



**MINISTRY OF ENERGY AND ENERGY INDUSTRIES  
MINERALS DIVISION  
PROCESSING PLAN TEMPLATE**

**Please write legibly in black or blue ink. Your responses are not limited to the spaces available. Supplemental pages are to be inserted where required. Please be advised that incomplete / inadequate submissions shall not be accepted and the Applicant will be required to resubmit a properly completed template.**

**1. GENERAL INFORMATION**

Information on Applicant		
NAME:		TELEPHONE:
ADDRESS:		EMAIL ADDRESS:
FACSIMILE:		
Contact (Person duly authorized by Applicant, <u>leave blank if same as above</u> )		
NAME:		EMAIL ADDRESS:
PHONE:	FACSIMILE:	
PROCESSING PLANT LOCATION:	Acreage of Land: (Acres / Hectares)	Land Ownership: <input type="checkbox"/> Private  <input type="checkbox"/> State
Certificate of Environmental Clearance Reference Number:		Water Abstraction Licence Number:
Town and Country Planning Approval Number:		Survey Plan Number:  Datum for stated elevations:

Version 2

**2. General Site Description:**

List the current land use of the site	<b>For all nearby communities, give the following details</b>			
	<i>Name</i>			
	<i>Characteristics (e.g. agricultural, residential, etc.)</i>			
	<i>Location</i>			
	<i>Population Size</i>			

**Vegetation Type**

Primary forest   
 Secondary forest   
 Evergreen seasonal forest   
 Semi-evergreen seasonal forest   
 Deciduous seasonal forest

Grasslands   
 Bush lands   
 Cultivated lands

Acreage covered by vegetation (Ac/Ha): \_\_\_\_\_   
Acreage to be cleared (Ac/Ha): \_\_\_\_\_

Acreage to be left undisturbed (Ac/Ha): \_\_\_\_\_

**Topography and Gradient:**

Generally flat

Rolling/Undulating

Hilly/Mountainous

Please provide the gradient: \_\_\_\_\_

**DRAINAGE:**

*Type of drainage present on and near the processing site, tick all that apply:*

**NATURAL SURFACE DRAINAGE:**

- Watercourses                       Natural outfalls                       Wetlands                       Perennial                       Intermittent

**MAN-MADE DRAINAGE:**

- Roadside drains     Perimeter drains     Storm-water ponds     Silt traps     Settling ponds     Man-made outfalls  
(connected to municipal drainage)

Specify type of outfalls present in relation to settling ponds on site:

- Man-made     Outfall to rivers     Closed Loop     Use of silt traps

Give details of measures in place to control sediment discharge after periods of rainfall.

**3. Management of Water Sources:** *(please liaise with the Water Resources Agency for pertinent accurate information)*

**Groundwater resources:** *present on and near the processing site, tick all that apply*

**Aquifer name:** \_\_\_\_\_

Type:       Confined                       Unconfined

**Acreage of recharge areas:**  
(Hectares/Acres)

**Water table:**  
Depth (m)

Give details of measures in place to control contamination of groundwater resources.

**Well information for any water-wells within or close to the processing area**

Location (northings, eastings) ( <i>Naparima Datum</i> )	Type (production/monitoring)	Ownership (private/state)

**Water utilization**

<i>Source</i>	<i>Rate of abstraction (gallons/month)</i>	<i>Monthly usage (gallons/month)</i>	<i>Method of treatment of raw water</i>
<i>Groundwater</i>			
<i>Surface water</i>			
<i>Potable water</i>			

**Official Signature and Stamp from the Water Resources Agency**







## 7. **Diagrams and Plans:**

i. Layout Plan of the Processing Operations- Please produce a detailed scaled drawing showing the location of the following, where applicable:

- Land boundaries
- Vegetative buffers
- Known groundwater recharge area(s)
- Offices and buildings
- Hard ground surface area(s)
- Fuelling site (showing the location of storage tanks and bunds)
- Processing Plant
- Settling ponds
- Silt Traps
- Catchments
- Water discharge points
- Check Dams
- Natural and man-made watercourses, and associated berms to be constructed
- Stockpiles for unprocessed minerals
- Stockpiles for processed minerals
- Berms
- Roadways in the vicinity and on the site
- Garage for storage and maintenance of equipment
- Any other feature(s) on the site
- Metered water abstraction point
- Water pumps

*Please note that this plan must be approved by the Water Resources Agency*

ii. Processing Flow of Operations- Please provide a block diagram giving details of the processing operations and also include the following:

- Description of the operations of each plant (mobile & fixed)
- Functions of the plant
- Plant Intake (plant capacity)
- Plant output (Material produced)

iii. Water Management- Please provide details of how water and waste-water would be managed on site from the intake source to eventual re-use for washing minerals and provide a layout plan that includes the following:

- Closed-loop system: give maximum storage capacity, dimensions, location and relative depths of ponds
- Open system: identify location of discharge for treated wastewater
- Drainage system to accommodate the run off from the processing plant and stockpiles
- Position of clarifiers & other water treatment facilities where available
- Position of water pumps
- Position of metered water abstraction points



**8. If a CEC has not been obtained, please provide:**

- i. A conceptual **Storm-water Management Plan** for the site stating:
  - a. The **temporary and permanent measures** that will be implemented during the site preparation, construction and post-construction phases to ensure that there is no net increase in peak runoff for a 1:25 rainfall event from the pre-development to the post-development phase
  - b. The pre-development flow value ( $Q \text{ m}^3/\text{s}$ ) for the proposed site such that the existing volume of surface runoff for the site can be quantified
  - c. The description of any onsite measures that would be instituted to maintain the pre-development flow value during the construction and post-construction phases of the proposed development
  - d. The proposed storm-water management measures can accommodate the post-development flow value and reduce it to the pre-development flow value ( $Q \text{ m}^3/\text{s}$ )
  - e. Calculations for determining the pre-and post-development flow value ( $Q \text{ m}^3/\text{s}$ ) for the proposed site
  - f. The drainage mechanisms
  - g. The storm-water retention/detention ponds, catchments, landscaping, etc
  - h. The proposed plans for the inspection and maintenance of any physical structures (e.g. detention/retention ponds, catchments, etc.) that may be constructed on the site.
- ii. A **Sediment and Erosion Management Plan** for the site stating the:
  - a. Temporary and permanent measures that will be implemented during the site preparation, construction and operational phases of the development
  - b. Possible measures such as, but not limited to, phased clearing, settling pond(s), filtering devices placed within drains and re-vegetation, that will be implemented to minimise or prevent the movement or migration of sediments off site due to the proposed site activities.
- iii. A **Monitoring and Reporting Plan for the Quality of Water Discharged** from the site
- iv. The **Mitigation Measures** to be applied for dust pollution, noise pollution, emissions from equipment/vehicles, soil pollution, and fuel and oil spills

\_\_\_\_\_  
Date

\_\_\_\_\_  
Authorised Signature

\_\_\_\_\_  
Name (block letters)