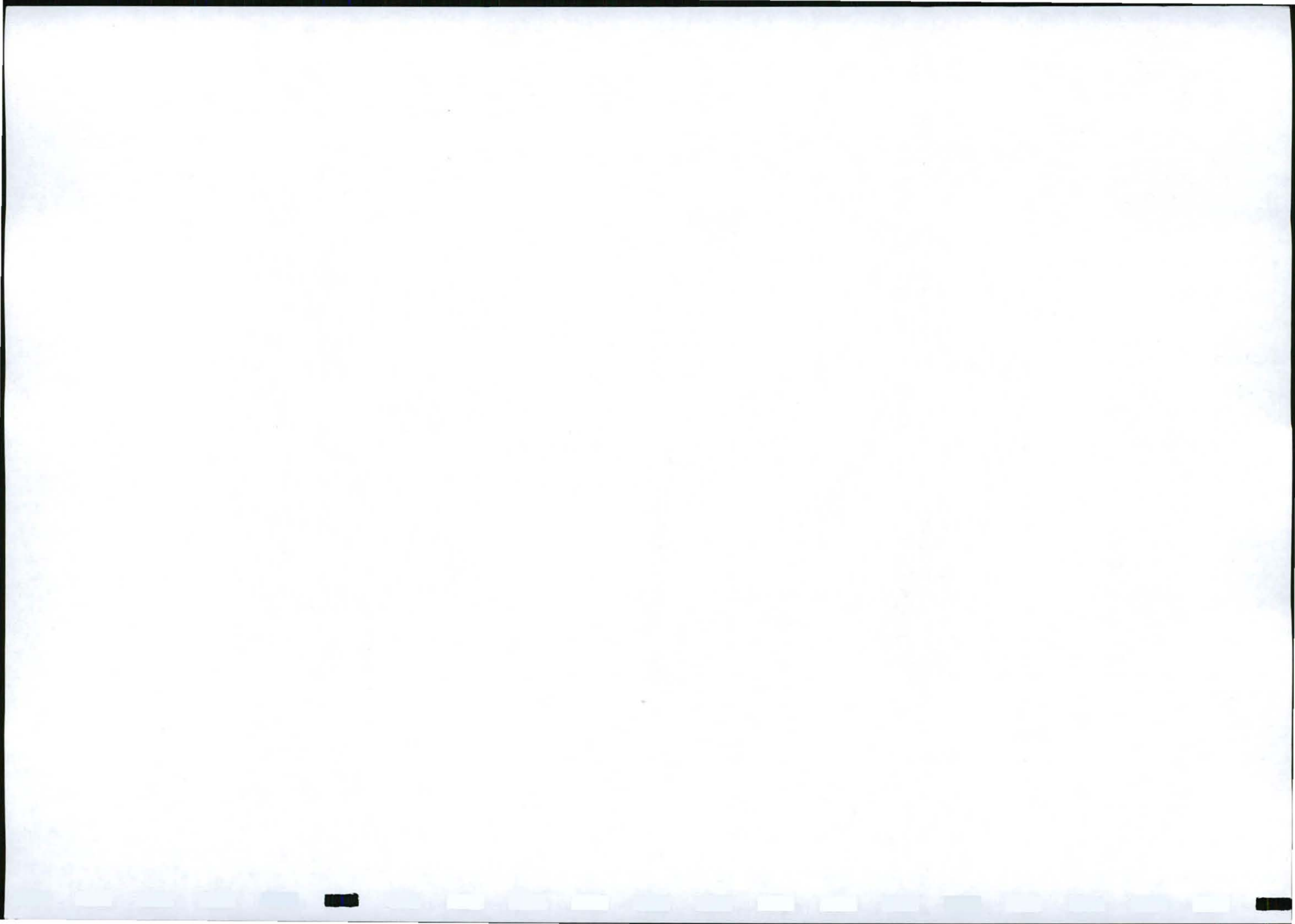
12.3 RESPONSIBILITY

- The holder shall rehabilitate the environment affected by the mining operations, as far as practicable, to its natural state or to a predetermined and agreed to standard or land use which conforms to the concept of sustainable development. The affected environment shall be maintained in a stable condition that will not be detrimental to the safety and health of humans and animals and that will not pollute the environment or lead to the degradation thereof.
- It is the responsibility of the holder of the mining right to ensure that the manager on the site and the employees are capable of complying with all the statutory requirements, which must be met in order to mine, which includes the implementation of this EMP.

12.4 INFRASTRUCTURE REQUIREMENTS

12.4.1 TOPSOIL

- Topsoil will be removed from all areas where physical disturbance of the surface will occur

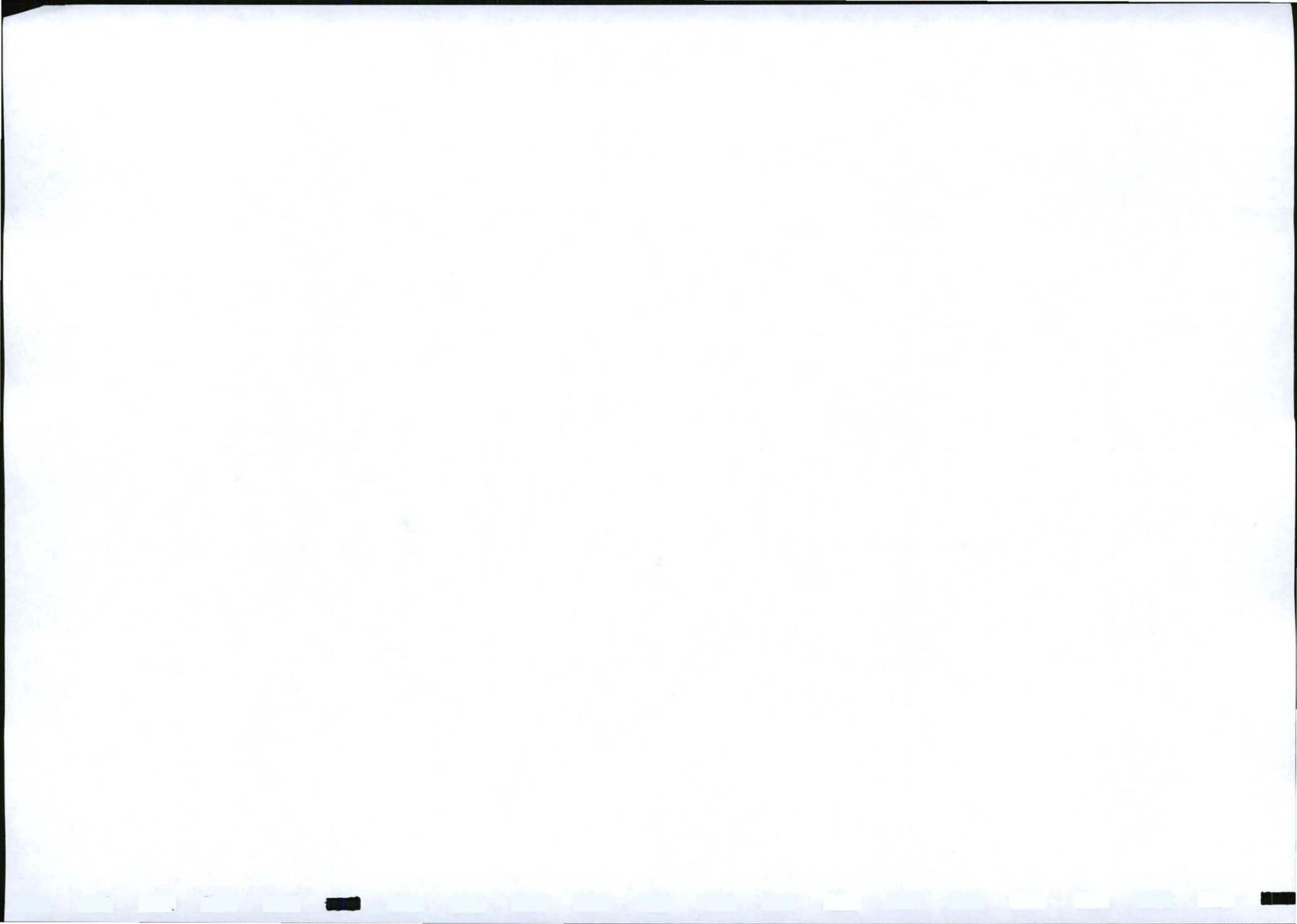


- The topsoil removed, will be stored in a bund wall on the high ground side of the mining area outside the 1:50 flood level within the boundaries of the mining area.
- Topsoil will be kept separate from overburden and shall not be used for building or maintenance of access roads.
- The topsoil stored in the bund wall will be adequately protected from being blown away or eroded

12.2.2 ACCESS TO THE SITE

12.2.2.1 Establishing access roads on the site

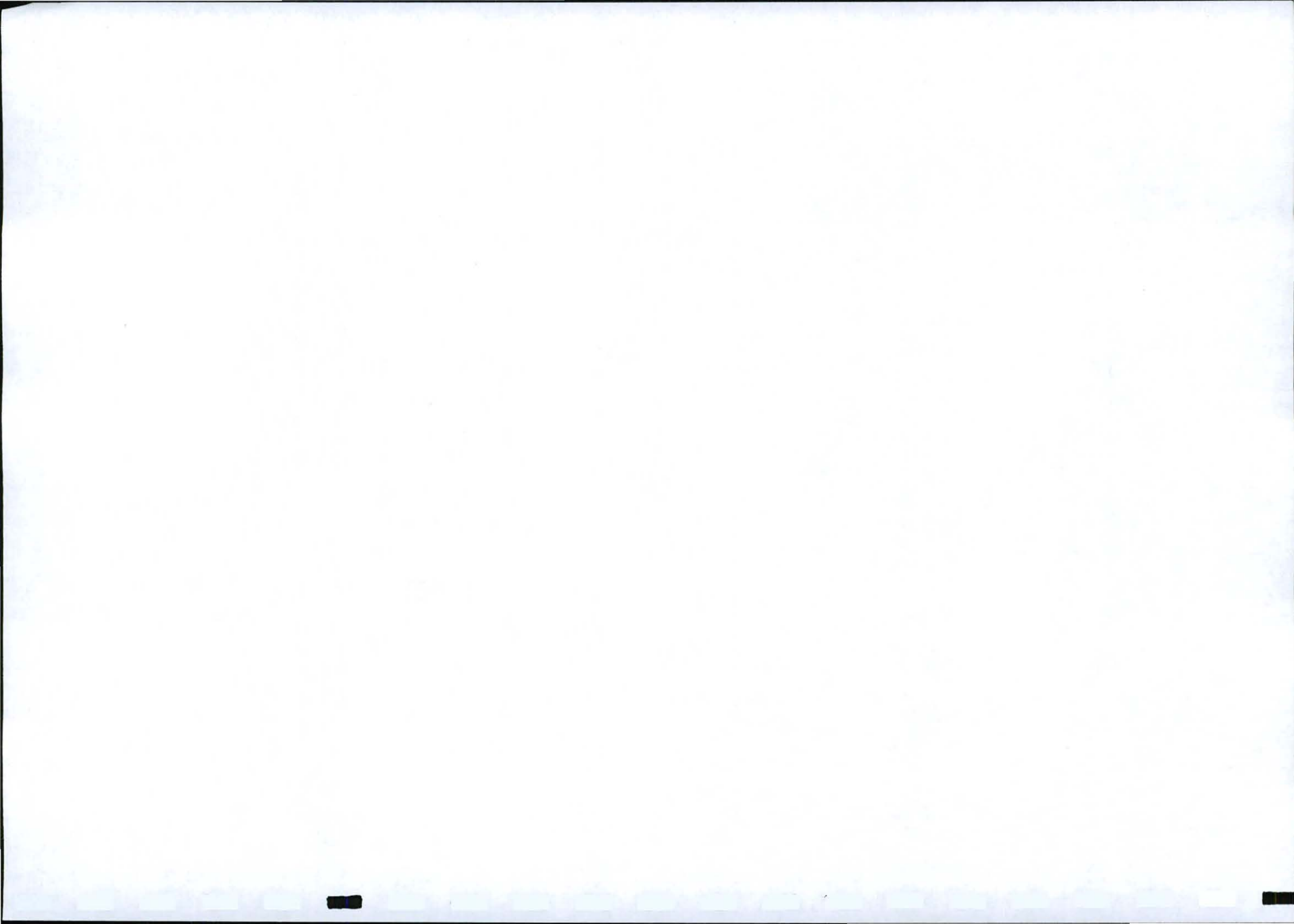
- The access road to the mining area and the camp-site/site office has been established in consultation with the landowner. The applicant will use existing roads as far as possible
- Should a portion of the access road be newly constructed the following must be adhered to:
 - The route shall be selected that a minimum number of bushes or trees are felled and existing fence lines shall be followed as far as possible
 - Water courses and steep gradients shall be avoided as far as practicable



- Adequate drainage and erosion protection in the form of cut-off beams or trenches shall be provided where necessary.
- No imported materials will be used in the construction or upgrading of the access road.
- The erection of gates in fence lines and the open or closed status of gates in new and existing positions have been clarified in consultation with the landowner. It will be maintained for the operational period.
- Vehicles or personnel for the purpose of gaining access to the site will use no other routes.

12.2.2.2 Maintenance of access roads

- In case of dual or multiple uses of access roads by other users, arrangements for multiple responsibilities must be made with the other users. If not, the maintenance of access roads will be the responsibility of the holder of the mining right.
- The applicant will maintain newly constructed access roads adequately to minimize dust, erosion or undue surface damage

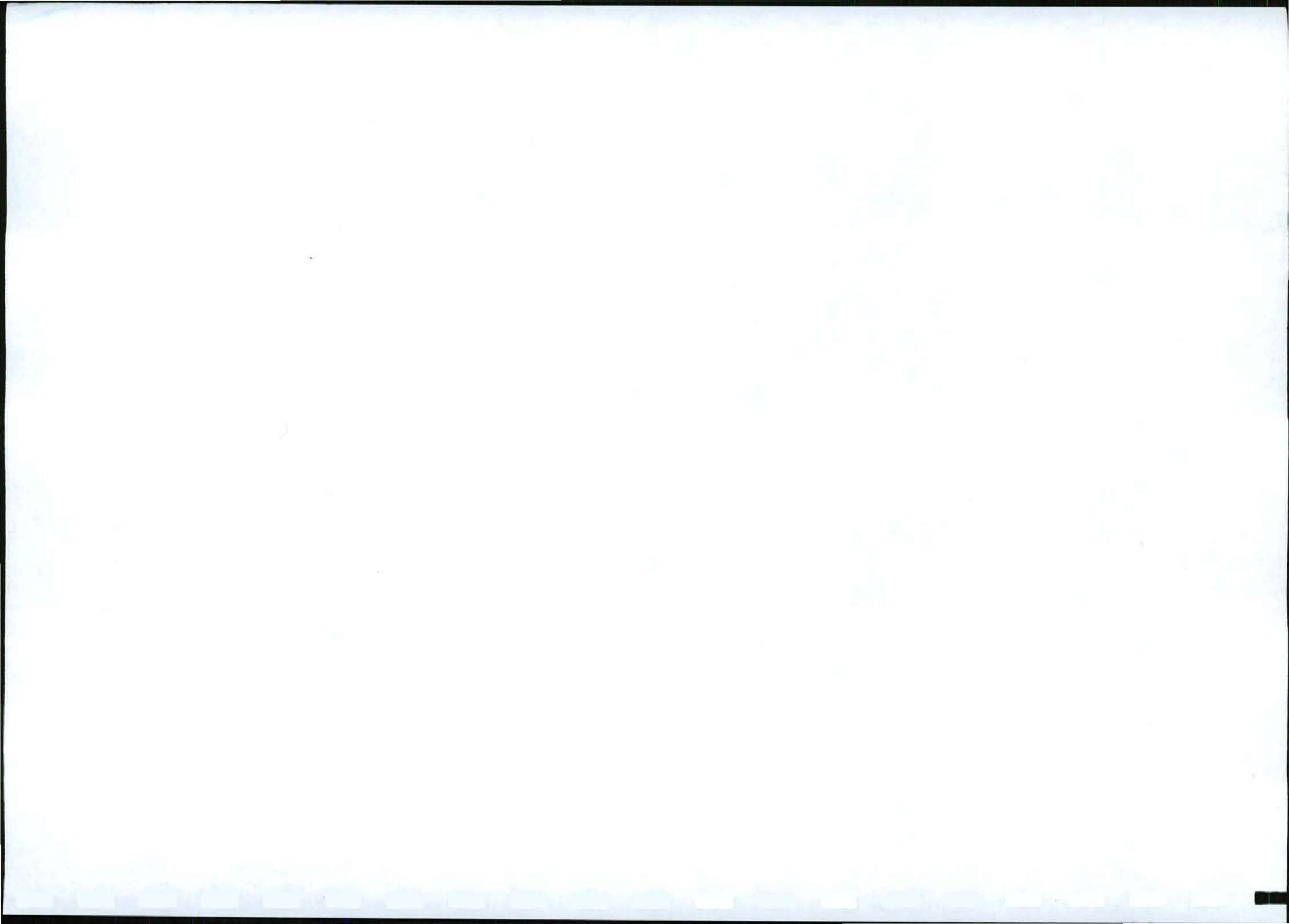


12.2.2.3 Dust control on the access and haul roads

- The liberation of dust into the surrounding environment will be effectively controlled by the use of, inter alia, water spraying and/or other dust-allaying agents. The speed of haul trucks and other vehicles will be strictly controlled to avoid dangerous conditions and excessive deterioration of the road being used.

12.2.2.4 Rehabilitation of access roads

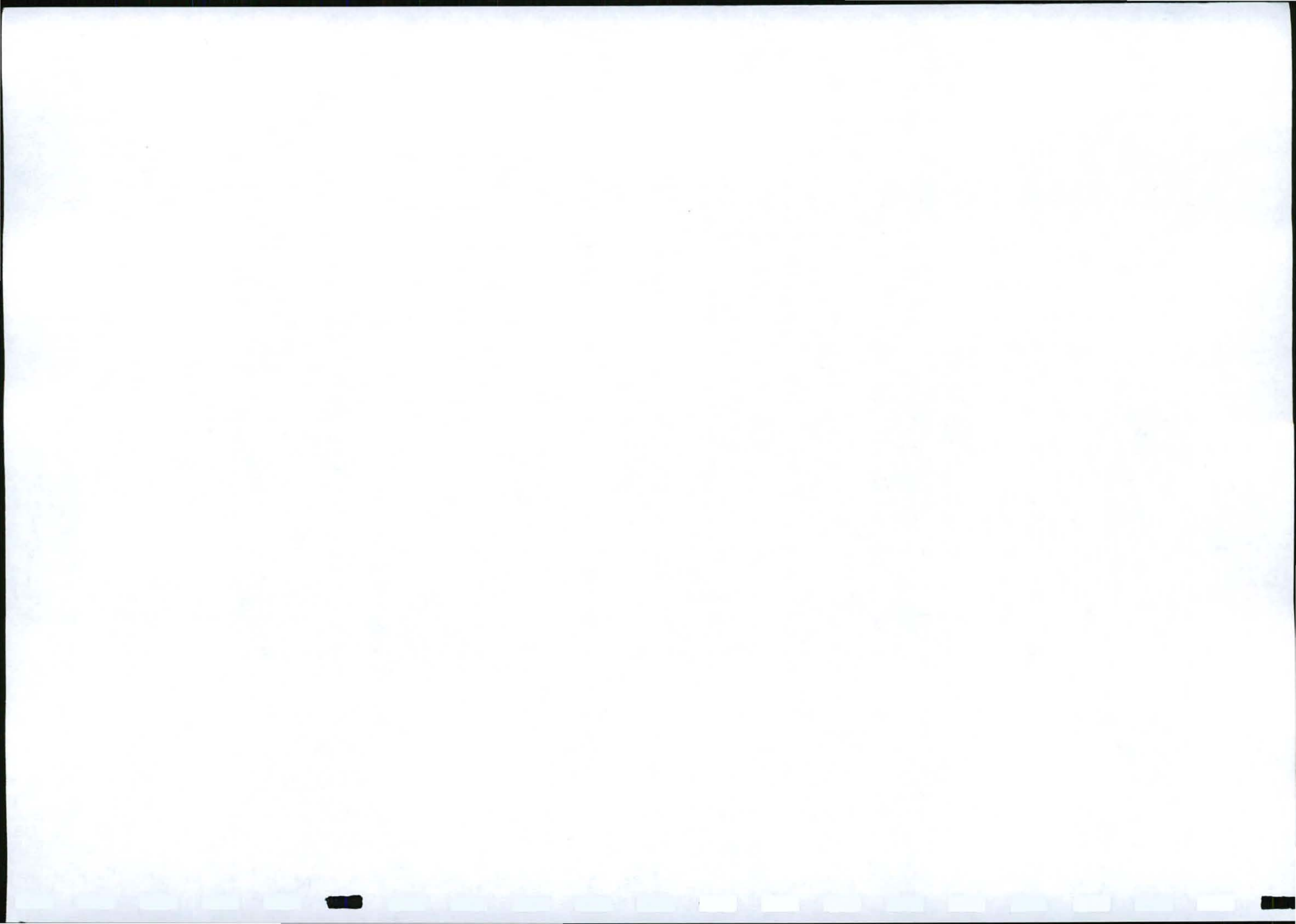
- Whenever the mining right is suspended, cancelled or abandoned or if it lapses and the holder does not wish to renew the right, any access road or portions thereof, constructed by the holder and which will no longer be required by the occupier will be removed or rehabilitated to the satisfaction of the Regional Manager.
- Any gate or fence erected by the holder which is not required by the landowner/tenant, shall be removed and the situation restored to the pre – mining situation
- Roads shall be ripped or ploughed, and if necessary, appropriately fertilized (based on soil analysis) to ensure re-growth of vegetation. Imported road construction materials that may hamper re-growth of vegetation will be removed and disposed of in an approved manner prior to rehabilitation.



12.2.3 OFFICE / CAMP SITES

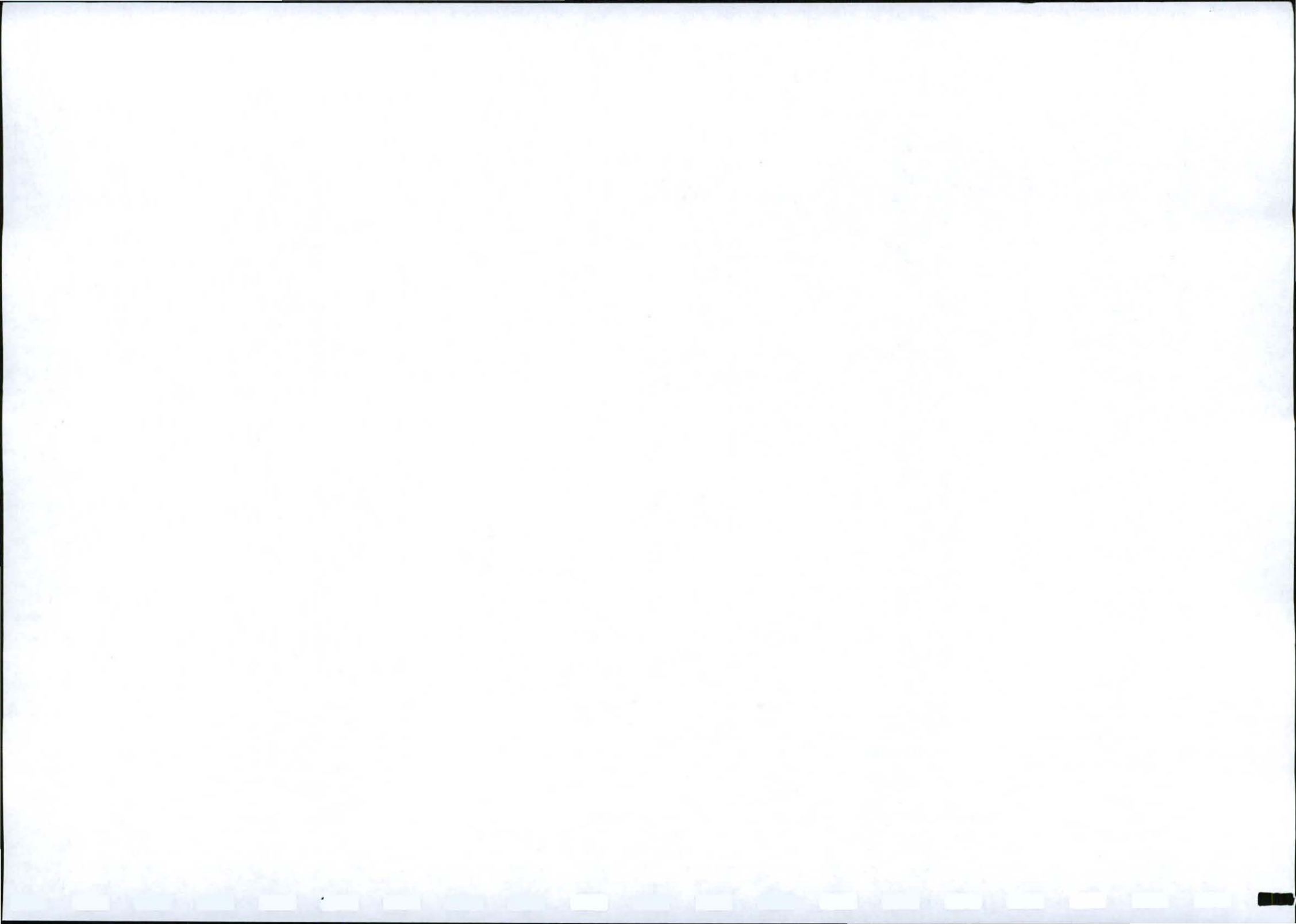
12.2.3.1 Establishing office / camp sites

- Office and campsites will be established, as far as practicable, outside the flood plain, above the 1 in 50 flood level.
- The area chosen for these purposes will be the minimum reasonably required and which will involve the least disturbance to vegetation. Topsoil shall be handled as described above.
- No camp or office site will be located closer than 100 meters from a stream, river, spring, dam or pan.
- No trees or shrubs will be felled or damaged for the purpose of obtaining firewood, unless agreed to by the landowner/ tenant
- Fires will only be allowed in facilities or equipment specially constructed for this purpose. If required by applicable legislation, a firebreak shall be cleared around the perimeter of the camp and office sites.
- Lighting and noise disturbance or any other form of disturbance that may have an effect on the landowner/ tenant/ persons lawfully living in the vicinity shall be kept to a minimum



12.2.3.2 Toilet Facilities, waste water and refuse disposal

- The holder of the mining right will provide latrines for employees and proper hygiene measures will be established. Where chemical toilet facilities or other approved toilet facilities such as septic drain, will preferably be used and sited on the camp site in such a way that they do not cause water or other pollution
- The use of existing facilities will take place in consultation with the landowner / tenant
- All effluent water from the camp washing facility will be disposed of in a properly constructed French drain, situated as far as possible, but no less than 200 meters, from any stream, river, pan, dam or borehole. Only domestic type wash water will enter this drain and any effluents containing oil, grease or other industrial substances will be collected in a suitable receptacle and removed from the site, either for resale or for appropriate disposal at a recognized facility
- Spills would be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognized facility
- Non- biodegradable refuse such as glass bottles, plastic bags, metal scrap, etc., will be stored in a container at a collecting point and collected on a regular basis and disposed of at a recognized

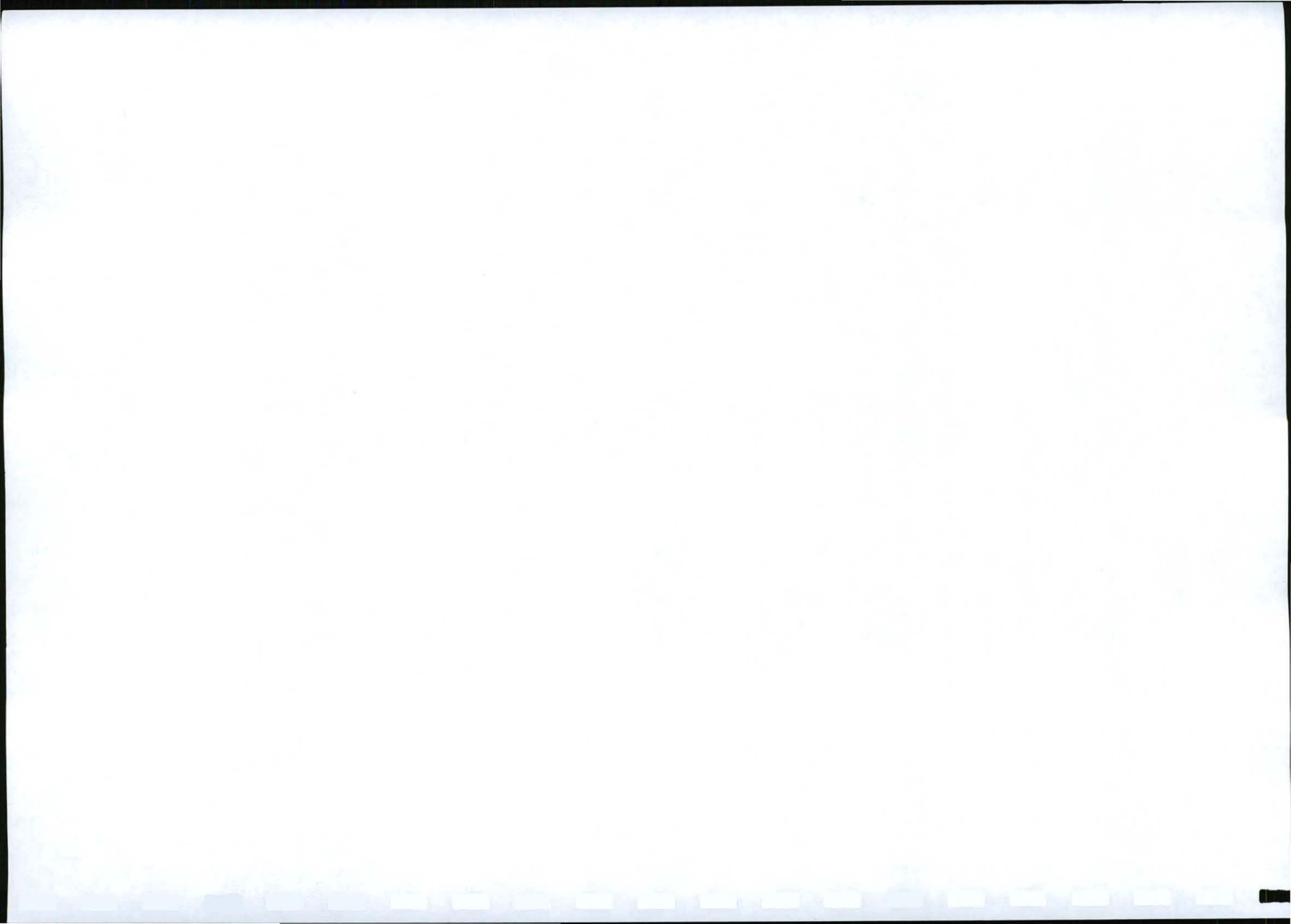


disposal facility. Precautions will be taken to prevent refuse from being dumped on or in the vicinity of the campsite.

- Biodegradable refuse generated from the office/camp site, processing areas, vehicle yard, storage area or any other area, will either be handled as indicated above or be buried in a pit excavated for that purpose and covered with layers of soil, incorporating a final 0,5m thick layer of topsoil (where practicable).

12.2.3.3 Rehabilitation of the office / camp site

- On completion of operations, all buildings, structures or objects on the camp / office sites will be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002).
- Where office / camp sites have been rendered devoid of vegetation / grass or where soils have been compacted owing to traffic, the surface will be scarified or ripped
- Areas containing French drains will be compacted and covered with a final layer of topsoil to a height of 10cm above the ground surface
- The site will be seeded with a vegetation seed mix adapted to reflect the local indigenous flora

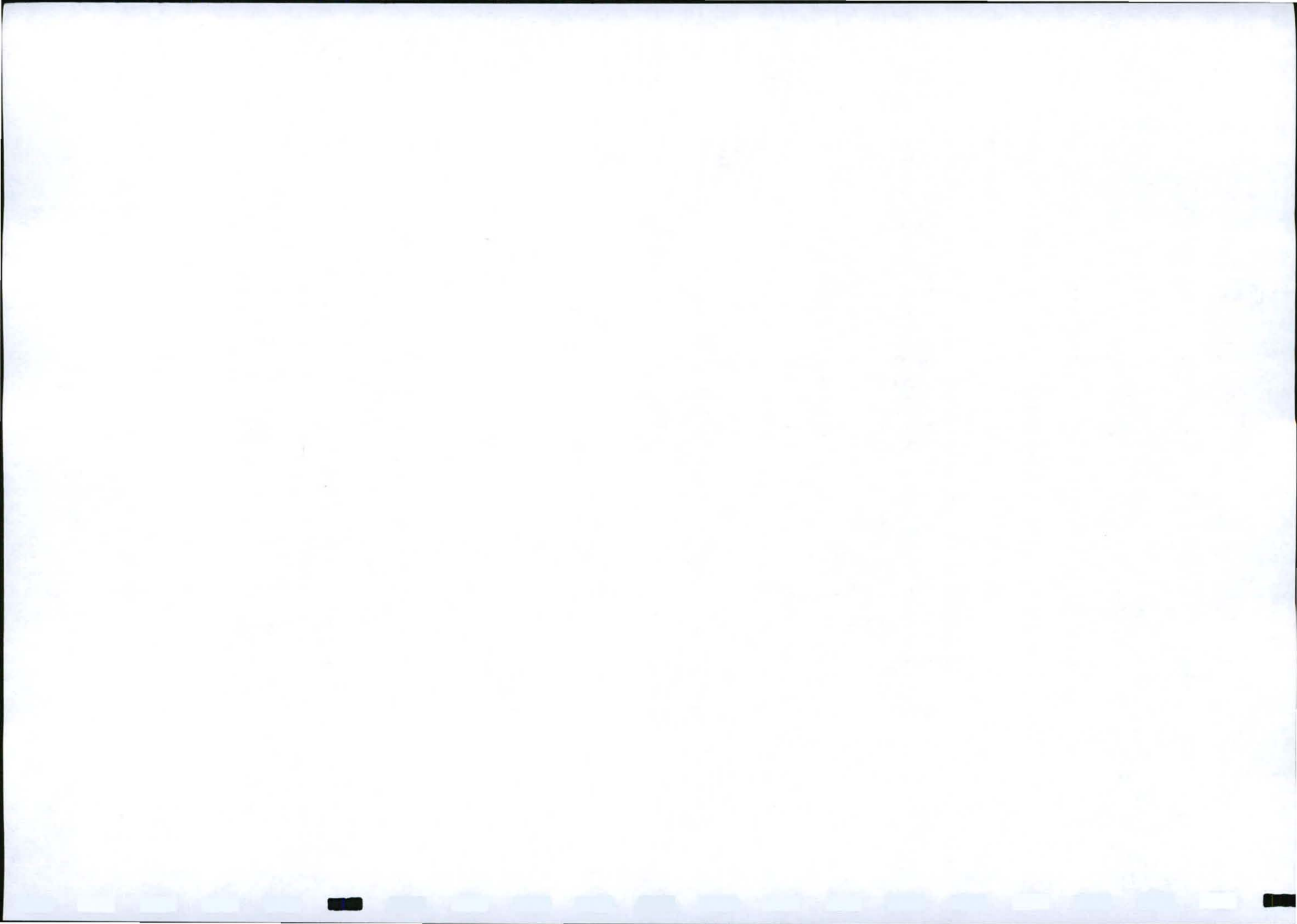


- If a reasonable assessment indicates that the re-establishment of vegetation is unacceptably slow, the Regional Manager may require that the soil be analysed and any deleterious effects on the soil arising from the mining operation be corrected and the area be seeded with a vegetation seed mix to his/her specification
- Photographs of the camp and office sites before and during the mining operation and after rehabilitation will be taken at selected fixed points and kept on record for the information of the Regional Manager.

12.2.4 VEHICLE MAINTENANCE YARD AND SECURED STORAGE AREAS

12.2.4.1 Establishing the vehicle maintenance yard and secured storage areas

- The vehicle maintenance yard and secured storage area will be established as far as practicable, outside the flood plain, above the 1 in 50 flood level mark within the boundaries of the mining / prospecting area
- The area chosen for these purposes will be the minimum reasonably required and involve the least disturbance to tree and plant life. Topsoil will be handled as described above



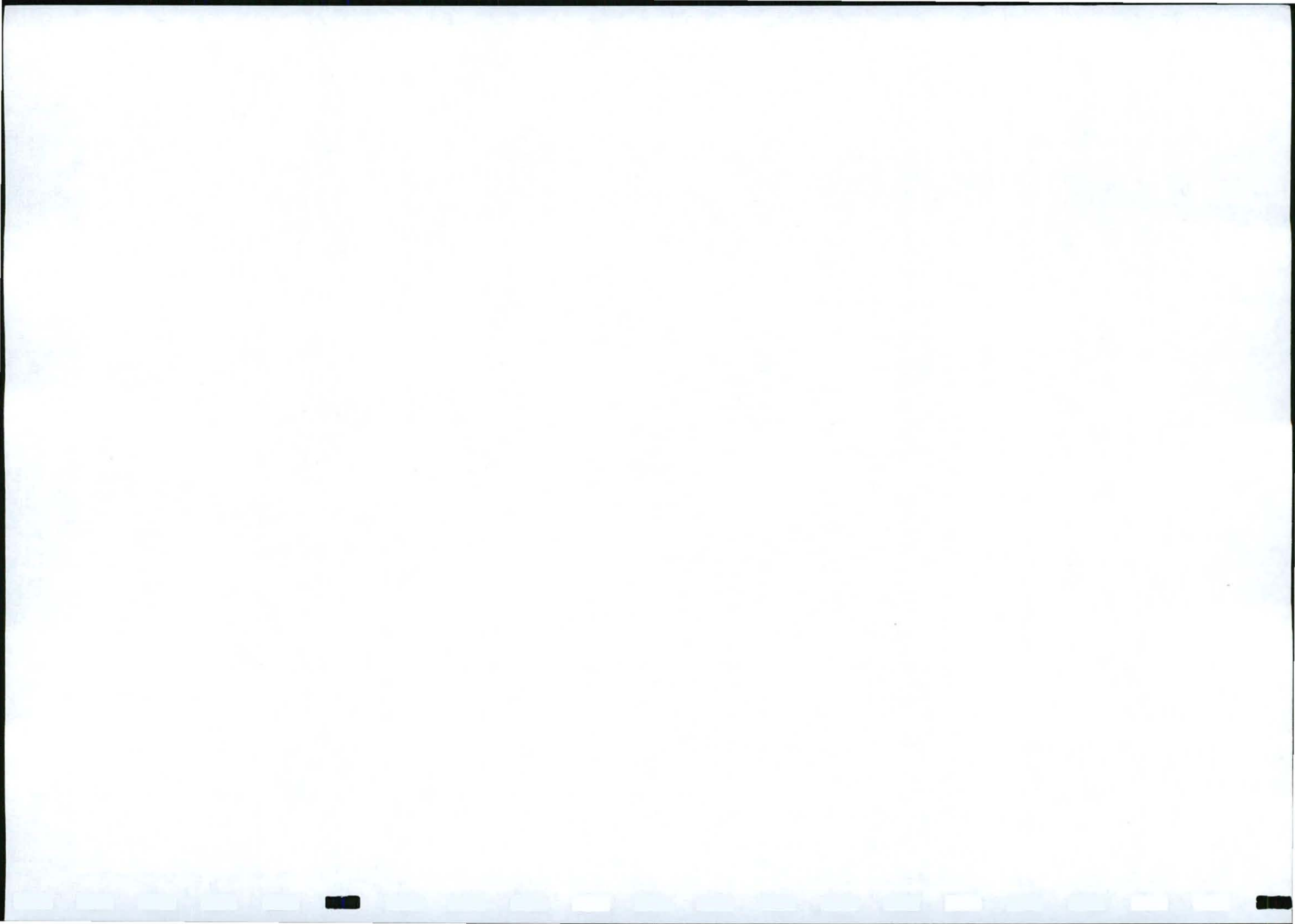
- The storage area will be securely fenced and all hazardous substances and stocks such as diesel, oils, detergents, etc., will be stored therein. Drip pans, a thin concrete slab or a facility with PVC lining, will be installed in such storage areas with a view to prevent soil and water pollution
- No vehicle will be extensively repaired in any place other than in the maintenance yard

12.2.4.2 Maintenance of vehicles and equipment

- The maintenance of vehicles and equipment used for any purpose during the mining operation will take place only in the maintenance yard area
- Equipment used in the mining process will be adequately maintained so that during operations, it does not spill oil, diesel, fuel or hydraulic fluid.

12.2.4.3 Waste disposal

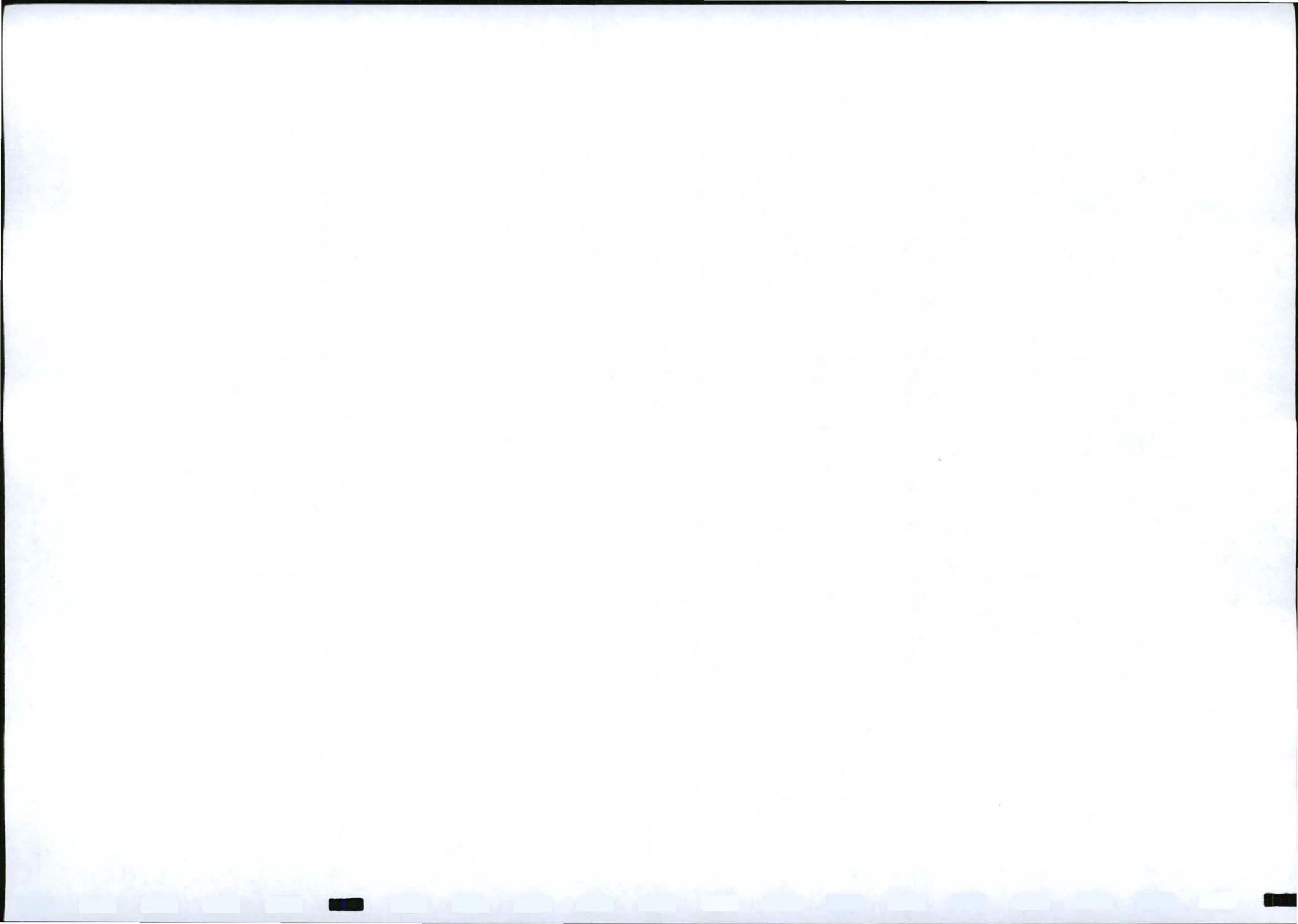
- Suitable covered receptacles will be available at all times and conveniently placed for the disposal of waste



- All used oils, grease or hydraulic fluids will be placed therein and these receptacles will be removed from the site on a regular basis for disposal at a registered or licensed disposal facility
- All spills would be cleaned up immediately to the satisfaction of the Regional Manager by removing the spillage together with the polluted soil and by disposing of them at a recognized facility

12.2.4.4 Rehabilitation of vehicle yard and secured storage areas

- On completion of mining operations, the vehicle yard and the secured storage areas will be cleared of any contaminated soil, which will be dumped as referred to. All buildings, structures or objects on the vehicle maintenance yard and secured storage areas will be dealt with in accordance with section 44 of the Mineral and Petroleum Resources Development Act, 2002
- The surface will then be ripped or ploughed to a depth of at least 300mm and the topsoil previously stored adjacent the site, will be spread evenly to its original depth over the hole area. The area will then be fertilized if necessary (base on soil analysis).
- The site will be seeded with a vegetation seed mix adapted to reflect the local indigenous flora



13. OPERATING PROCEDURES IN THE MINING AREA

13.1 Limitations on mining

- The mining of precious stones will take place only within the approved demarcated mining area

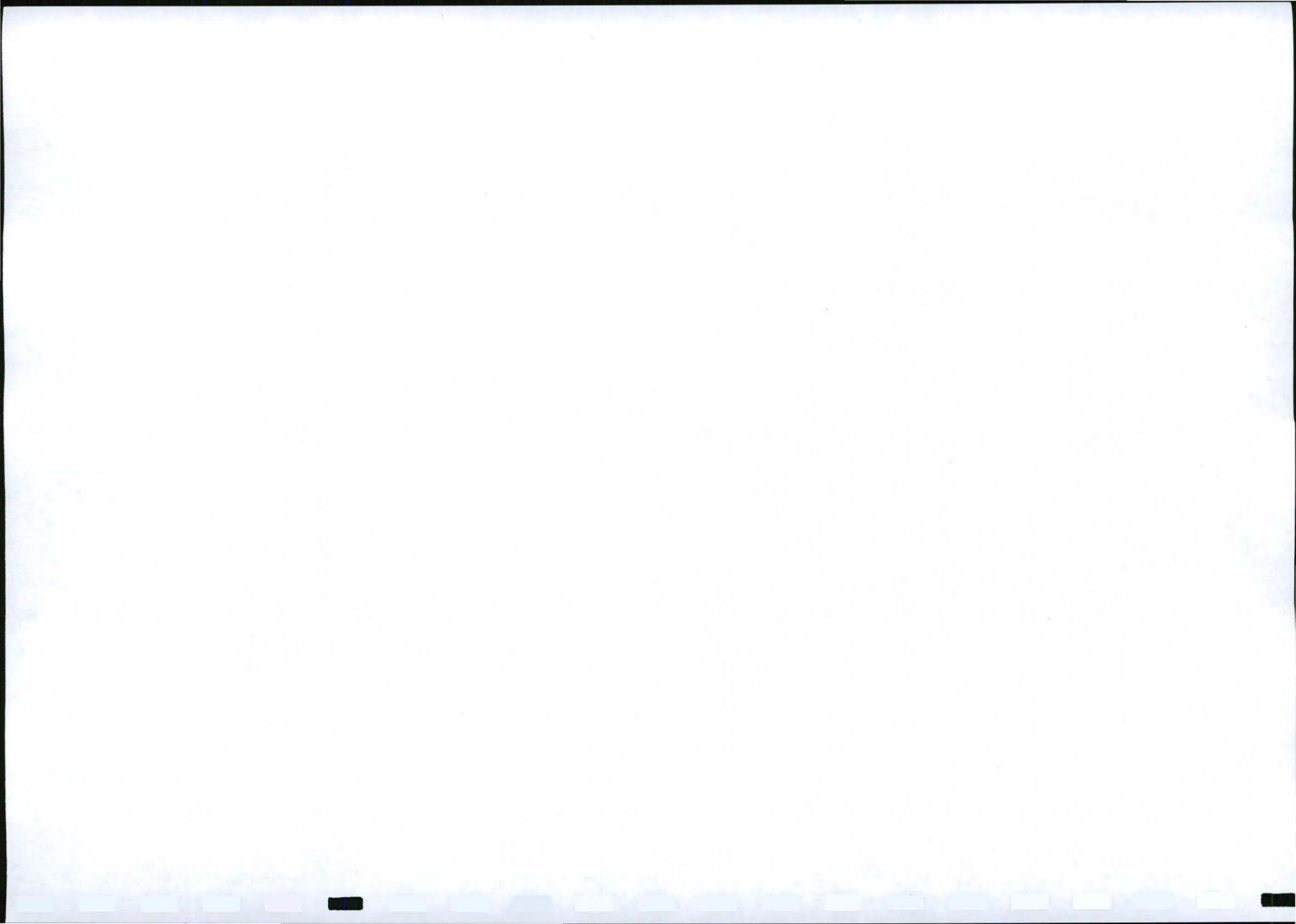
14. THE WATER USE LICENSE

The National Water Act, (Act 36 of 1998,) is base on the principles of sustainability, efficiency and equity, meaning that the protection of water resources must be balanced with their development and use. The applicant applied for a water license in terms of the Act.

15. EXCAVATIONS

15.1 Establishing the excavation areas

- Whenever any excavation is undertaken for the purpose of locating and/or extracting ore bodies of all types of minerals, including precious stone bearing gravels, the following operating procedures will be adhered to:



- ❖ Topsoil will, in all cases (except when excavations are made in the river-bed); be handled as stipulated in the document.
- ❖ Excavations will take place only within the approved demarcated mining area
- ❖ Overburden rocks and coarse material will be placed concurrently in the excavations or stored adjacent to the excavation, if practicable, to be used as backfill material once the ore or gravel has been excavated
- ❖ Trenches will be backfilled immediately if no ore or precious stone-bearing gravel can be located

15.2 Rehabilitation of excavation areas

The following operating procedures will be adhered to:

- The excavated area must serve as a final depositing area for the placement of tailings during processing
- Rocks and coarse material removed from the excavations must be dumped into the excavation simultaneously with the tailings.
- Waste will not be deposited in the excavations
- Once excavations have been refilled with overburden, rocks and coarse natural materials and profiled with acceptable contours and



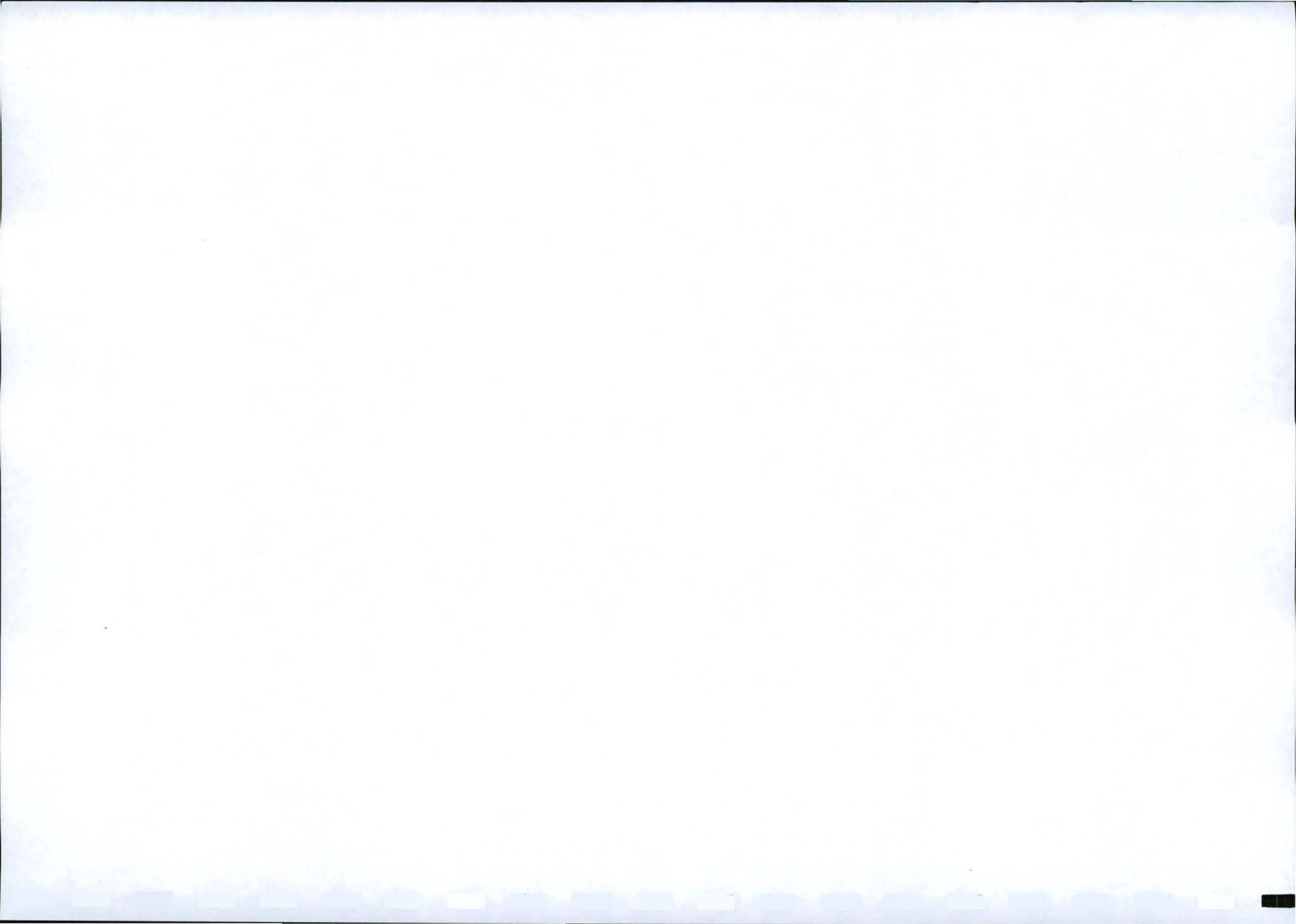
erosion control measures, the topsoil previously stored, will be returned to its original depth over the area

- The area will be fertilized to allow vegetation to establish rapidly. The site will be seeded with a local or adapted indigenous seed mix in order to propagate the locally or regionally occurring flora.

15.3 PROCESSING AREAS AND WASTE PILES (DUMPS)

15.3.1 Establishing processing areas and waste piles

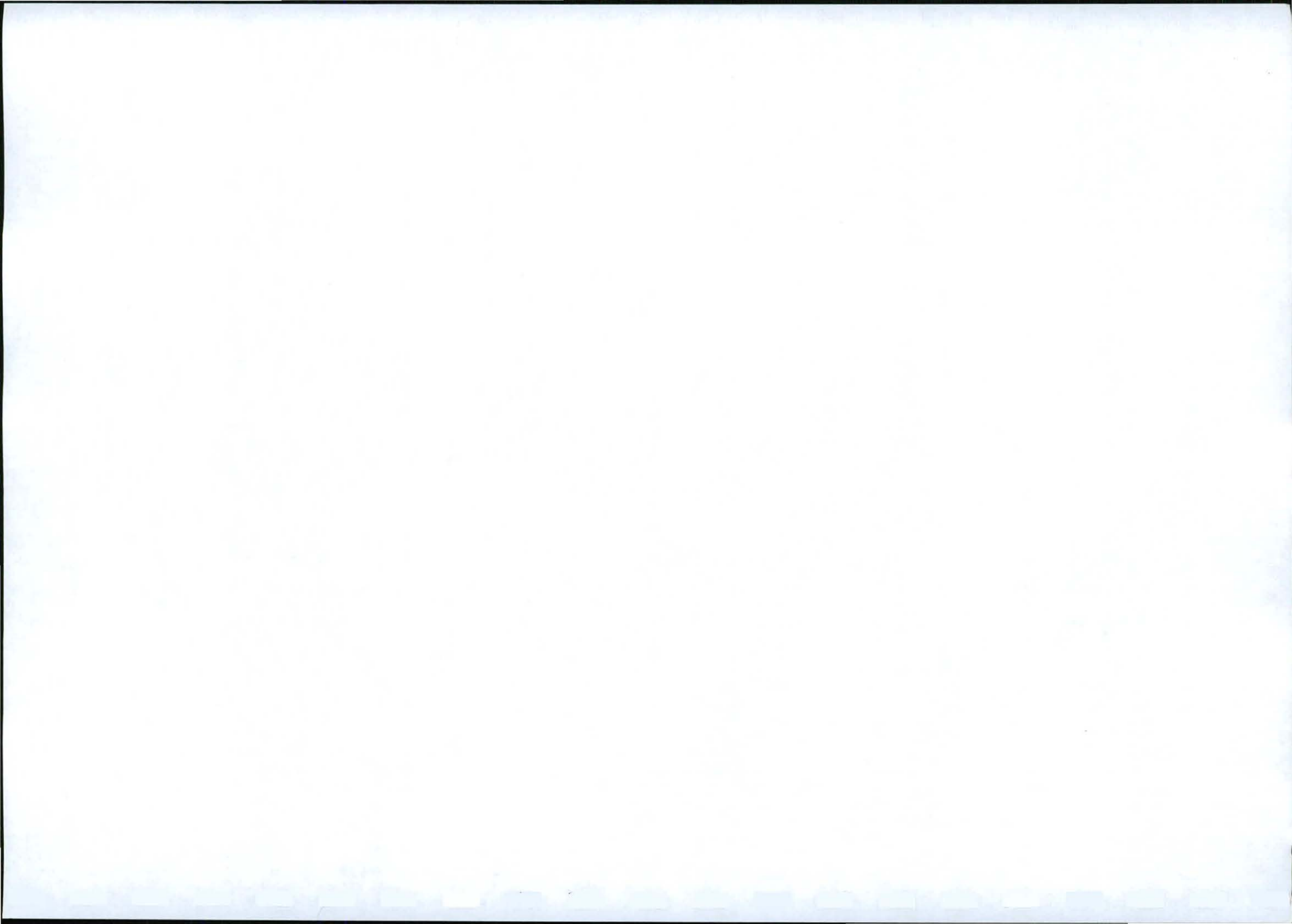
- Processing areas and waste piles will not be established within 100m of the edge of any river channel or other water bodies
- Processing areas would be established, as far as practicable, near the edge of excavations to allow waste, gravel and coarse material to be processed therein
- The areas chosen for this purpose will be the minimum reasonably required and involve the least disturbance to vegetation
- Prior to development of these areas, the topsoil will be removed and stored as stipulated above
- The location and dimensions of these areas are indicated on the layout plan.



- The processing of ore containing precious stones will be confined to these areas and no stockpiling or processing will be permitted on areas not correctly prepared
- Tailings from the extraction process will be treated and / or deposited that it will in no way prevent or delay the rehabilitation process

15.3.2 Rehabilitation processing areas

- Coarse natural material for the construction of ramps will be removed and dumped into excavations
- On completion of mining operations, the surface of the processing areas especially if compacted due to hauling and dumping operations, will be scarified to a depth of at least 300mm and graded to an even surface condition and the previously stored topsoil will be returned to its original depth over the area
- Prior to replacing the topsoil the material that was removed from the processing area will be replaced in the same order as it originally occurred
- The area will then be fertilized if necessary to allow vegetation to establish rapidly. The site will be seeded with a local, adapted indigenous seed mix



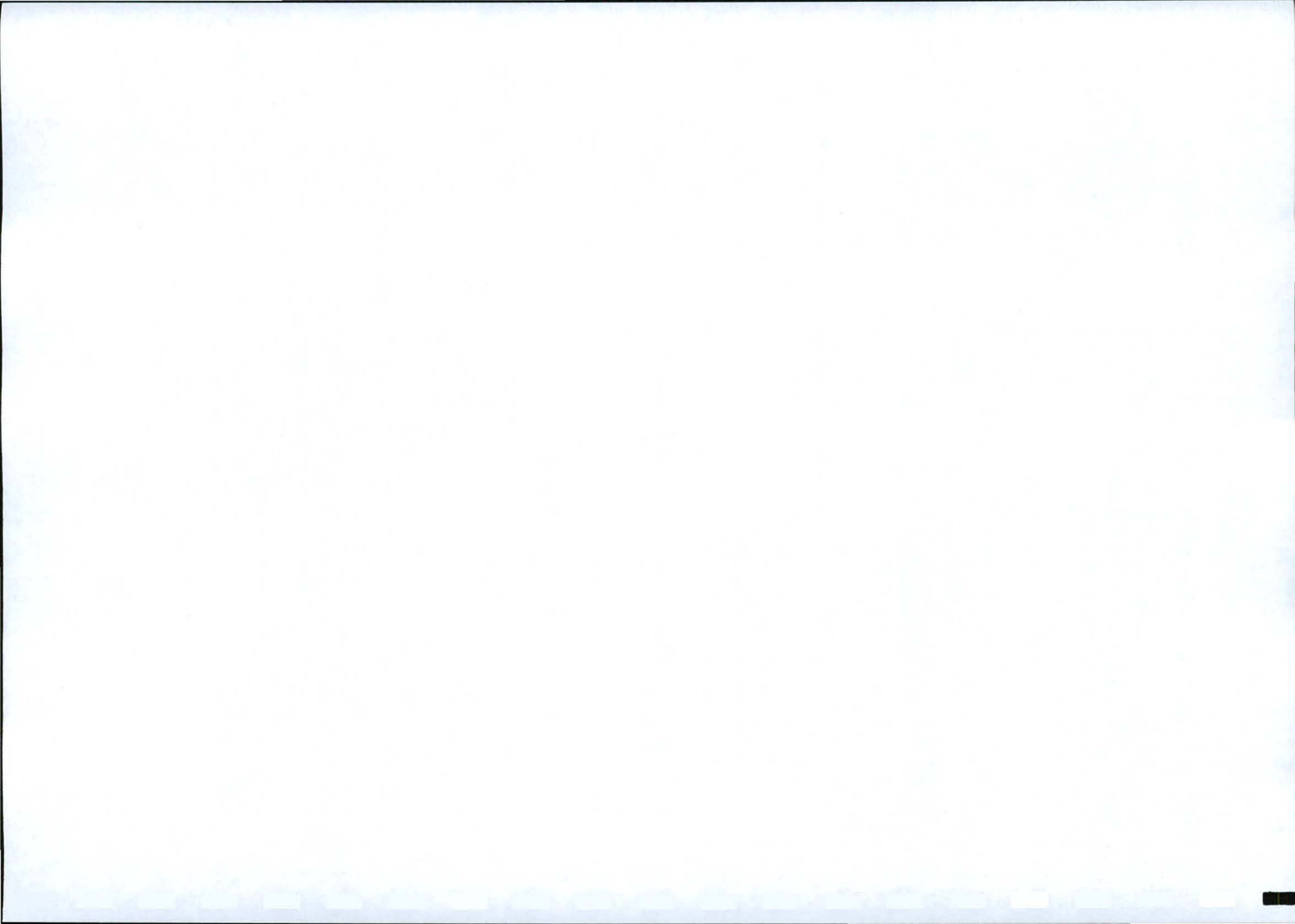
15.3.4 FINAL REHABILITATION

- All infrastructure, equipment, plants, temporary housing and other items used during the mining period will be removed from the site (section 44 of the MPRDA)
- Waste material of any description, including receptacles, scrap, rubble and tires, will be removed entirely from the mining area and disposed of at a recognized landfill facility. It will not be permitted to be buried or burned on site
- Final rehabilitation will be completed within a period specified by the Regional Manager

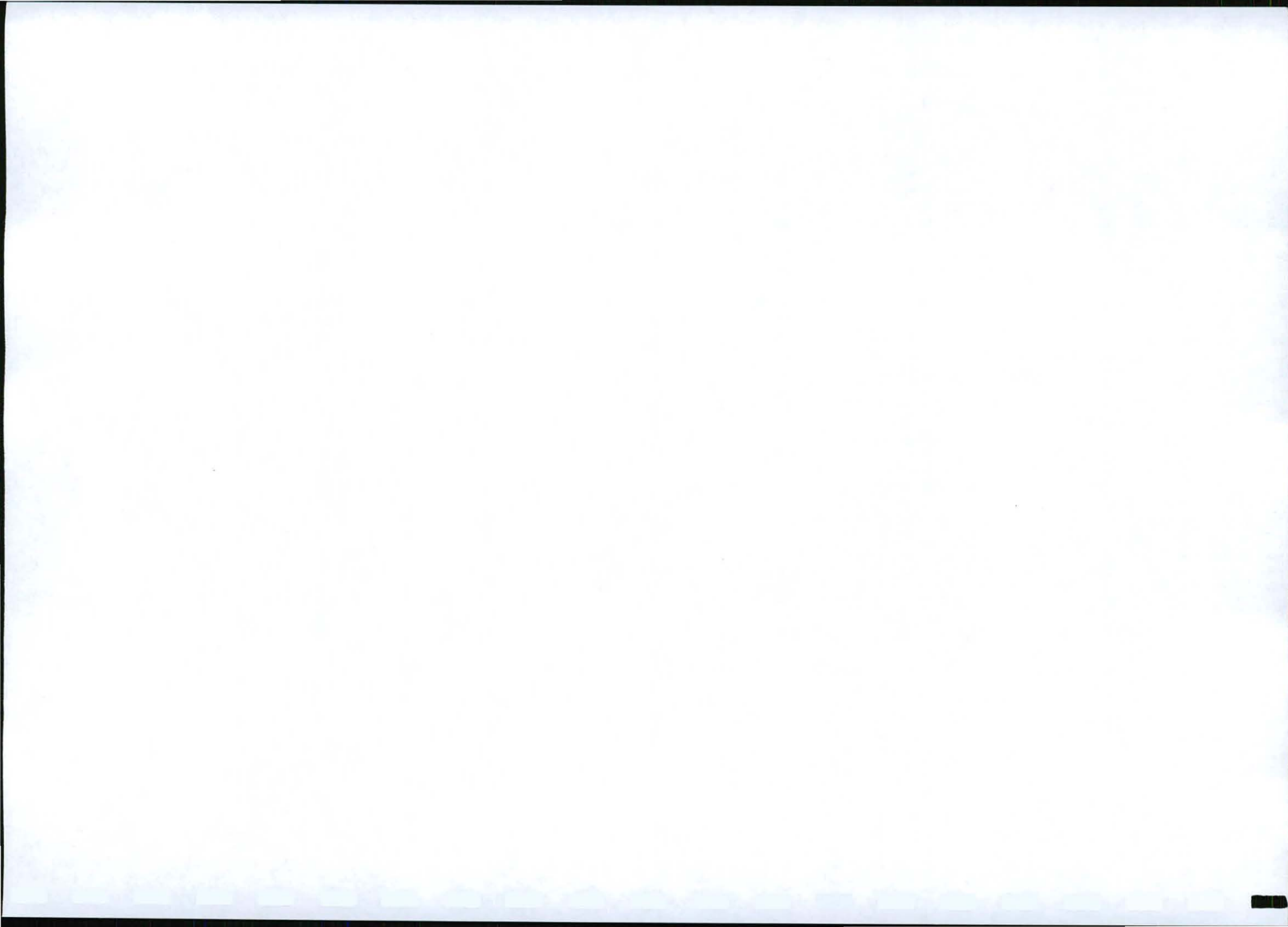
16. MONITORING AND REPORTING

16.1 Inspections and monitoring

- Regular monitoring of all the environmental management measures and components will be carried out by the holder of the mining right in order to ensure that the provisions of this programme are adhered to
- Ongoing and regular reporting of the progress of implementation of this programme will be done
- Various points of compliance will be identified with regard to the various impacts that operations will have on the environment



- Inspections and monitoring will be carried out on both the implementation of the programme and the impact on plant and animal life
- Visual inspections on erosion and physical pollution will be carried out on a regular basis
- The holder of the mining right will
 - (a) conduct monitoring on a continuous basis
 - (b) conduct performance assessments of the environmental management plan or programme as required
 - (c) compile and submit a performance assessment report to the Minister every 6 months
 - (d) the performance assessment report submitted by the holder will be made available by the Minister to any person on request
- The performance assessment report, will as a minimum contain –
 - (a) information regarding the period that applies to the performance assessment
 - (b) the scope of the assessment
 - (c) the procedure used for the assessment
 - (d) the interpreted information gained from monitoring the approved environmental management programme or plan
 - (e) the evaluation criteria used during the assessment
 - (f) the results of the assessment

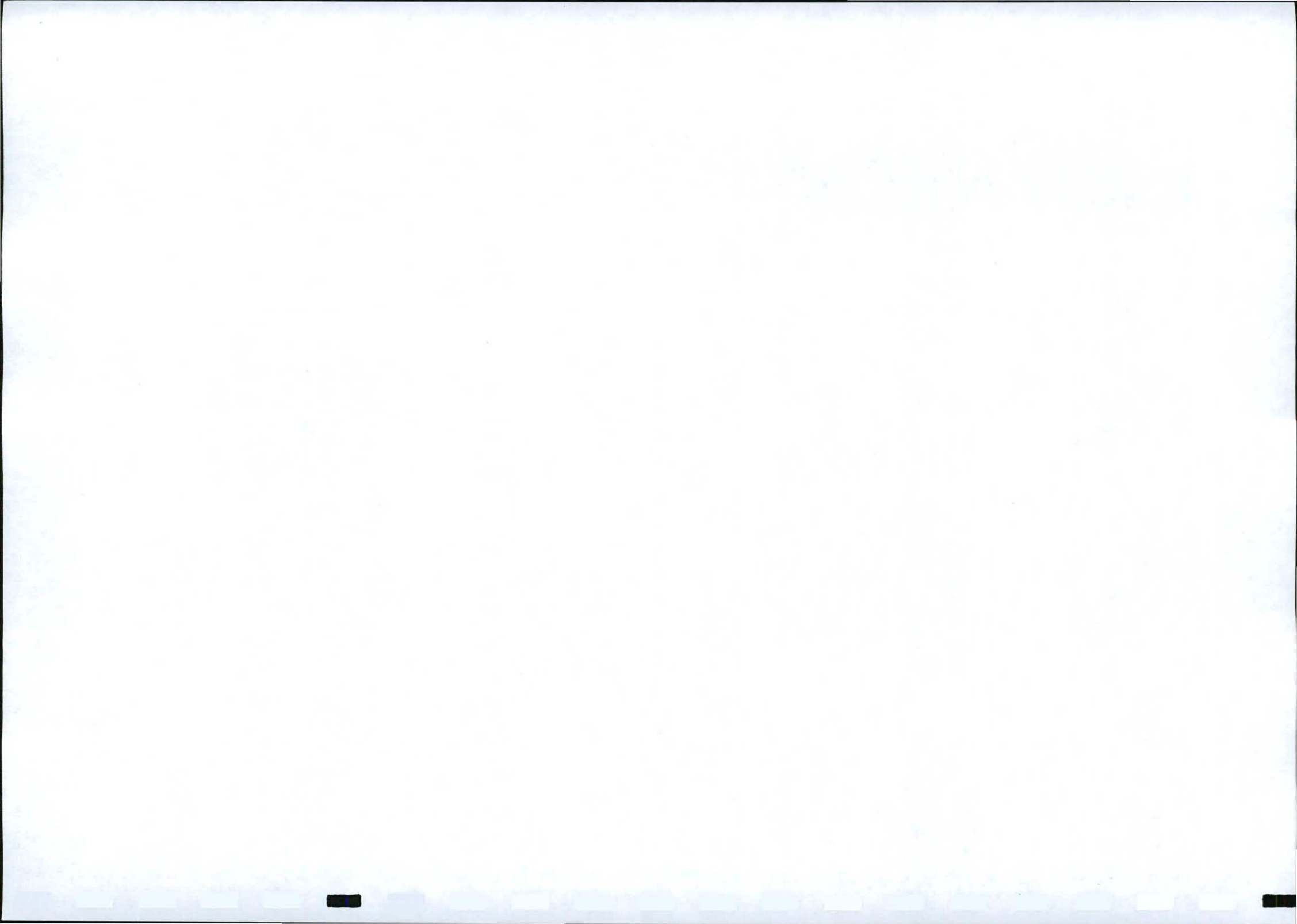


(g) recommendations on how and when deficiencies that are identified and / or aspects of non-compliance will be rectified

- The holder will appoint an independent qualified person(s) to conduct the performance assessment and compile the performance assessment report. The holder will stay responsible and will it not relieve the holder of the right of the responsibilities in terms of the regulations
- If the holder intends closing the operation, a final performance assessment will be conducted and a report submitted to the Minister to ensure that –
 - (a) the requirements of the relevant legislation have been complied with
 - (b) the closure objectives as described in the environmental management programme or plan have been met
 - (c) all residual environmental impacts resulting from the holder's operations have been identified and the risks of latent impacts which occur have been identified, quantified and arrangements for the management thereof have been assessed

16.2 Compliance reporting / submission of information

- Layout plans will be updated on a regular basis and updated copies will be submitted on biennial basis to the Regional Manager

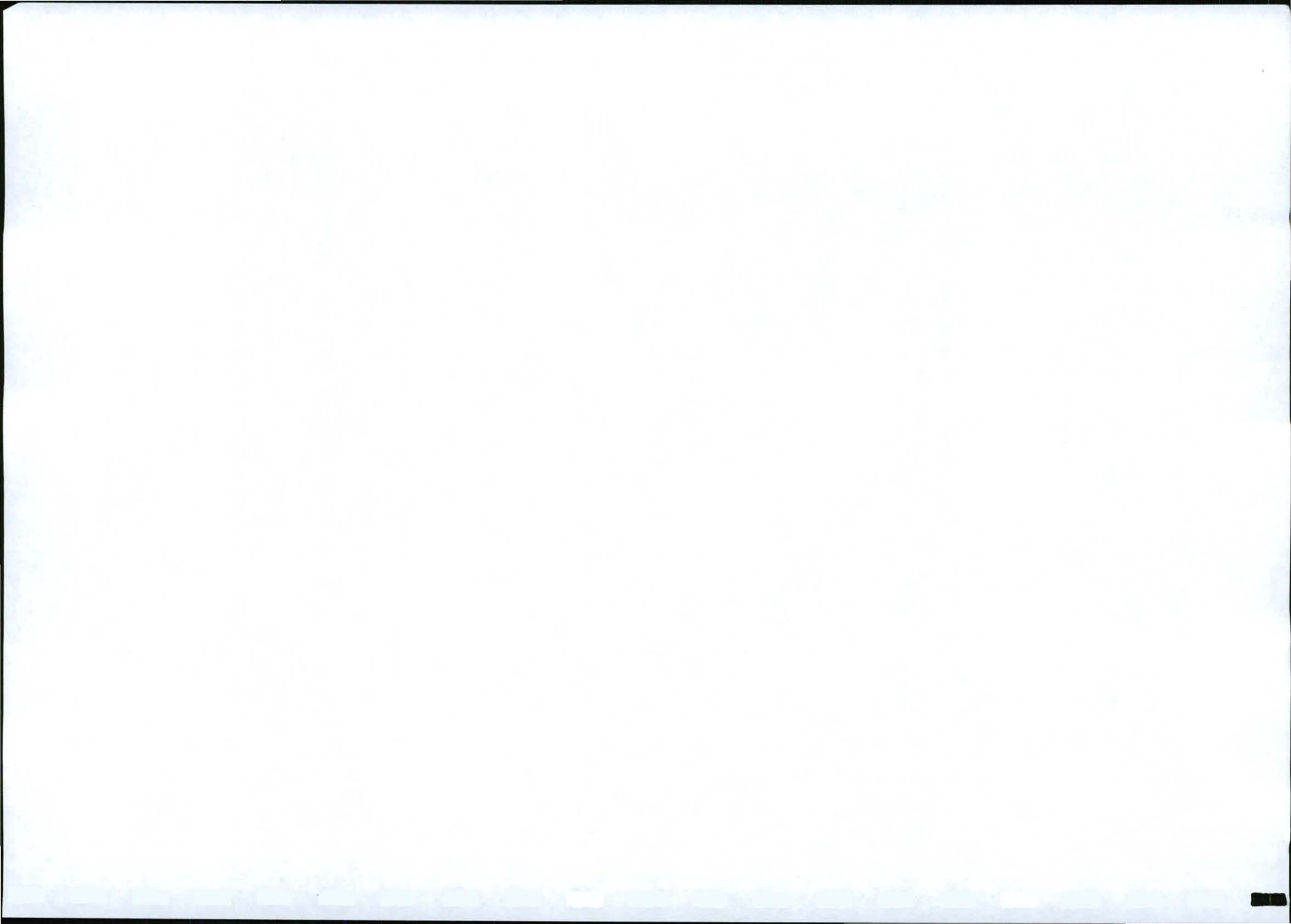


- Reports confirming compliance with various points identified in the environmental management programme will be submitted to the Regional Manager on a regular basis and as decided by the said manager
- Any emergency or unforeseen impact will be reported as soon as possible
- An assessment of environmental impacts that were not properly addressed or were unknown when the programme was compiled will be carried out and added as a corrective action.

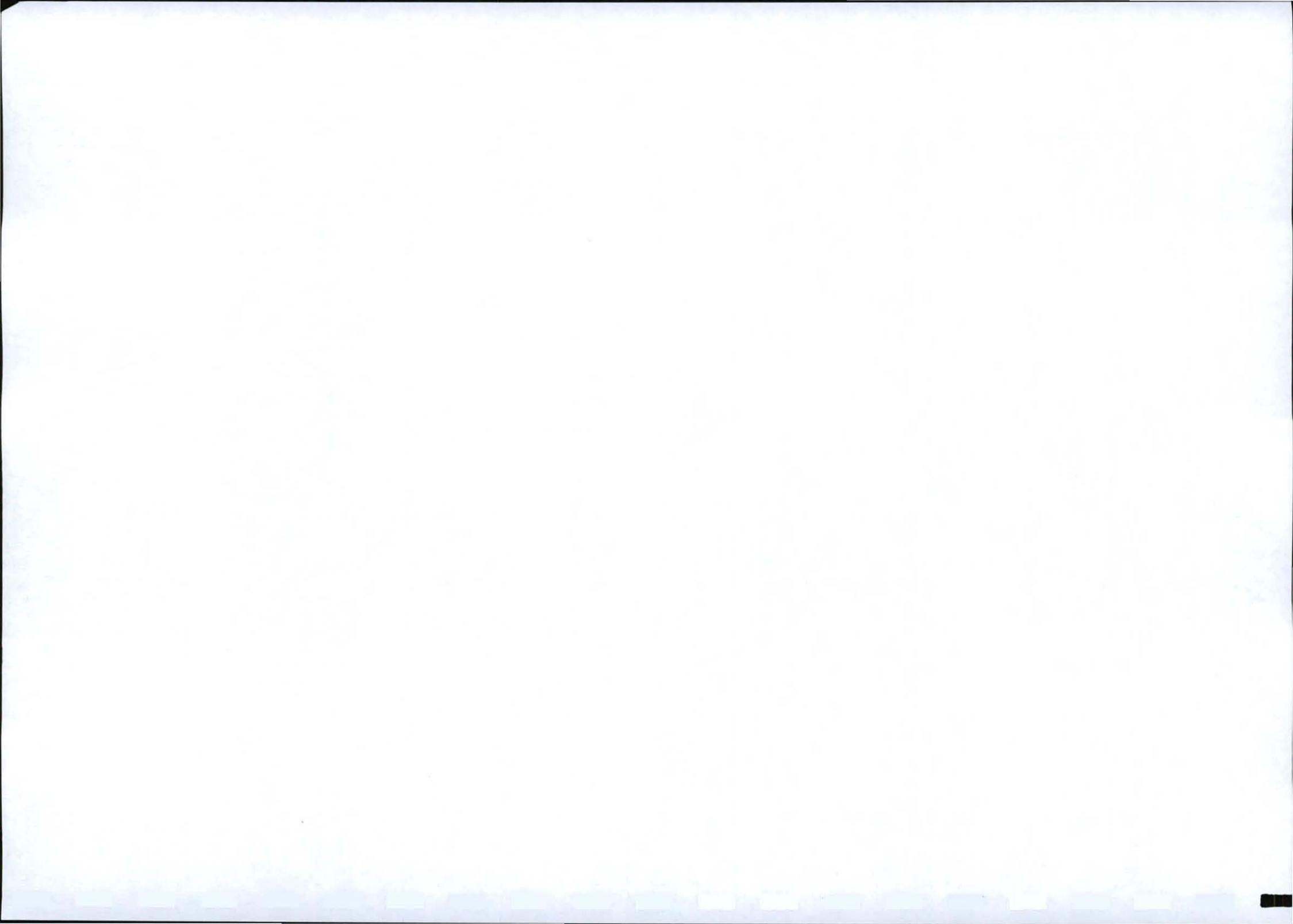
17. ENVIRONMENTAL RISK REPORT

“An application for a closure certificate must be accompanied by an environmental risk report which must include-

- (a) the undertaking of a screening level environmental risk assessment where-
 - (i) all possible environmental risks are identified, including those which appear to be insignificant;
 - (ii) the process is based on the input from existing data;
 - (iii) the issues that are considered are qualitatively ranked as –
 - (aa) a potential significant risk; and/or
 - (bb) a uncertain risk; and/or



- (cc) an insignificant risk.
- (b) the undertaking of a second level risk assessment on issues classified as potential significant risks where-
 - (i) appropriate sampling, data collection and monitoring be carried out;
 - (ii) more realistic assumptions and actual measurements be made; and
 - (iii) a more quantitative risk assessment is undertaken, again classifying issues as posing a potential significant risk or insignificant risk.
- (c) Assessing whether issues classified as posing potential significant risks are acceptable without further mitigation;
- (d) issues classified as uncertain risks be re-evaluated and re-classified as either posing potential significant risks or insignificant risks;
- (e) documenting the status of insignificant risks and agree with Interested and affected persons;
- (f) identifying alternative risk prevention or management strategies for potential. Significant risks which have been identified, quantified and Qualified. In the second level risk assessment;
- (g) agreeing on management measures to be implemented for the potential



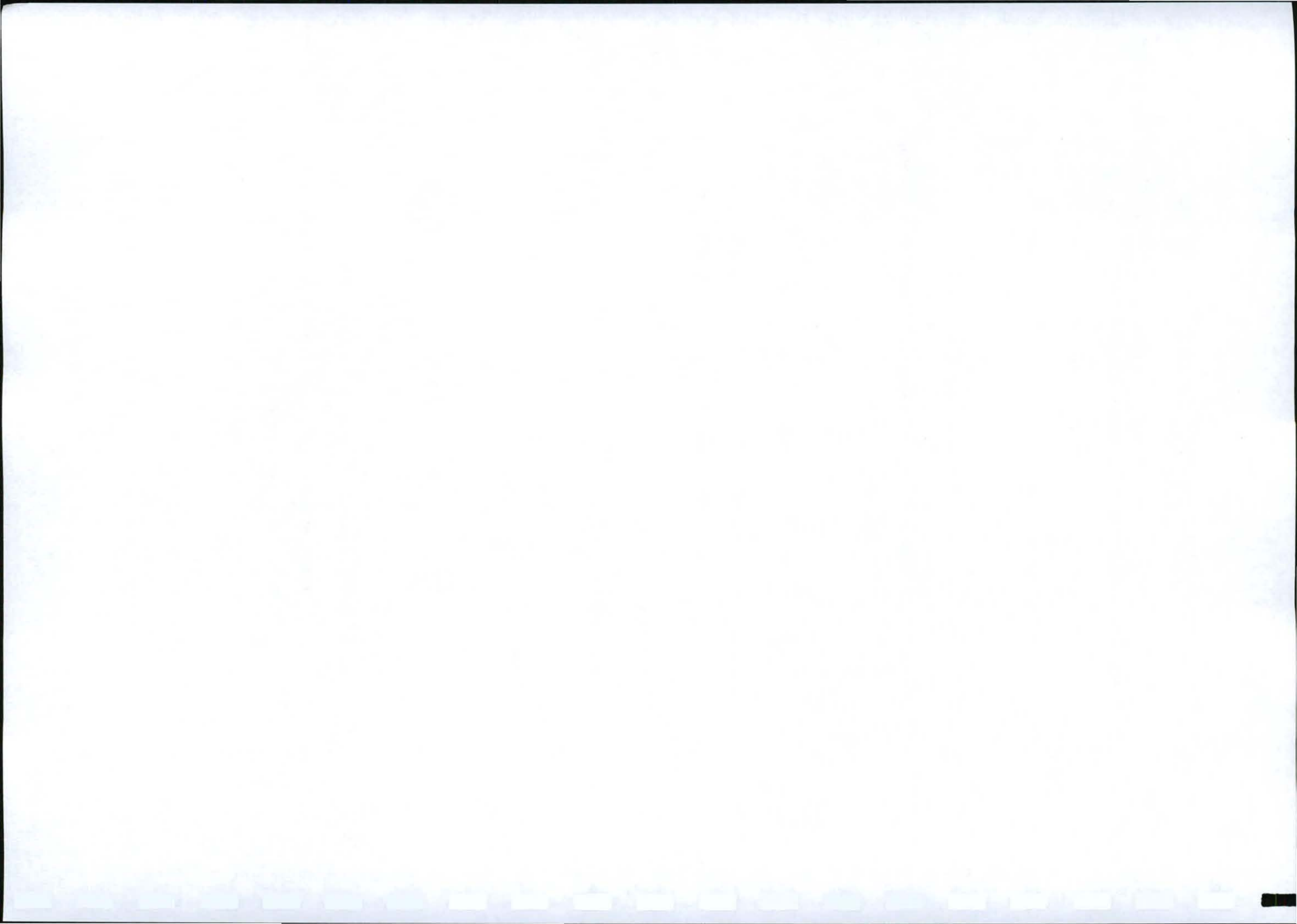
Significant risks which must include –

- (h) a description of the management measures to be applied;
- (ii) a predicted long-term result of the applied management Measures;
- (iv) the residual and latent impact after successful implementation of the management measures;
- (v) responsibilities for implementation and long-term maintenance of the management measures;
- (vi) financial provision for long-term maintenance; and
- (vii) Monitoring programme to be implemented.”

18. LEGAL PROVISIONS

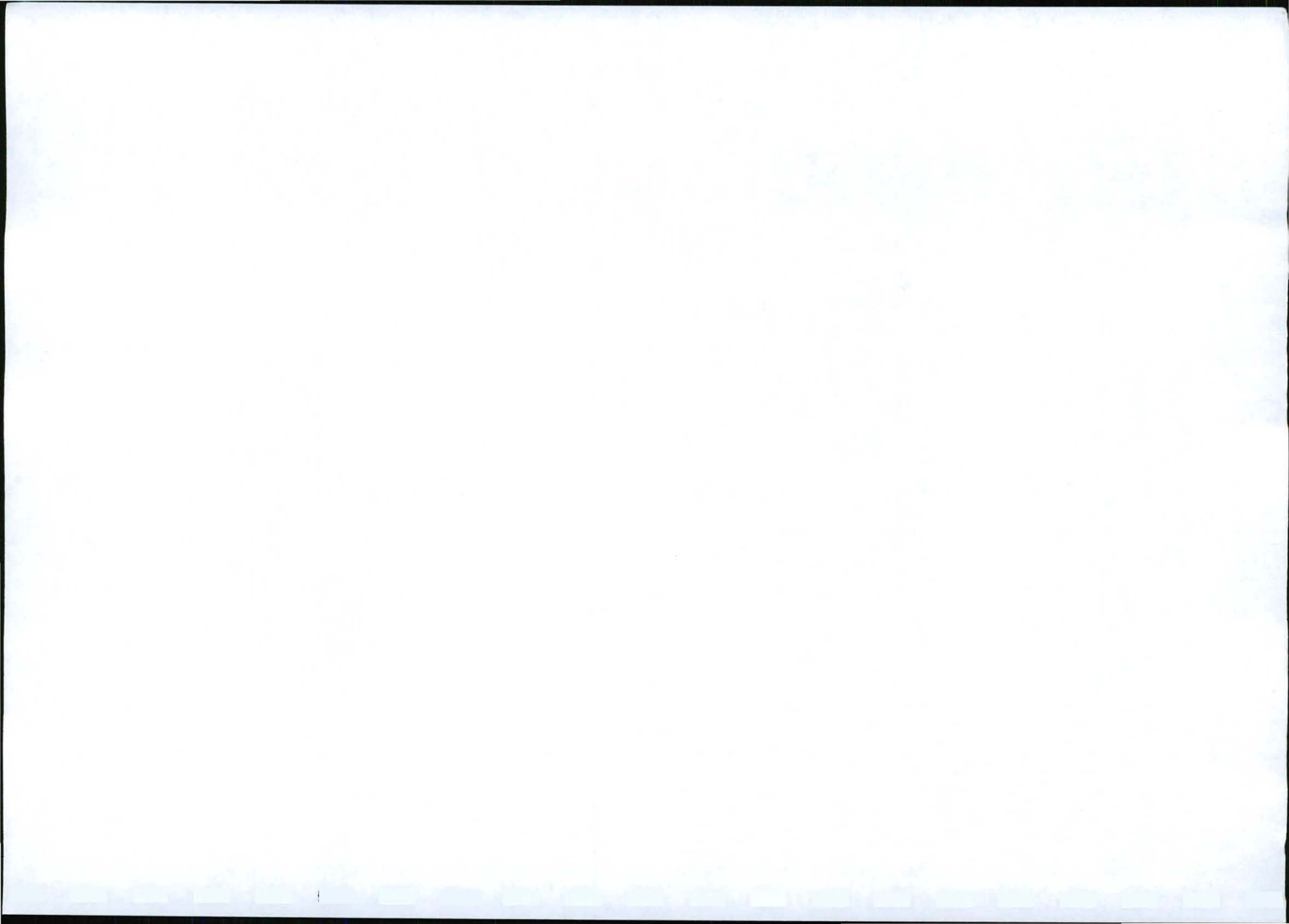
The following legal provisions are applicable. The applicant will adhere to them.

- National Monuments Act, 1969 (Act 28 of 1969)
- National Parks Act, 1976 (Act 57 of 1976)
- Environmental Conservation Act, 1989 (Act 73 of 1989)
- National Environmental Management Act, 1998 (Act No. 107 of 1998)
- Atmospheric Pollution Prevention act, 1965 (Act 45 of 1965)
- The National Water Act, 1998 (Act 36 of 1998)

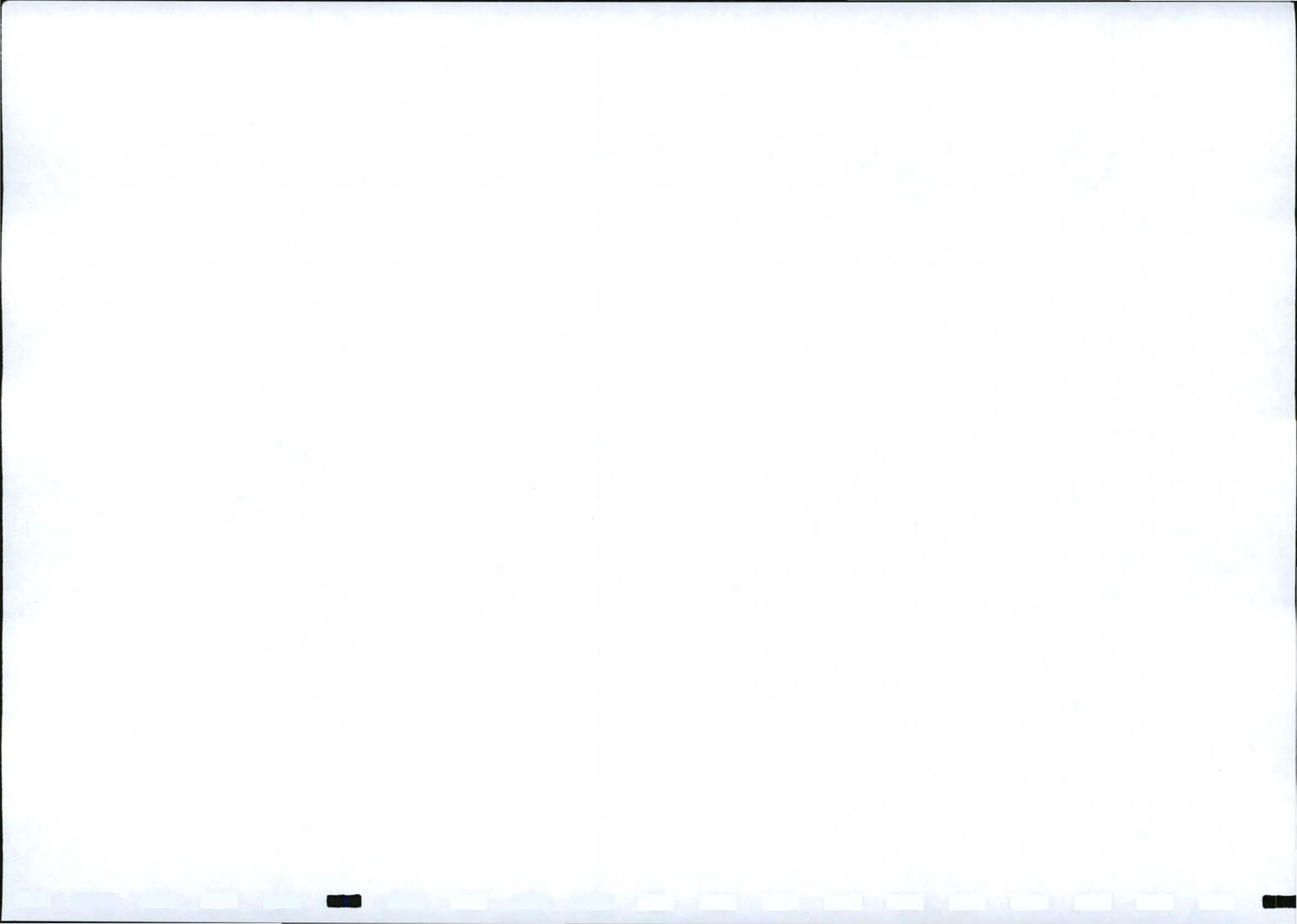


- Mine Safety and Health Act, 1996 (Act 29 of 1996)
- The Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983).

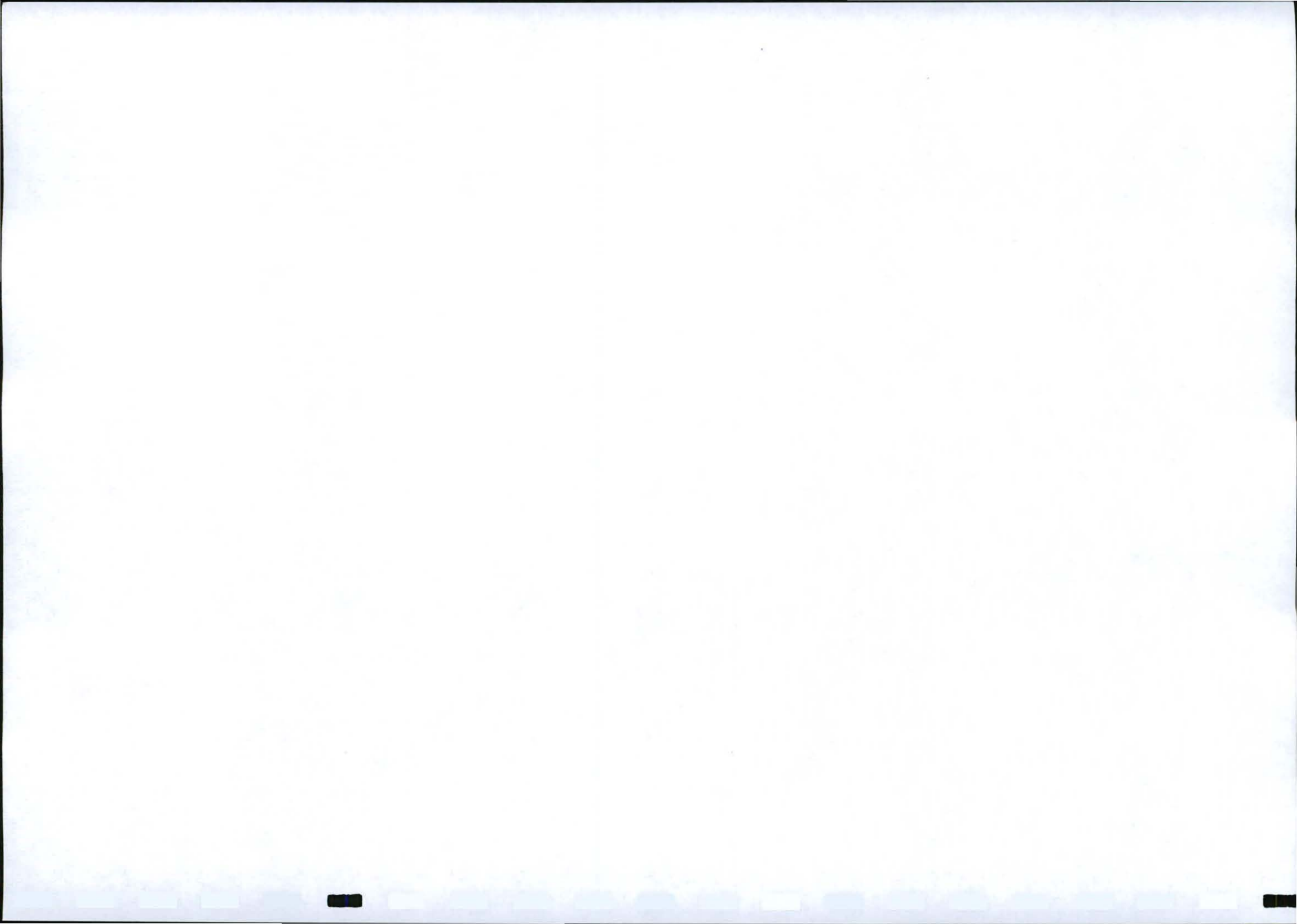
The applicant has familiarized himself with the following legal principles of the Mineral and Petroleum Resources Development act and it's supporting Regulations.



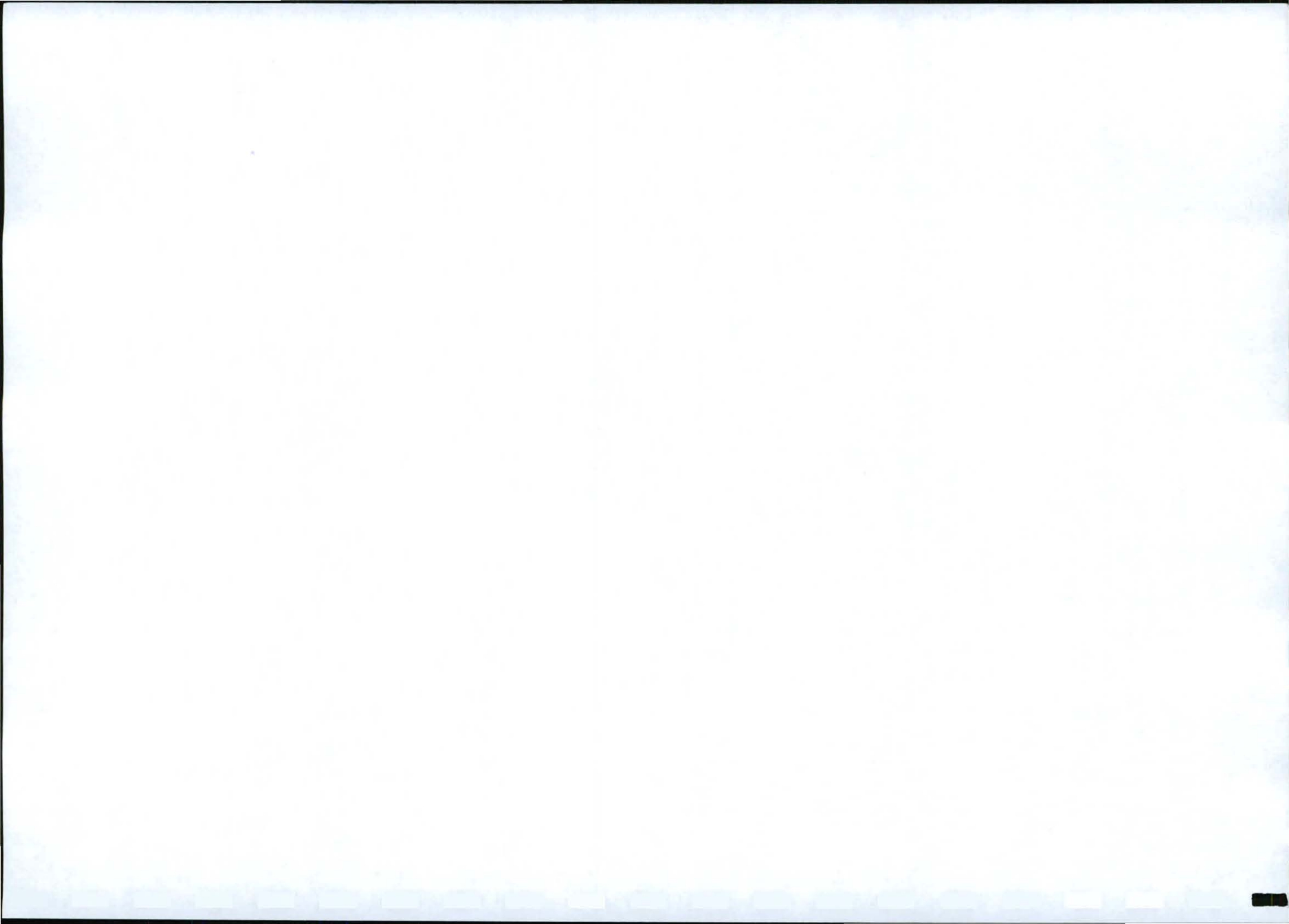
Section of Act	Legislated activity/ Instruction/ Responsibility Or failure to comply	Penalty in terms Of section 99
5(4)	No person may prospect, mine, or undertake reconnaissance operations or any other activity without an approved EMP, right, permit or permission or without notifying land owner	R 100 000 or two years imprisonment or both
19	Holder of a Prospecting right must: lodge right with Mining Titles Office within 30 days; commence with prospecting right, continuously and actively conduct prospecting operations; comply with requirements of approved EMP, pay prospecting fees and royalties	R 100 000 or two years imprisonment or both
20(2)	Holder of prospecting right must obtain Minister's permission to remove any mineral or bulk samples	R 100 000 or two years imprisonment or both
26(3)	A person who intends to beneficiate any mineral mined in SA outside the borders of SA may only do so after notifying the Minister in writing and after consultation with the Minister	R 500 000 for each day of contravention
28	Holder of a mining right or permit must keep records of operations and financial records AND must submit to the DG: monthly returns, annual financial report and a report detailing compliance with social labour plan &	R 100 000 or two years imprisonment or both



	charter	
29	Minister may direct owner of land or holder/ applicant of permit/ right to submit data or information	R 10 000
38(1)(c)	Holder of permission/permit/right MUST manage environmental Impacts according to EMP and as ongoing part of the operations	R 500 000 or ten years imprisonment or both
42(1)	Residue stockpiles must be managed in prescribed manner on a site demarcated in the EMP	A fine or imprisonment up to six months or both
42(2)	No person may temporarily or permanently deposit residue on any Other site than that demarcated and indicated in the EMP	A fine or imprisonment up to six months or both
44	When any permit/right/permission lapses, the holder may not remove or demolish buildings, which may not be demolished in terms of any other law, which has been identified by the Minister or which is to be retained by agreement with the landowner	Penalty that may be imposed by Magistrate's court for similar offence



92	Authorized persons may enter mining sites and require holder of permit To produce documents/ reports/ or any material deemed necessary for Inspection	Penalty as may be imposed for perjury
94	No person may obstruct or hinder under an authorized person in the performance of their duties or powers under the Act	Penalty as may be imposed for perjury
95	Holder of a permit/right may not subject employees to occupational detriment on account of employee disclosing evidence or information to authorized person (official)	Penalty as may be imposed for perjury
All Sections	Inaccurate, incorrect or misleading information	A fine or imprisonment Of up to six months or both
All Sections	Failure to comply with any directive, notice, suspension, order, instruction, or condition issued	A fine or imprisonment up to six months or both



19. UNDERTAKING BY THE APPLICANT

We DIDIMALA DIAMONDS CC, the applicant for a mining right hereby declare that the above information is true, complete and correct. I undertake to implement the measures as described and indicated in this document. I understand that this undertaking is legally binding and that failure to give effect hereto will render me liable for prosecution in terms of Section 98 (b) and 99(1) (g) of the Mineral and Petroleum Resources Development Act, 2002 (Act 28 of 2002). I am also aware that the Regional Manager may, at any time but after consultation with me, make such changes to this plan, as he/she may deem necessary.

Signed on this 14 day of June 2010 at Kimberley



DIDIMALA DIAMONDS CC