ENVIRONMENT PROTECTION (CONTROL OF PIG FARMING POLLUTION) RULES 2008

In exercise of the powers conferred by paragraph 60(2)(d) & (k) of the Environment Protection Enactment 2002, the Minister makes the following rules:

PART I PRELIMINARY

Citation and commencement

- 1. (1) These rules may be cited as the Environment Protection (Control of Pig Farming Pollution) Rules 2008.
- (2) These Rules come into operation on such date as the Minister may, by notification in the *Gazette*, appoint.

Interpretation

2. In these Rules, unless the context otherwise requires –

"best available techniques" means techniques which -

- (a) have been developed on a scale which allows implementation under economically and technically viable conditions, taking into consideration the cost and advantages, irrespective of whether or not the techniques are used or produced in Malaysia, as long as they are reasonably accessible to the owner of the pig farm;
- (b) have been found to be the most effective in achieving a high general level of protection of the environment; and
- (c) includes both the technology used and the way in which the application or installation is designed, built, operated and maintained;

"BOD₅" means bio-chemical oxygen demand, where BOD is determined after five days incubation at 20° C;

"COD" means chemical oxygen demand;

"Director" means the Director of the Environment Protection Department;

"Enactment" means the Environment Protection Enactment 2002;

"environmental enforcement officer" means any officer authorised in writing by the Director under section 26 of the Environment;

"interim period" means the period allowed by the Director for the existing pig farm to discharge liquid waste into watercourses subject to the standard of treatment of the liquid waste as specified in the Fourth Schedule;

"existing pig farms" means pig farms established before the date of commencement of these Rules;

"liquid waste" means waste with an average dry matter content less than twenty percent by weight;

"Minister" means the Minister charged with the responsibility for environmental protection;

"parameter" means any of the factors shown in the Fourth Schedule;

"permit" means a permit issued by the Director to allow the discharge of liquid waste into watercourses during the interim period, or to allow the disposal of solid waste or sludge on land outside the pig farm;

"person" has the same meaning assigned to it by the Interpretation and General Clauses Enactment 1963 [Enactment No. 34 of 1963];

"pig" means any pig of any age, sex or type;

"pig farm" means any area of land or premises used for pig farming and having a standing population of fifty (50) or more pigs, or an area of land or premises which has been licensed for pig farming by the authority having jurisdiction on livestock farming;

"pig farming" means breeding, keeping, rearing and treatment of pigs including the treatment, storage, transportation and disposal of waste;

"pig farming area" means an area designated for an integrated pig farming activities including the slaughtering and processing of pigs;

"sites" means any structure, house, shed or any other enclosure used for keeping pigs;

"solid waste" means waste with an average dry matter content ranging from twenty to one hundred percent by weight;

"sludge" means sludge extracted or pumped out from the liquid waste storage facilities;

"TSS" means total suspended solids;

"waste" means faeces, urine, blood, carcass or body parts of pig and includes wasted feeds, water used for the washing, bathing or cleansing of pigs, or water or any liquid used for the flushing and cleansing of any pig farm;

"waste storage facilities" refers to an earthen, steel or concrete containment system, or any other appropriate system with or without a covering which is used for the storage and treatment of liquid or solid waste;

"waste treatment facilities" includes the waste separator equipment and sludge drying bed;

"watercourses" includes underground water, an aquifer, any river, stream, canal, channel of water, drain, waterfall, estuary, lagoon, swamp, marsh, reservoir, lake or any part of the sea abutting the foreshore or any other body of water, including water on wetlands;

"wetlands" means land which is either subject to inundation with saltwater and/or freshwater, or has a high water table, and includes areas of mangrove forests, brackish water forests, transitional forests, freshwater swamp forests and peat swamp forests.

PART II ESTABLISHMENT OF PIG FARM

Location of pig farm

- 3. (1) No person shall establish a pig farm on a location and in a manner that the pig farming causes any pollution or significant adverse effect on the environment.
- (2) Every sites, waste treatment facilities and waste storage facilities shall be located at least
 - (a) two hundred metres downstream from any potable water supply intake point;
 - (b) fifty metres from any watercourses; or
 - (c) twenty metres from any public or private road, or boundary of adjacent land.
- (3) Notwithstanding subrule (2), the Director may specify the distance of any sites, waste treatment facilities or waste storage facilities from any potable water supply intake point, watercourses, public or private road, or boundary of adjacent land, as the Director may deem necessary to prevent or minimize any pollution or significant adverse effect on the environment.

Construction of pig farming facilities

- 4. (1) Every pig farming facilities shall be designed and constructed in a manner that the pig farming does not cause any pollution or significant adverse effect on the environment.
 - (2) For the purpose of subrule (1)
 - (a) the sites shall be constructed with impermeable floors to prevent seepage of waste into surface water or ground water;
 - (b) a closed drainage system shall be constructed with impermeable materials to collect and transport waste to the waste treatment facilities and waste storage facilities;

- (c) a separate drainage system shall be constructed to channel storm water away from the liquid waste storage facilities;
- (d) a separator system shall be established to separate the solid waste and liquid waste from the waste;
- (e) the solid waste storage facilities shall be constructed in a manner that the leachate is drained to the liquid waste storage facilities;
- (f) the liquid waste storage facilities shall be constructed in a manner that such facilities are be able to contain the liquid waste generated by the pig farming;
- (g) every sludge drying bed shall be constructed and covered in a manner that surface water from the surroundings is prevented from seeping into the drying bed; and
- (h) buffers shall be established to prevent or minimize nuisance due to odour and noise pollution.

PART III

OPERATION AND MAINTENANCE

Operation and maintenance of pig farm

- 5. (1) Every owner of a pig farm shall maintain the farm in a manner that the pig farming will not cause any pollution or significant adverse effect on the environment.
- (2) For the purpose of subrule (1), the owner of the pig farm shall prepare an operation and maintenance manual prescribing the procedures and schedules for
 - (a) the treatment and storage of waste;
 - (b) the cleaning and maintenance of premises of the pig farm, sites, drainage system, and waste treatment and storage facilities;
 - (c) the discharge of liquid waste into watercourses under a permit issued by the Director;

- (d) the disposal of solid waste or sludge to a location outside the pig farm under a permit issued by the Director;
- (e) the removal of sludge from the liquid waste storage and treatment facilities;
- (f) the sampling and analysis of discharge of liquid waste on parameters of BOD₅, COD and TSS;
- (g) the prevention or minimization of nuisance due to odour and noise; and
- (f) the maintenance of the pig farm in accordance with good housekeeping and animal husbandry practices.
- (3) The owner of the pig farm shall revise the manual as the Director may, from time to time require.
- (4) The manual shall be made available for inspection upon request by the Director or any environmental enforcement officer.

Half-yearly report

- 6. (1) The owner of a pig farm shall, in respect of each year, submit two reports to the Director
 - (a) a first half-yearly report in respect of the period from 1st of January until 30th June of the particular year to be submitted not later than 31st of July of such particular year; and
 - (b) a second half-yearly report in respect of the period from 1st of July until 31st December of the particular year to be submitted not later than 31st of January of the following year.
- (2) The report shall be in the format as specified in the Third Schedule, subject to such modifications, as the case may require.

PART IV TREATMENT, DISCHARGE AND DISPOSAL OF WASTE

Use of best available techniques

7. Every person who operates a pig farm shall apply the best available techniques for efficient management of wastes which includes the treatment, storage, discharge and disposal of waste in order to prevent any adverse effect on the environment.

Restriction on discharge of liquid waste outside pig farming area

- 8. (1) No person shall discharge, or cause or allow to discharge liquid waste into any watercourses, or on any soil or surface of any land outside the pig farm.
- (2) Notwithstanding subrule (1), existing pig farms may, during the interim period, discharge liquid waste into watercourses with the written permission of the Director.

Parameter limits and point of discharge of liquid waste

- 9. (1) Liquid waste to be discharged into watercourses under a permit issued by the Director, shall not contain substances greater than those specified as the parameters limits shown in the Fourth Schedule.
- (2) The point or points of discharge of liquid waste into watercourses shall be determined by the Director.
- (3) The position and design of the outlet at the point or points of discharge of the liquid waste into watercourses as determined in subrule (2) shall not be altered or changed without the prior written approval of the Director.
- (4) Whenever the concentration of any parameter of liquid waste discharged or to be discharged is mentioned in these Rules, the reference, unless the context otherwise requires, is the concentration as at the point of discharge determined in subrule (2).

Installation of apparatuses

10. Any person who discharges liquid waste into watercourses under a permit issued by the Director within the interim period shall, in connection with such discharge, install

such sampling test point or points, recoding apparatus or other apparatuses as the Director may, from time to time, require.

Restriction on disposal of solid waste or sludge outside pig farming area

- 11. (1) No person shall dispose, or cause or allow to dispose solid waste or sludge into any watercourses, or on any soil or surface of any land outside the pig farm.
- (2) Notwithstanding subrule (1), solid waste or sludge may be disposed on land outside the pig farm with the written permission of the Director.

PART V

PERMIT TO DISCHARGE OR DISPOSE WASTE OR SLUDGE

Mode of application for permit

- 12. (1) Any application for the issue or renewal of a permit to discharge liquid waste into any watercourses, or dispose solid waste or sludge on any land outside the pig farm shall be made to the Director in the format as specified in the First Schedule, subject to such modifications, as the case may require.
- (2) A fee of ten ringgit shall be charged for the processing of every application for the issue or renewal of a permit.

Conditions precedent for issue of permit

- 13. No permit to discharge liquid waste into any watercourses, or to dispose solid waste or sludge on any land outside the pig farm shall be issued unless
 - (a) the pig farm to which the permit relates, is located on land which is suitable for pig farming or has been licensed for pig farming by the authority having jurisdiction on livestock farming;
 - (b) the Director is satisfied that the pig farm to which the permit relates contains adequate facilities for the treatment, storage and disposal of waste;
 - (c) the owner of the pig farm can demonstrate that the facilities for the treatment of waste in the pig farm are capable of meeting the standard of discharge of liquid waste as prescribed in the Fourth Schedule;

- (d) the Director is satisfied that the discharge of liquid waste into watercourses, or the disposal of solid waste or sludge on land outside the pig farm does not cause any pollution or significant adverse effect on the environment;
- (e) permission in writing has been granted by the registered proprietor of land or any person in occupation thereof by virtue of any licence issued or rights recognised under the Land Ordinance (Sabah Cap. 68) of the relevant authority having jurisdiction on such land where solid waste or sludge is to be disposed;
- (f) the annual fees as specified in the Fifth Schedule has been paid; and/or
- (g) the owner of the pig farm has complied with any other requirements as specified by the Director.

Form of permit

- 14. (1) A permit issued under this Part shall be in the format as specified in the Second Schedule, subject to such modifications, as the case may require.
- (2) Every permit issued shall be valid for one year from the date of issue and may be renewed on application for a period not exceeding one year at any one time.

Renewal of permit

- 15. (1) Any application for renewal of a permit during the interim period shall be submitted to the Director at least two months before the date of expiry of the permit.
- (2) If the application meets the requirements specified under these Rules, the Director shall renew the permit by issuing a new permit.

Conditions or restrictions of permit

- 16. (1) A permit shall be subject to such conditions or restrictions as the Director may deem necessary to impose for the protection or enhancement of the environment.
- (2) The Director may at any time amend or vary any conditions or restrictions imposed in any permit as the Director may deem necessary for the protection or enhancement of the environment.

Permit non-transferable

17. A permit issued under these Rules shall not be transferable except with the written consent of the Director.

Display and production of permit

18. A holder of a permit shall display the permit in a conspicuous place in the pig farm and produce on demand by the Director or any environmental enforcement officer.

Refusal to renew permit

19. The Director may, within the interim period refuse to renew a permit if in his opinion that any discharge of liquid waste into watercourses or any disposal of solid waste or sludge to a location outside the pig farm will cause or has caused pollution or significant adverse effect on the environment or water supply sources.

Suspension or revocation of permit

- 20. (1) The Director may suspend or revoke any permit issued to the owner of a pig farm if such owner is found to have breached any conditions or restrictions imposed in the permit, or contravened any of the provisions of these Rules, or whose pig farm has caused pollution to any watercourses or water supply sources.
- (2) The Director shall issue a notice to the owner of the pig farm prior to the revocation of the permit under subrule (1).

Mode of payment

- (1) All payment of fees shall be made by
 - (a) cash; or
 - (b) money order, cashier's order, postal order, banker's order, or bank draft, and shall be payable to the Director of the Environment Protection Department and crossed "Account Payee Only".
 - (2) An official receipt shall be issued for every payment received.

PART VI MISCELLANEOUS

Inspection and provision of assistance

- 22. (1) The Director or any environmental enforcement officer may conduct from time to time on-site inspection of the pig farm to determine whether there is any breach of the conditions or restrictions imposed in the permit, or any other provisions of these Rules.
- (2) For the purpose of subrule (1), the owner of the pig farm shall provide the Director or any environmental enforcement officer every reasonable assistance as he may require.

Pig farm to cease operation

23. The Director may order a pig farm to cease operation if the owner of the pig farm, his agents or servants have been found to have been breached or contravened any of the provisions of these Rules.

FIRST SCHEDULE [Subrule 12(1)]

APPLICATION FOR ISSUE OR RENEWAL OF PERMIT

TO: The Director
State Environment Protection Department
Sabah

APPLICATION FOR ISSUE OR RENEWAL OF PERMIT TO DISCHARGE LIQUID
WASTE INTO WATERCOURSES, OR DISPOSE SOLID WASTE
OR SLUDGE ON LAND OUTSIDE PIG FARM

- Name of Applicant:
 (Attach a recent passport sized photograph)
- 2. Identity Card/Passport No.:

- 3. Nationality/Race:
- 4. Name of Company:

(Attach a copy of Registration Certificate)

5. Postal Address:

Telephone:

Fax:

E-mail:

6. Location of Pig Farm:

(Attach a copy of land title and locality map)

- 7. Particulars of Permit (if any)
 - Reference Number:
 - · Date of Issue:
 - · Date of Expiry:
- 8. Number of pigs to be kept, reared and bred in the pig farm.
 - · Sows:
 - · Piglets:
 - · Others:
- 9. Layout plan of sites, waste treatment and storage facilities.

(Attach layout plan in A1 size with description of processes showing):

- Detailed information about the land including road system, cadastral boundary, storage facilities, building/house erected and other information deemed necessary
- · Layout of the waste treatment
- Drainage system showing inlet and outlet
- Name and directional flow of the watercourse receiving the liquid waste*

All diagram shown must be up to scale and references grid must be in Borneo Rectified Skew Orthomorpic coordinate system.

Distance of sites, waste treatment and storage facilities (in metres) from:

- Potable water supply intake point
- Watercourses
- · Public or private road, or boundary of adjacent land
- 10.* Disposal of solid waste/sludge on land outside pig farm (Attach copy of land title and location map)

Locati	on:									
Writte	n agreement	between	the ow	ner of	pig far	m and	the	receiver	of	solid
waste	/sludge (Attac	h copy of и	ritten ag	reement)):					
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Amount	of Fees paid:
	Director
	Sate Environment Protection Department
	Sabah
(
(* Delete	e as appropriate)
	THIRD SCHEDULE
	[Subrule 6(2)]
	HALF-YEARLY REPORT
1.	Name of Owner of Pig Farm:
2.	Name of Company:
	(If applicable)
2	Doctol Address
3.	Postal Address: Fax, E-mail, Telephone No.:
	Tax, E mail, Tolophone No
4.	Location of Pig Farm:
5.	Standing of Pig Population:
	Sows:
	Piglets: Others:
	Curoro.
6.*	Parameters of liquid waste discharge (mg/l).
	BOD₅:
	COD:
	TSS:

Phase	Ωf	Achievement:
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7.* Disposal of solid waste or sludge outside Pig Farm

Volume (metric ton):

Location of Disposal:

- 8. Particulars of Permit:
 - Reference Number:
 - Date of Issue:
 - Date of Expiry:
- 9. Period covered by the Report:
- 10. Person Furnishing the Report:

Signature:

Name:

I.C./Passport No.:

Date:

(* Delete as appropriate)

FOURTH SCHEDULE

[Subrules 9(1) and paragraph 13(c)]

STANDARS FOR TREATMENT OF LIQUID WASTE FOR EXISTING PIG FARM

(a) Parameter Limits of Liquid Waste

A permit to discharge liquid waste into watercourses shall be allowed to achieve the parameter limits in three (3) phases as follows –

Parameters	Limits			
1 drameters	Phase 1	Phase 2	Phase 3	
(1)	(2)	(3)	(4)	
(i) BOD ₅ mg/l	250	50	20	

(ii)	COD mg/l	500	100	50
(iii)	TSS mg/l	500	150	50

(b) Time Frame for meeting the Parameter Limits of Liquid Waste

Using the BOD_5 concentration as the target, the initial BOD_5 of the liquid waste shall not exceed 500 mg/l, and the period of achieving the parameter limits shall be as follows –

Phase	Year 1	Year 2	Year 3	Year 4
(1)	(2)	(3)	(4)	(5)
1	500 to 250 mg/l			
2		250 to 50 mg/l		
3			50 to 20 mg/l	20 mg/l

No discharge of liquid waste into watercourses shall be allowed at the end of the fourth year of this Rules into effect.

FIFTH SCHEDULE [Paragraph 13(f)]

ANNUAL FEES FOR PERMIT

1. Annual Fees for a Permit to discharge Liquid Waste into Watercourses:

Number of Pigs	Annual Fees (Ringgit)		
(1)	(2)		
50 – 100	50		
101 – 500	150		

501 – 1000	250
1001 – 1500	500
1501 – 2000	1000
2001 – 5000	2000
5001 and above	4000

2. The annual fee for a permit to dispose solid waste or sludge to a designated location on land outside the pig farm shall be one hundred ringgit.

(* Delete as appropriate)

Made on this 21st day of August, 2008.

DATUK MASIDI MANJUN,

Minister of Tourism, Culture and Environment.