



## DEPARTMENT OF ENVIRONMENT QUARRY APPLICATION FORM

## QUARRY APPLICATION UNDER THE ENVIRONMENTAL QUALITY ACT 1974 AND THE REGULATIONS UNDER IT

To ensure efficient processing of your application:

- Complete all sections of this application form
- Ensure all supporting documents are submitted with the application form

Please submit completed form to the Department of Environment (State Office) where the project/premise is located. The application form is to be submitted after the EIA report has been approved.

JABATAN ALAM SEKITAR
KEMENTERIAN SUMBER ASLI DAN ALAM SEKITAR
DEPARTMENT OF ENVIRONMENT
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT

## QUARRY APPLICATION UNDER THE ENVIRONMENTAL QUALITY ACT 1974 AND THE REGULATIONS UNDER IT

A		IDENTIFICATION	
1.	(i) Name of applicant		
	(ii) Identity Card. Number		
	(iii) Address of applicant		_
			_
	(iv) Telephone number	Fax numbere-mail address	_
2.	(i) Name of premise		
	(ii) Address of premise		_
			_
	Telephone number	Fax number	
	(iii) Latitude of site/premise	degrees minutes seconds	
	Longitude of site/premise	degrees minutes seconds	
4.	Consultant/Agent (if applicab	e)	
	(i) Name of company		_
	(ii) Contact person		_
	(iii) Telephone Number	e-mail address	_
В.		LOCATION OF PROPOSED QUARRY	

5. Please attach a location plan and/or map that provide sufficient details on it to enable the site to be located for inspection and to assist in describing your proposal. Maps/plans are required to show the following:

Property boundary and neighboring properties (name of public facilities such as school, clinic, hospital etc. within 1 km radius from the location of proposed quarry) Location of the proposed quarry including access roads, nearby settlements/towns, etc. Location of any waterways or wetlands in the vicinity Orientation (that is north arrow and scale) Prevailing wind C. ENVIRONMENTAL CONCERNS AND DISCHARGES TO THE ENVIRONMENT 6. What types of discharges are discharged from the quarry facility? Please check wherever applicable Discharge of treated storm water Discharge of treated sewage \*Discharge of effluent (ex. effluent resulting from use of water spray system) Placement of overburden onto land Discharge of dust into the air Noise emission Vibration (\* effluent is understood to mean any wastewater generated by reason of the production processes taking place at any industrial premise) D OPERATIONAL INFORMATION 7. Schedule of operation (i) Number of shifts per day Average \_\_\_\_\_\_Maximum \_\_\_\_\_ (ii) Number of hours of operation Average \_\_\_\_\_ Maximum \_\_\_\_ \_\_\_\_\_ a.m. to \_\_\_\_\_ p.m. (iii) Operating days All days except public holidays List of raw materials/chemicals stored on site (i) Fuel oil Storage tank capacity: \_\_\_\_\_ L Storage tank designed with bunds of 110% capacity? Please circle: Yes/No If No, provide explanation

	(ii) Chemical (s)	
	Name(s):  Quantity stored:	
	Quality stored.	
9.	Production capacity and list of products	
	Aggregate size (mm)	Quantity per month (metric tons)
E	INFORMATION ON	N WATER SUPPLY AND CONSUMPTION
10.	Water use Source	Average quantity per day (m <sup>3</sup> )
	(i) Potable water	
	(ii) Water for	
	water sprayer system (iii) Others	<del></del>
F	SEWAGE TI	REATMENT AND DISPOSAL
11	(i) Number of employees	Maximum
	(ii) Type of sewage treatment system	
	(ii) Type of sewage areament system	
	Capacity (Population Equivalent/PE)	
	Capacity (Population Equivalent/PE)	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discl  (iv) Quality of the treated sewage to be discharged.	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS*
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discl  (iv) Quality of the treated sewage to be disch	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS*
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discl  (iv) Quality of the treated sewage to be discharged.	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS* nance activity and schedule*
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discl  (iv) Quality of the treated sewage to be disched.  (v) Describe sewage treatment system maintender.  (vi) Describe method of disposal of sludge from	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS* nance activity and schedule*
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discletive Quality of the treated sewage to be disched to the Describe sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage discletion (vi) Describe sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage to be disched (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treat	harged m³/day Flow meter will be installed? (Please circle): Yes/No  narged in terms of BOD <sub>5</sub> , SS*  nance activity and schedule* m sewage treatment system *
G	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discletive Quality of the treated sewage to be disched to the Describe sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage discletion (vi) Describe sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage to be disched (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system maintent (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treatment system (vi) Describe method of disposal of sludge from the treated sewage treat	harged m <sup>3</sup> /day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS* nance activity and schedule*
<b>G</b> 12.	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage disclaration (iv) Quality of the treated sewage to be discharated (v) Describe sewage treatment system maintent (vi) Describe method of disposal of sludge from *(please use attachment if required)  STORMWATER MAN.	harged m³/day Flow meter will be installed? (Please circle): Yes/No  narged in terms of BOD <sub>5</sub> , SS*  nance activity and schedule* m sewage treatment system *
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage disclaration (iv) Quality of the treated sewage to be discharated.  (v) Describe sewage treatment system maintend (vi) Describe method of disposal of sludge from *(please use attachment if required)  STORMWATER MAN.  (i) Attach Erosion and Sediment Control Plane	harged m³/day Flow meter will be installed? (Please circle): Yes/No harged in terms of BOD <sub>5</sub> , SS* mance activity and schedule* m sewage treatment system *
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discletive (iv) Quality of the treated sewage to be disched (v) Describe sewage treatment system mainter (vi) Describe method of disposal of sludge from *(please use attachment if required)  STORMWATER MAN.  (i) Attach Erosion and Sediment Control Plane	harged m³/day Flow meter will be installed? (Please circle): Yes/No  harged in terms of BOD <sub>5</sub> , SS*  mance activity and schedule*  m sewage treatment system *  AGEMENT AND DISPOSAL  lan (ESCP) approved by the relevant authority
	Capacity (Population Equivalent/PE)  (iii) Estimated quantity of treated sewage discletive (iv) Quality of the treated sewage to be disched (v) Describe sewage treatment system mainter (vi) Describe method of disposal of sludge from *(please use attachment if required)  STORMWATER MAN.  (i) Attach Erosion and Sediment Control Plane	harged m³/day Flow meter will be installed? (Please circle): Yes/No  harged in terms of BOD <sub>5</sub> , SS*  mance activity and schedule*  m sewage treatment system *  AGEMENT AND DISPOSAL  lan (ESCP) approved by the relevant authority

(viii) Description (ix) Icon Name	ribe and attach drawings showing the location of discharge point(s) identifying the names of water courses nich the discharge occurs  y outlet structure? Yes/No (Please circle)  use describe:
(viii) Description (ix) Icon Name	y outlet structure? Yes/No (Please circle) see describe:
(viii) Desc	y outlet structure? Yes/No (Please circle) use describe:
(vii) Any o	y outlet structure? Yes/No (Please circle)
(vii) Any o	y outlet structure? Yes/No (Please circle)
(vii) Any o	y outlet structure? Yes/No (Please circle)
(vii) Any o	y outlet structure? Yes/No (Please circle)
to which	y outlet structure? Yes/No (Please circle)
to which	y outlet structure? Yes/No (Please circle)
to which	y outlet structure? Yes/No
	nich the discharge occurs
	nich the discharge occurs
(v) Expla	lain how accumulated material in the sediment pond will be managed
(iv) Desc	scribe the maintenance procedure of the sediment pond(s)

(ii)	Describe and attach drawings showing the location of all discharge points and identify the names of water courses to which the discharge occurs (if different from the discharge point identified in section G)
	Effluent is understood to mean wastewater produced by reason of the production processes taking place at any industrial facility)
I	VEGETATION CLEARING, TOPSOIL AND OVERBURDEN MANAGEMENT
Vegetat	ion Clearing
14. (i)	Describe the method of vegetation clearing to be practiced in order to minimize the potential for run off and soil erosion
(ii)	Describe the method of biomass disposal
<u>Topsoil</u>	<u>Management</u>
15. (i)	Describe and attach drawings showing the location and how top soil removed during vegetation clearing will be managed for future use and in order to reduce the potential for soil erosion
<u>Overbu</u>	rden Management
16. (i)	Describe and attach drawings showing the location of overburden dumps in relation to the quarry operations

	(11)	Describe how these areas are managed to ensure the potential for run off and erosion is minimized
J		DRILLING AND BLASTING
<u>Dri</u>	illing	
17.	(i)	Drilling operation hours:a.m. top.m.
	(ii)	Drilling machine
		Type:
		Model:
	(iii)	Type dust pollution control (please check where relevant)
		Dust extraction system
		Water injection
	, <b>.</b>	
	(iii)	Noise suppression (please describe) :
	(iii)	Noise suppression (please describe) :
	(iii) 	Noise suppression (please describe) :
Rla		
	sting	
		Operation hours of blasting activity: a.m. top.m.
		Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)
	asting (i) (ii)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators  Electric (NONEL) detonators with multirow blasting delay/hole design  Typical airblast overpressure expecteddb(A)
	asting (i) (ii)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators  Electric (NONEL) detonators with multirow blasting delay/hole design  Typical airblast overpressure expected
	asting (i) (ii)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators  Electric (NONEL) detonators with multirow blasting delay/hole design  Typical airblast overpressure expected
	asting (i) (ii)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators  Electric (NONEL) detonators with multirow blasting delay/hole design  Typical airblast overpressure expected
	(i) (ii) (iv) (v)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators  Electric (NONEL) detonators with multirow blasting delay/hole design  Typical airblast overpressure expected
	(i) (ii) (iv) (v)	Operation hours of blasting activity: a.m. top.m.  Type of detonators used (please check)  Electronic detonators with multirow blasting delay/hole design  Typical airblast overpressure expecteddb(A)  Involve secondary blasting? (please circle) Yes/No  If Yes, type of blasting to be used: hydraulic rock breakers or by explosive  Identify the competent person approved by the relevant authority who will be responsible for the above responsibilities
	(i) (ii) (iv) (v)	Operation hours of blasting activity:a.m. top.m.  Type of detonators used (please check)  Electronic detonators with multirow blasting delay/hole design  Typical airblast overpressure expecteddb(A)  Involve secondary blasting ? (please circle) Yes/No  If Yes, type of blasting to be used: hydraulic rock breakers or by explosive  Identify the competent person approved by the relevant authority who will be responsible for the above responsibilities (blasting and noise measurement)

19.	(i)	Typical Peak Particle V Identify the competent (vibration measure Name:	/elocit person ment)	y expectedmm/s ,		e for the above responsibilities	S
K				DUST EMISSION AND CONTROL			
Nor	ı fug	itive sources (from pro	cessin	g activities)			
20.				ctivities that may result in the discharge of dus	t into the air.	Provide a schematic di agran	n
21.		Moisture content of rav		rial/product% where relevant)			
•		(presse	(i)	totally contained	Yes	No	
			(ii)	totally enclosed			
			(iii)	fitted with a water spray system over the crusher aperture.*			
			(iv)	if water suppression used, crusher fitted with water flow detectors?			
			(v)	discharge from crusher enclosed ?			
			(vi)	water suppression system			
				required pressure			
				Extra pumps required ?			
			(vii) s	econdary crushing operations conducted?			
				If Yes, dust controlled by: enclosure  And ventilated through air pollution control  equipment			

• •	ir pollution control equipment	
2. Screens (please check where relevant)		
(i) type of sc	reen ( 2 deck/3 deck.?)	
(ii) lower scr	reen enclosed? Yes N	0
(iii) discharge	from screen enclosed? Yes No	
3. Conveyors (please check where relevant	t) Yes No	
4. Stockpiles (please check where relevan	t)	
(i) drop heightm		
(ii) sizes of aggregates	mm	
(iii) fencing: Yes Bur	nding: Yes Wind breaks: Ye	es
No	No No	o
(iv) dust suppressants: Yes  (v) water spray system: Yes  (vi) stone ladder: Yes  (vii) covers on stockpile: Yes  5. Specify air pollution control equipment Attach engineering drawings where rel	No N	n each generating point.
Machinery/Dust generating point	Brief description of control equipment	Drawing No.

<u>Fugit</u>	ive sources (approach roads, haul roads, stock piles, etc)
26. (i	Describe all fugitive sources of dust emission. Provide relevant drawings/plans where relevant
(	ii) Describe the measures and management procedures that will be put in place to minimize and control fugitive dust emissions
(	iii) Describe the method of monitoring the effectiveness of the above measures, record keeping procedure and format and who would be put in charge of this responsibility
Com	petent Person
27.	Competent Person
I	Identify the name and qualification of the personnel who will be in charge of the operation and maintenance including the performance monitoring of the pollution control system to minimize dust emission (wet dust suppression system and deportrol system)
1	Name:
(	Qualification:

L	NOISE CONTROL
28.	Describe measures to be taken to control noise level including at the planning stage and engineering measures. Attach plans/drawings where relevant
29.	Please check where relevant
	(i) Enclosures provided around (please check where relevant):
	Crushing plant: Yes No Screening plant: Yes No
	Other machinery/plant (please describe)
	(ii) Solid barrier (e.g. bund walls, topographical features) used as 'in-line' sound level reduction measure? (please explain)
	(iii) Vegetation belt provided? (please explain)
	——————————————————————————————————————
	(iv) Silencers fitted on (please check where relevant)
	Compressors: Yes No Rotary engines: Yes No
	Generators: Yes No Exhausts: Yes No
I	Plans/Drawings attached:
	Descriptions:
	Reference Numbers:

M	VISUAL IMPACT REDUCTION
	30. Describe planning and engineering measures to be instituted to minimize the concern of visual impact due to
	quarry activities (attach drawings where applicable)
N	MANUFACTURING PROCESS AND MACHINERIES EMISSION POINTS
31.	Please provide the following
	(i) Production process flow chart showing points of air emission and effluent generation.
	(ii) Working engineering drawings/plans of the machineries in plan view and in elevation
	(iii) List of all production machineries (including fuel burning equipment*, if any)
	•
	•
	•
	•
	•
	•
	•
	•
(	(*Note: Fuel burning equipment needs prior written approval before installation. Use the relevant application form)
o	REHABILITATION AND AFTER USE
32.	Describe plans for rehabilitating the site which include stabilization, regressing and replanting and final land use after closure.

P	DECLARATION	
Ideclare that all the information given	the applicant/authorized agent*** of the applicant this application is to the best of my knowledge and belief true and correct.	icant, hereby
Date:	Signature of applicant/*** Authorized agent:	
Telephone Number:	Full Name:	
	I.C. Number	
Fax Number:	Designation:	
	Official Stamp of the Company:	
For and on behalf of:		
Telephone Number:	Fax Number:	
*** Delete whichever is not applicab	le	
Dated: September 2007		