SCHEDULE

[Refer rule 3(f), 3(g), 4(1)(a)(ii), 4(1)(b)(ii), 5(b), 7(1)(b), 7(2)(b)]

The terms used, pertaining to levels of exploration and the category of resources and reserves achieved through various levels of exploration have been defined in Part-I of the Schedule. The parameters for establishing the existence of mineral content in an area in terms of quantity and grade have been specified in Part-II, Part-III, Part-IVA, Part-IVB, and Part-V of the Schedule.

Part – I

Definitions

1. The definitions and codes used in Part I of the schedule are drawn mainly from the United Nations Framework Classification (UNFC) version-1997 and Committee for Mineral Reserves International Reporting Standards (CRIRSCO) Template. To the extent found necessary, the definitions given here may be supplemented by reference to UNFC or CRIRSCO.
2. The exploration for any mineral deposit involves four stages namely, Reconnaissance Survey (G4), Preliminary Exploration (G3), General Exploration (G2) and Detailed Exploration (G1). These stages of exploration lead to four resource categories namely Reconnaissance Mineral Resource, Inferred Mineral Resource, Indicated Mineral Resource and Measured Mineral Resource respectively reflecting the degree of geological assurance.
3. Reconnaissance Survey (G4) identifies areas of enhanced mineral potential based primarily on results of regional geological studies, regional geological mapping, airborne and indirect methods, preliminary field inspection, as well as geological inference and extrapolation. The objective is to identify mineralised areas worthy of further investigation towards deposit identification. Estimates of quantities should only be made if sufficient data are available and when an analogy with known deposits of similar geological character is possible, and then only within an order of magnitude.
4. Preliminary Exploration (G3) is the systematic process of searching for a mineral deposit by narrowing down areas of promising enhanced mineral potential. The methods utilised are outcrop identification, geological mapping, and indirect methods such as geophysical and geochemical studies. Limited wide spaced pitting/ trenching/drilling with sampling is made to identify a deposit which will be the target for further exploration. Estimates of quantities are inferred, based on interpretation of geological, geophysical, geochemical and geo-technical investigation results.
5. General Exploration (G2) involves the initial delineation of an identified deposit. Methods used include surface mapping, pitting/ trenching/

drilling, followed by sampling for evaluation of mineral quantity and quality (including mineralogical tests on laboratory scale if required), and limited interpolation based on indirect methods of investigation. The objective is to establish the main geological features of a deposit, giving a reasonable indication of continuity and providing an initial estimate of size, shape, structure and grade.

6. Detailed Exploration (G1) involves the detailed three-dimensional delineation of a known deposit achieved through sampling, such as from outcrops, pits, trenches, boreholes, shafts and tunnels etc. Sampling grids are closely spaced such that size, shape, structure, grade, and other relevant characteristics of the deposit are established with a high degree of accuracy. Processing tests involving bulk sampling may be required.
7. Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided, in order of increasing geological confidence into Reconnaissance, Inferred, Indicated and Measured resource categories.
8. Reconnaissance Mineral Resource (334) are estimates based primarily on indirect evidence and includes data and information generated through a reconnaissance survey. The quantity of data available is generally not sufficient to allow any reasonable estimates of Mineral Resource.
9. Inferred Mineral Resource (333) is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling achieved through a stage of preliminary exploration. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and shall not be converted to a Mineral Reserve. The majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
10. Indicated Mineral Resource (332) is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An

Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

11. Measured Mineral Resource (331) is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.
12. Mineral Reserve is the economically mineable part of a Measured and Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors.

    Probable Mineral Reserve (121 and 122) is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource.

    The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.

    Proved Mineral Reserve (111) is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

    Feasibility Mineral Resource (211) A ‘Feasibility Mineral Resource' is that part of Measured Mineral Resource which is not economically mineable as , defined by studies at feasibility level. This material is identified as being possibly economically viable subject to changes in technological, economic, and environmental and/or other relevant conditions.

    Pre-Feasibility Mineral Resource (221 and 222) A ‘Prefeasibility Mineral Resource' is that part of an Indicated, and in some circumstances, Measured Mineral Resource, that has been found, by studies at Pre-feasibility level, as not economically viable. This material is identified as being possibly economically viable subject to changes in technological, economic, and environmental and/or other relevant conditions.

1. A Geological Study (F3) is an initial evaluation of Economic Viability. This is obtained by applying meaningful cut off values for grade, thickness, depth, and costs estimated from comparable mining

operations. The purpose of the Geological Study is to identify mineralization, to establish continuity, quantity, and quality of a mineral deposit, and thereby define an investment opportunity.

Economic viability categories, however, cannot in general be defined from the Geological Study because of the lack of details necessary for an Economic Viability evaluation. The resource quantities estimated may indicate that the deposit is of intrinsic economic interest, i.e. in the range of economic to potentially economic.

1. Modifying Factors are those factors which are taken into consideration while conducting a Prefeasibility or feasibility study so as to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, end use, cut off grade, threshold value, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
2. A Pre-Feasibility Study (F2) is a study of a range of options for the economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient, to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A Pre-Feasibility Study is at a lower confidence level than a Feasibility Study.
3. A Feasibility Study (F1) is a detailed comprehensive economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The confidence level of the study will be higher than that of a Pre-Feasibility Study.
4. Intrinsically Economic (E3) Quantities, reported in tonnes or volume with grade/quality, estimated by means of a Geological Study to be of intrinsic economic interest. Since the Geological Study includes only a preliminary evaluation of Economic Viability, no distinction can be made between economic and potentially economic. These Resources are therefore said to lie in the range of economic to potentially economic.
5. Potentially Economic (E2) Quantities, reported in tonnes/volume with grade/quality, demonstrated by means of a Prefeasibility Study or Feasibility Study in order of increasing accuracy, not justifying extraction

under the technological economic, environmental and other relevant conditions, realistically assumed at the time of the determination, but possibly so in the future.

6. Economic (E1) Quantities, reported in tonnes or volume with grade/ quality, demonstrated by means of a Prefeasibility Study or Feasibility Study in order of increasing accuracy, that justify extraction under the technological, economic, environmental and other relevant conditions, realistically assumed at the time of the determination.

PART-II

GEOLOGICAL PARAMETERS FOR EXPLORATION

1	Aerial reconnaissance: Satellite imagery/ remote sensing/ airborne geophysical survey etc. using appropriate technology (applicable mainly for reconnaissance exploration (G4) stage).
2	Topographic & Geological survey (Mapping): On 1 : 50,000 or smaller scale for reconnaissance (G4) stage; on 1:25000 to 1 : 10,000 or larger scale for preliminary exploration (G3) stage; 1:4000/1 : 5,000 or larger scale for general exploration(G2) stage; on 1 : 2,000 or larger scale for detailed exploration (G1) stage.
3	Ground Geophysical and Geochemical survey: Geophysical and geochemical survey using appropriate techniques as may be necessary.
4	Technological : Exploration and sampling using appropriate techniques from locations such as outcrops, trenches, pits, old workings and drill holes. The sampling locations are spaced suitably (in a grid pattern to the extent possible and may be modified depending on structural complexity) for establishing existence of ore body and its lateral and vertical continuity. Part III of the schedule may be referred for further details. For General (G2) and detailed (G1) stages of exploration the depth continuity of mineralisation may be considered limited to the depth upto which direct evidence of mineralization is established. The lateral extension to be considered for resource assessment shall depend on geological considerations supplemented by geological continuity by mapping or by other means and in any case shall not be more than 50% of the grid spacing of the probe points. Assessment based on selected information such as isolated assays, isolated drill holes, assays of panned concentrates etc. is not recommended.
5	Sampling & sub sampling: (a) Random grab/chip/channel sampling from surface exposure/ escarpments/ nallah cuttings/ pit/channel etc. for reconnaissance stage.

	(b) Systematic sampling from pits/trenches/outcrops/workings etc. spaced closely enough to confirm geological and grade continuity for other stages of geological assessment. (c) Geological logging and sampling of drill core/chip samples at regular interval, preferably meter wise or less for the mineralized portions. (d) The drill technique to be deployed shall depend on the rock type to be penetrated and with an aim to achieve maximum sample/core recovery. (e) The exploration samples including surface samples, drill core/ chip samples shall be preserved, for future use.
6	Assay data & Laboratory tests: Analysis of all samples generated for major radicals appropriate to the mineral under investigation. Analysis of byproducts such as Ga in bauxite, Ni, PGE in chromite, Au in iron ore, Ag in lead and zinc, Au in copper ore etc. and other deleterious elements wherever necessary.
7	Petrographic &Mineragraphic studies: Petrographic analysis of mineralized portions to ascertain the rock types and mineral assemblages including grain size, texture, gaunge and its liberation characteristics etc. if considered necessary.
8	Bulk density study: The bulk density must be measured by methods that adequately account for incipient void spaces (vugs, porosity, etc.)in mineral /ore body
9	Bulk Sampling for Beneficiation studies: Bulk sampling if necessary for testing processing technology.
10	Environmental setting: Details about local infrastructure, host population, historical sites, forests, sanctuaries, national park and base line information on environmental setting of the area to be collected.
11	Any other relevant data: Groundwater, geotechnical and rock characteristics etc. that may be relevant.

PART -III
EXPLORATION NORMS FOR DIFFERENT TYPES OF DEPOSITS
(The grid spacing given below are indicative. A closer spacing may be necessary depending upon the geological complexity of the deposit)

Type of deposit & principal minerals	G4 stage	G3 stage	G2 stage	G1 stage	Remarks
1. Bedded Stratiform and tabular deposits of regular and irregular habit:	Scout drilling, if necessary (In line with grid specified by the Central	For limestone, bauxite, potash and salt beds the grid spacing of	For limestone, bauxite, potash and salt beds the grid spacing of	For limestone, bauxite, potash and salt beds the grid spacing of	For shallow surficial deposits continuing to a depth of up to 6m from surface pitting

Iron ore, manganese ore, bauxite, limestone, chromite/ potash and salt beds etc.	Government from time to time)	bore holes may be 800m or closer for deposits of regular habit and 400m or closer for irregular habit; for others the spacing may be 400m or closer for regular and 200m or closer for irregular habit.	bore holes may be 400m or closer for regular habit and 200m or closer for irregular habit; for others the spacing may be 200m or closer for regular habit and 100m or closer for irregular habit.	bore holes may be 200m or closer for regular habit and 100m or closer for irregular habit; for others the spacing may be 100m or closer for regular habit and 50m or closer for irregular habit.	in a grid pattern as per the grid spacing for various levels of prospecting may suffice. For deposits continuing further in depth drilling is recommended.
II. Lenticular bodies of all dimensions including bodies occurring en echelon, silicified linear zones of composite veins. Lenses, pockets, stock-works; Irregular shaped modest to small sized bodies Iron and manganese ore bodies in lateritoid terrain, pocket bauxite and nickel cobalt laterites, base metal sulphides of Cu-Pb-Zn- Sb-Hg, podiform chromite, auriferous quartz reefs, PGM, graphite lenses, molybdenum, tin bodies, pyrite, skarn bodies of scheelite, wollastonite, fluorite etc., vermiculite, magnesite, insitusilimanie and kyanite lenses etc.	Scout drilling, if necessary (In line with grid specified by the Central Government from time to time)	Bore-hole spacing along strike may be kept 200-100m or closer interval.	Bore-hole spacing along strike may be kept 100-50m or closer. In specific cases, depending on necessity, it may be brought down to 25m or closer, especially for precious metals.	Bore-hole spacing along strike may be kept 50-25m or closer interval	Exploratorymine openings- open pit or underground with bulk determination of grades wherever necessary at G2 and G1 stage.
III. Gem- stones and rare metal pegmatites, reefs and veins/pipes: Tin-tungsten-tantalum-niobium-molybdenum veins and pegmatites; Beryl, topaz, emerald deposits, diamond, wolframite deposits, pockets/lenses/veins of fluorite in carbonatites etc.	Scout drilling, if necessary (In line with grid specified by the Central Government from time to time.)	8 to 10 pits/ trenches per sq.km. Bore holes to test the continuity of host rock, at 200m or closer interval.	Trenching preferably at 50m. interval Bore-hole to test continuity of host rock at 100-50m or closer interval	Bore hole spacing may be kept closer to that of G2 stage	Exploratory mine openings- open pit or underground with bulk determination of grades & recovery wherever necessary at G2 and G1 stage.
IV. Float or Placer deposits: Iron, manganese ore float; Placer tin and gold deposit; garnet, ilmenite, rutile, zircon; diamond, corundum, kyanite, sillimanitefloats .	Scout drilling, if necessary (In line with grid specified by the Central Government from time to time)	400m along trend of the deposit and 200m across	200m* along trend of the deposit and 100m across	100m* along the trend of the deposit and 50m across	For shallow deposits pitting in grid may suffice. Stream sediment or placer sediment sampling as may be required at each stage. Laboratory scale separation and testing and analysis of

					concentrates.

*In case replenishment is reported in placer deposit associated with beach sand, river sand etc., periodic reassessment of resources may be necessary.

Part IV-A
Reporting of Mineral Resources

A Geological Study Report for estimation and reporting of Mineral Resources integrating all data of exploration, sampling and testing generated through aerial, geophysical, geochemical, geological surveys and technological study may be undertaken for every stage of exploration i.e. from G4 to G1 for assessing the resources. The study should incorporate the following contents among other things.

Sl. No.	Contents	Explanation
1	Title & Ownership	– Name, address of the prospector including E-mail ID, telephone number. – Details of period of prospecting/mineral right if any. – Details of exploration agency, qualification, experience of associated technical persons engaged in exploration.
2	Details of the area	– Village, District, State – Survey of India Toposheet No., Geo-coordinates of the area of all corner points – cadaster details of the area with land use, area under forest with type of forest – mineral(s) under investigation
3	Infrastructure &Environment	– Local infrastructure, host population, historical sites, forests, sanctuaries, national parkand environmental settings of the area.
4	Previous exploration	– Details of previous exploration carried out by other agencies/parties. – In case the area forms part of the area covered under earlier exploration then the sameshould be shown in a map with proper scale.
5	Geology	– Brief regional geology of the area outlining the broad geological, structural frame work.

		– Deposit type, geological setting and details of dip, strike, old workings, surface exposures etc. of the area under study also of adjoining nearby areas if the information is likely to have an impact on the area under study. – Reliable geological map of appropriate scale with geo-coordinates showing major lithological units, structural & tectonic features; extent of surface mineralisation, structure, location of boreholes, pits, trenches, old workings etc. – Cross sections at suitable intervals showing vertical projections of litho-units and mineralization. – The extent and variability of the mineralization expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.
6	Aerial/ground geophysical/ geochemical data	Details of aerial, geophysical & geochemical survey results taken up if any and their results.
7	Technological investigation	– Details of technological investigation (pitting/ trenching/drilling etc.) – Data spacing for reporting of Exploration Results: Whether the data spacing and distribution is based on Part I and II of the schedule and is sufficient to establish thedegree of geological and grade continuity appropriate for the Mineral Resource estimation procedure(s) and classifications applied.
8	Location of data points.	– Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. – Quality and adequacy of topographic control.
9	Sampling Technique	– Nature and quality of sampling (e.g. cut channels, random chips etc.) and measures taken to ensure sample representivity.
10	Drilling technique& drill sampling employed	– Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic etc.) and details (e.g. core diameter, triple or standard tube, collar R.L,azimuth, inclination, coordinates of bore holes etc.). – Whether core and chip sample recoveries have been

		properly recorded and results assessed. – Measures taken to maximise sample recovery and ensure representative nature of the samples. – Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. Logging: -Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.
11	Sub-sampling techniques and sample preparation	– If core, whether cut or sawn and whether quarter, half or all core taken. – If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry. – For all sample types, the nature, quality and appropriateness of the sample preparation technique. – Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples. – Measures taken to ensure that the sampling is representative of the in situ material collected. – Whether sample sizes are appropriate to the grain size of the material being sampled.
12	Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. Check analysis of atleast 10% of samples may be analyzed from third party NABL accredited/or department of science & technology (DST) / BIS recognized laboratories or government laboratories for assessing the acceptable levels of accuracy.
13	Moisture.	– Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.
14	Bulk Density	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method

		used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.
15	Resource estimation techniques	– Discussion on sufficient data density to assure continuity of mineralization and synthesis adequate data base for estimation procedure used. – The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points. – The basis for the classification of the Mineral Resources into varying confidence categories. – The assumptions made regarding recovery of byproducts. – Detailed description of the method used and the assumptions made to estimate tonnages and grades (section, polygon, inverse distance, geostatistical, or other method). – Description of how the geological interpretation was used to control the resource estimates. – Discussion of basis for using or not using grade cutting or capping. If a computer method was chosen, description of programmes and parameters used. – Geostatistical methods are extremely varied and should be described in detail. The method chosen should be justified. The geostatistical parameters, including the variogram, and their compatibility with the geological interpretation should be discussed. Experience gained in applying geostatistics to similar deposits should be taken into account. – Data verification and /or validation procedures used.
16	Further work	– The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large scale step-out drilling).
17	Annexures/ enclosures to the report	The report shall include all relevant data including maps, sections, logs, analysis reports, photographs etc. in support of the estimates made.
18	Any other information	Any other information as may be available or required by any authority as prescribed

PART IV-B

ESTIMATION AND REPORTING OF DIAMONDS AND OTHER GEMSTONES

Criteria listed in Part IVA also apply to this group; additional guidelines are available in the 'Guidelines forthe Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.

1	Indicator minerals	– Reports of indicator minerals, such as chemically/ physically distinctive garnet, ilmenite, chrome spinel and chrome diopside, should be prepared by a suitably qualified laboratory.
2	Source of diamonds	– Details of the form, shape, size and colour of the diamonds and the nature of the source of diamonds (primary or secondary) including the rock type and geological environment.
3	Sample collection	– Type of sample, whether outcrop, boulders, drill core, reverse circulation drill cuttings, gravel, stream sediment or soil, and purpose, e.g. large diameter drilling to establish stones per unit of volume or bulk samples to establish stone size distribution. – Sample size, distribution and representativity.
4	Sample treatment	– Type of facility, treatment rate, and accreditation. – Sample size reduction. Bottom screen size, top screen size and re-crush. – Processes (dense media separation, grease, X-ray, hand-sorting etc.). – Process efficiency, tailings auditing and granulometry. – Laboratory used, type of process for micro diamonds and accreditation.
5	Carat	One fifth (0.2) of a gram (often defined as a metric carat or MC).
6	Sample grade	– Sample grade in this section is used in the context of carats per units of mass, area or volume. – The sample grade above the specified lower cut-off sieve size should be reported as carats per dry metric tonne and/or carats per 100 dry metrictonnes. For alluvial deposits, sample grades quoted in carats per square metre or carats per cubic metre are acceptable if accompanied by a volume to weight basis for calculation.

		– In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive sample grade (carats per tonne).
7	Reporting of Bulk Exploration Results.	– Complete set of sieve data using a standard progression of sieve sizes per facies. Sampling results, global sample grade per facies. Spatial structure analysis and grade distribution. Stone size and number distribution. Sample head feed and tailings particle granulometry. – Sample density determination. – Per cent concentrate and undersize per sample. – Sample grade with change in bottom cut-off screen size. – Adjustments made to size distribution for sample plant performance and performance on a commercial scale. – If appropriate or employed, geostatistical techniques applied to model stone size, distribution or frequency from size distribution of exploration diamond samples. – The weight of diamonds may only be omitted from the report when the diamonds are considered too small to be of commercial significance. This lower cut-off size should be stated.
8	Grade estimation for reporting Mineral Resources and Ore Reserves	– Description of the sample type and the spatial arrangement of drilling or sampling reporting Mineral designed for grade estimation. – The sample crush size and its relationship to that achievable in a commercial treatment plant. – Total number of diamonds greater than the specified and reported lower cut-off sieve size. – Total weight of diamonds greater than the specified and reported lower cut-off sieve size. – The sample grade above the specified lower cut-off sieve size.
9	Value estimation	– Valuations should not be reported for samples of diamonds processed using total liberation method, which is commonly used for processing exploration samples.

		– To the extent that such information is not deemed commercially sensitive, Public Reports should include: • Diamonds quantities by appropriate screen size per facies or depth. • Details of parcel valued. • Number of stones, carats, lower size cut-off per facies or depth. • The average $/carat and $/tonne value at the selected bottom cut-off should be reported in US Dollars. The value per carat is of critical importance in demonstrating project value. • The basis for the price (e.g. dealer buying price, dealer selling price etc.). • An assessment of diamond breakage.
10	Classification	– In addition to general requirements to assess volume and density there is a need to relate stone frequency (stones per cubic metre or tonne) to stone size (carats per stone) to derive grade (carats per tonne). The elements of uncertainty in these estimates should be considered, and classification developed accordingly.

PART-V
CONTENTS OF PRE-FEASIBILITY REPORT

Contents of a Prefeasibility Report for Estimation and Reporting of Mineral Reserves based on a Geological Report prepared as per Part IV-A and Part IV-B. The Geological Study Report shall also form a part of the Prefeasibility Report.

Sl. No.	Contents	Explanation
1	Mineral Resource estimate for conversion to Mineral Reserve	– Description of Mineral Resource estimate used as a basis for the conversion to a Mineral reserve. – Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Mineral Reserves. – The type and level of study undertaken to enable Mineral Resources to be converted to Mineral Reserves i.e. Prefeasibility/Feasibility level.
2	Cut off Parameters	– The basis of the adopted cut-off grade(s) or quality parameters applied, including the basis, if

		parameters applied, including the basis, if appropriate, of equivalent metal formulae& the threshold values prescribed.
3	Miningfactors or assumptions	– The method and assumptions used to convert the Mineral Resource to a Mineral Reserve (i.e.either by application of appropriate factors byoptimisation or by preliminary or detailed design supported with Conceptual plan for mining). – Anticipated Ore to OB ratio, mine recoveries, dilutions etc. for both open cast and U/G workings. – The choice of, the nature and the appropriateness of the selected mining method(s), the size of the selected mining unit (length, width, height) and other mining parameters including associated design issues such as pre-strip, access, etc. – The assumptions made regarding geotechnical parameters (eg. pit slopes, stope sizes, etc.), grade control and pre-production drilling. – The major assumptions made and Mineral Resource model used for pit optimisation (if appropriate). – The mining dilution factors, mining recovery factors, and minimum mining widths used. – The infrastructure requirements of the selected mining methods. Where available, the historic reliability of the performance parameters.
4	Metallurgical factors or assumptions	– The metallurgical process proposed and the appropriateness of that process to the type of deposit. – The nature, amount and representativeness of metallurgical test work undertaken and the metallurgical recovery factors applied. – Any assumptions or allowances made for deleterious elements. – The existence of any bulk sample or pilot scale test work and the degree to which such samples are representative of the ore body as a whole. – The tonnages and grades reported for Mineral Reserves should state clearly whether these are in respect of material to the plant or after recovery. Comment on existing plant and equipment, including an indication of replacement and salvage value.

5	Cost and revenuefactors	– The derivation of, or assumptions made, regarding projected capital and operating costs. – The assumptions made regarding revenue including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, etc. – The allowances made for royalties payable, both Government and private. – Basic cash flow inputs for a stated period. – Yearly planned production, Net Present Value (NPV) and Internal Rate of Return (IRR) of the deposit, intrinsic value of the deposit based on annual projected production.
6	Market assessment	– The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. – A customer and competitor analysis along with the identification of likely market windows for the product. – Price and volume forecasts and the basis for these forecasts. – For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.
7	Other modifying factors	– The effect, if any, of natural risk, infrastructure, environmental, legal, marketing, social or governmental factors on the likely viability of a project and/or on the estimation and classification of the Mineral Reserves. – The status of titles and approvals critical to the viability of the project, such as mining leases, discharge permits, government and statutory approvals. – Environmental descriptions of anticipated liabilities. Location plans of mineral rights and titles.
8	Classification	– The basis for the classification of the Mineral Reserves into varying confidence categories. – Finalization of estimates of grade wise mineable quantities in contemplation with proposed preliminary mine design/conceptual plan subject to

		all necessary approvals/contracts have been confirmed or there are reasonable expectations that all such approvals/contracts will be obtained within a reasonable timeframe and with certification that that Economic viability is not affected by short-term adverse market conditions provided that longer-term forecasts remain positive.