Department of Environment and Resource Management

Registration certificate

Environmental Protection Act 1994

Registration certificate

No: ENRE00872309

This registration certificate is issued by the administering authority and takes effect from: 31-AUG-2011.

The anniversary day for the purposes of the Annual Return is 18 February.

This registration certificate is a requirement of section 73F of the *Environmental Protection Act 1994* and authorises the registered operator to undertake the activity listed below at the following places; subject to the conditions set out in development approval attached to the premises.

Registered Operator:-
McQuade Marine No 2 Pty Ltd
C/- Holmes & Partners Pty Ltd
Suite 3, 23 Main Street, VARSITY LAKES QLD 4227

Development Approval Number: IPDE01326809

Place:-
No fixed place. The activity is a mobile and temporary activity as defined in Schedule 4 of the Environmental Protection Act 1994.

Located at:-
Various locations within the State of Queensland

Registered Activity:-
ERA 16 Extractive and screening activities Threshold 1(c) - dredging, in a year, more than 100000t to 1000000t of material

Delegate
Linda Gorman
Department of Environment and Resource Management
Environmental Protection Act 1994

31-AUG-2011

Department of Environment and Resource Management
www.derm.qld.gov.au ABN 46 640 294 485

Queensland Government

Licence No. **SR1309**

Section 45(1)

Under the provisions of the *Environmental Protection Act 1994* this Licence is issued:

To: Mc Quade Marine No. 2 Pty Ltd

Address: 2 Chalk Street
COOLANGATTA QLD 4225

in respect of carrying out the environmentally relevant activity at the following place(s):

at a number of locations across Queensland.

located at: at a number of locations across Queensland.

ERA 18(c) - Dredging material - dredging material from the bed of any waters (other than dredging by a port authority of material for which a royalty or similar charge is not payble) using plant or equipment having a design capacity of 100 000 tonnes or more per year.

This environmental authority is granted subject to the conditions set out in the schedules attached to this environmental authority.

This licence takes effect from 18 February 1997.

signed .....

R. Wolff
Regional Manager (Environment)
Delegate of Administering Authority
Environmental Protection Act (1994)

date 24/5/99

AA256580 $1680-00

SCHEDULE A – GENERAL CONDITIONS

Limits on Dredging Works

(A1) The licensee is prohibited from carrying out dredging works other than maintenance dredging works if the dredging works increases, or is likely to substantially increase, the risk of environmental harm.

Display of Environmental Authority

(A2) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

Records

(A3) Any record or document required to be kept by a condition of this environmental authority must be kept at the licensee's principal place of business in Queensland for a period of at least five years and be available for examination by an authorised person. The record retention requirements of this condition will be satisfied if any daily and weekly records are kept for a period of at least three (3) years and these records are then kept in the form of annual summaries after that period.

Alterations

(A4) No change, replacement or operation of any plant or equipment is permitted if the change, replacement or operation of the plant or equipment increases, or is likely to substantially increase, the risk of environmental harm above that expressly provided by this environmental authority.

Calibration

(A5) All instruments and devices used for the measurement or monitoring of any parameter under any condition of this environmental authority must be calibrated, and appropriately operated and maintained.

Integrated Environmental Management System (IEMS)

(A6) The holder of this environmental authority must:

(a) develop and implement an IEMS which provides for the following functions:

- the monitoring of releases of contaminants into the environment and an environmental assessment of the releases; and
- staff training and awareness of environmental issues; and
- the conduct of environmental and energy audits; and
- waste prevention, treatment and disposal; and

(b) lodge with the administering authority on or before 13 March 1997 and at 3-monthly intervals thereafter until 13 September 1997, a brief report describing the progress in developing and implementing the IEMS; and

(c) on or before 13 December 1977, have completed and implemented the IEMS; and

(d) on or before 13 February 1998, lodge a detailed description of the IEMS and its documentation with the administering authority for its review and comment; and

(e) have due regard to that comment in the finalisation of the IEMS.

(A7) A description of the IEMS must be kept at the licensee's principal place of business in Queensland.

Prediction of Environmental Impacts before Dredging

(A8) (a) Before beginning each dredging project, the licensee must carry out a study which (i) predicts, by use of appropriate techniques, the impacts of the proposed operations on the water quality and (ii) determines the appropriate control measures to be used at that site; but this does not apply in any case where such a study for the project has already been carried out by another person and that person allows the licensee to make use of the results of the study;

(b) A report on the results of the study must be prepared and given to the Administering Authority at least 28 days before the dredging begins;

(c) If the Administering Authority gives to the licensee any comment on the report within 21 days of receiving it, the licensee must have due regard to that comment in conducting the dredging operations.

END OF CONDITIONS FOR SCHEDULE A

SCHEDULE C – WATER

Effects of Dredge Operation on Water Quality

(C1) (a) The licensee must, by using all means that are reasonable and practicable in the circumstances, ensure that dredging is carried out so as to keep to a practical minimum the water turbidity resulting from the operation of the dredge;

(b) For the purposes of this condition, examples of measures that could be reasonable and practicable include the following:

(i) operating the vessel at a slow speed such as approximately 3 knots so as to limit disturbance of the bottom by drag head turbulence;

(ii) keeping the dredge's trailing suction head at a constant level to limit overdredging.

Rate of Release of Tailwater to Waters

(C2) In any case where a study to predict environmental impacts is required by condition [(A8)], the licensee must take all measures that are reasonable and practicable in the circumstances to limit the rate of release of tailwater so that significant environmental harm is not caused by such release.

Quality Characteristics of Tailwater Releases to Waters

(C3) (a) The quality of tailwater released from the dredge must be such that the quality of the waters around the dredge, measured at a point referred to as Monitoring Point R2, complies with the limits set out in Table 1.

(b) For the purposes of this condition, "background" concentration or value means the concentration or value in the waters at a point referred to as Monitoring Point R1, as determined in-situ or as measured in a sample taken—

(i) within 2 hours before the time of making the corresponding in-situ determination or taking the corresponding sample of the waters at Monitoring Point R2; and

(ii) in the case of tidal waters, outside of a 2-hour period comprising 1 hour either side of slack water.

Table 1. Limits for Quality of Waters – Monitoring Point R2

Quality Characteristic	Limit
Suspended Solids	not more than 100 milligrams per litre, or 110% of the background concentration, whichever is greater
pH value	not different from the background value by more than 0.2 pH unit
Dissolved Oxygen	not less than 6.0 mg/L

Quality Characteristics of Releases from Land-based

Disposal Site to Waters

(C4) The quality of wastewater released from any site where dredge spoil is disposed of on land must comply with the limits set out in Table 2.

Table 2: Limits on quality of wastewater released from land-based site for disposal of dredge spoil

QUALITY CHARACTERISTIC	LIMIT	UNITS	LIMIT TYPE
Suspended Solids	100	mg/L	maximum
pH value	6.5-8.5	pH units	range
Dissolved Oxygen	6.0	mg/L	minimum

Dredge Spoil Disposal to Waters

(C5) (a) This condition applies in all cases where the licensee may lawfully dispose of dredge spoil by discharge or dumping into waters within Queensland's jurisdiction;

(b) The disposal of dredge spoil into waters must be carried out using all measures that are reasonable and practicable in the circumstances to limit the environmental impact of the disposal;

(c) For the purposes of this condition, examples of reasonable and practicable measures could include the following—

(i) carefully positioning the dredge at a suitable location up-current of the disposal area before releasing the spoil so as to promote deposition within the designated disposal area;

(ii) avoiding discharge or dumping during weather conditions likely to promote dispersion of spoil through surface water.

END OF CONDITIONS FOR SCHEDULE C

SCHEDULE E – LAND APPLICATION

Selection of Sites for Dredge Spoil Disposal on Land

(E1) (a) This condition applies in all cases where the licensee may lawfully dispose of dredge spoil on land;

(b) The licensee must take all measures that are reasonable and practicable in the circumstances to ensure that the disposal site is selected so as to keep to a practical minimum the risk of environmental harm occurring;

(c) For the purposes of this condition, examples of reasonable and practicable measures could include the following—

(i) avoiding sites prone to flooding or surface ponding;

(ii) selecting a site where it will be practicable to ensure that dredge spoil is contained on site at all times;

(iii) avoiding sites where leaching from spoil could cause contamination of aquifers or surface waters;

(iv) selecting a site away from residences and other places liable to be affected by noise generated by the environmentally relevant activity.

Disposal of Dredge Spoil on Land

(E2) (a) This condition applies in all cases where the licensee may lawfully dispose of dredge spoil on land;

(b) The licensee must take all measures that are reasonable and practicable in the circumstances to ensure that dredge spoil is handled and disposed of so as to keep to a practical minimum the risk of environmental harm.

(c) For the purposes of this condition, examples of measures that could be reasonable and practicable include the following—

(i) preventing or minimising leaching into groundwater or surface water by use of a low-permeability barrier between the spoil and the natural ground surface;

(ii) use of bunding or similar barriers to ensure that dredge spoil is contained on site at all times;

(iii) providing appropriate bunding, contour banks, drains or other works to divert external stormwater runoff around the disposal site;

(iii) finding means for re-use of the dredge spoil.

END OF CONDITIONS FOR SCHEDULE E

SCHEDULE F – NOISE

(F1) When operating at any location where it is reasonable to expect that noise could cause environmental nuisance, the licensee must take all reasonable and practicable measures to minimise noise emissions from carrying out the environmentally relevant activity during the hours 6 am to 6 pm.

(F2) If a complaint is made about noise emissions from the carrying out of the environmentally relevant activity during the hours 6 pm to 6 am, and if the complaint is not resolved to the reasonable satisfaction of the complainant within 21 days of its having come to the notice of the licensee, the following noise limits will apply until the complaint is resolved to the reasonable satisfaction of the complainant:

(a) The level of noise emitted from the environmentally relevant activity, when assessed as the "adjusted maximum noise level" ($L_{Amax\ adj,\ T}$) within a "noise sensitive place" using an

"approved instrument", must not exceed the noise level specified in Table 3, column 2 in any of the time periods set out opposite the level in Table 3, column 1.

Table 3: Noise limits within a "noise sensitive place"

Column 1: Time period: during which the noise limits in column 2 must not be exceeded	**Column 2: Noise limits:** assessed as the "adjusted maximum noise level" ($L_{Amax\ adj,\ T}$)
6pm - 10pm	"background noise level" plus 5dB(A)
10pm - 6am	"background noise level" plus 3dB(A)

(b) The level of noise emitted from the environmentally relevant activity, when assessed as the "adjusted maximum noise level" ($L_{Amax\ adj,\ T}$) at the boundaries of a "commercial place" using an "approved instrument", must not exceed the noise level specified in Table 4, column 2 in any of the time periods set out opposite the level in Table 4, column 1.

Table 4: Noise limits at the boundary of a "commercial place"

Column 1: Time period: during which the noise limits in column 2 must not be exceeded	**Column 2: Noise limits:** assessed as the "adjusted maximum noise level" ($L_{Amax\ adj,\ T}$)
6pm - 10pm	"background noise level" plus 10dB(A)
10pm - 6am	"background noise level" plus 8dB(A)

END OF CONDITIONS FOR SCHEDULE F

SCHEDULE H – MONITORING AND REPORTING

Complaint Recording

(H1) All complaints received by the holder of this environmental authority relating to releases of contaminants from operations at the licensed place must be recorded and kept in a log book with the following details:

(i) time, date and nature of complaint;

(ii) type of communication (telephone, letter, personal etc.);

(iii) name, contact address and contact telephone number of complainant (Note: if the complainant does not wish to be identified then "Not identified" is to be recorded);

(iv) response and investigation undertaken as a result of the complaint;

(v) name of person responsible for investigating complaint; and

(vi) action taken as a result of the complaint investigation and signature of responsible person.

Water Quality Monitoring

(H2) The licensee is responsible for carrying out determinations of the quality of wastewaters and waters at the Monitoring Points specified in Table 5, for the quality characteristics and at the times specified there.

Table 5. Water Quality Monitoring

Monitoring Point	Quality Characteristics	Times of Sampling or in-situ Determination
Waters near locations where points R1 and R2 are expected to be when dredging begins	Characteristics specified in Table 1	Once before dredging begins
Waters at points R1 and R2	Characteristics specified in Table 1	Once per week during dredging operations
Waters at similar locations to those used for R1 and R2 before beginning of dredging	Characteristics specified in Table 1	Once after dredging is finished
Wastewater released to waters from each land-based site used for disposal of dredge spoil	Characteristics specified in Table 2	Once during each week in which a release occurs

(H3) All determinations of the quality of waters and of releases to waters must be made in accordance with methods set out in the Department of Environment and Heritage Water

Quality Sampling Manual, 2nd Edition, February 1995, or more recent additions or supplements to that document as they become available.

(H4) All determinations of the quality of waters and of releases to waters must be made by persons possessing appropriate qualifications and experience to perform the required measurements.

Description of Water Quality Monitoring Points

(H5) Monitoring Point R1 refers to any point located not less than 100 metres up-current from the dredge at the time of sampling or in-situ determination, and at a depth within 1 metre of the water surface.

(H6) Monitoring Point R2 refers to any point located not less than 100 metres down-current from the dredge at the time of sampling or in-situ determination, and at a depth within 1 metre of the water surface.

Noise Assessment

(H7) Where noise measurement and assessment are necessary, the method of measurement and assessment and the format for reporting results must be in accordance with the current edition of the Noise Measurement Manual published by the Queensland Department of Environment and Heritage, 2nd edition dated 1 March 1995.

END OF CONDITIONS FOR SCHEDULE H

SCHEDULE I – DEFINITIONS

(I1) Unless otherwise defined below, words used in this environmental authority have the meaning contained in the Environmental Protection Act 1994 and the Environmental Protection (Interim) Regulation 1995.

"adjusted maximum noise level" has the meaning given the term "adjusted average maximum A—weighted sound pressure level" under AS 1055.1—1989 Acoustics—Description and Measurement of Environmental Noise: Part 1—General Procedures.

"approved instrument" for assessing the level of noise means an instrument that complies with the specifications for sound level meters Type 1 or 2 under AS 1259.1—1990 Acoustics—Sound Level Meters: Part 1—Non-integrating or AS 1259.2—1990 Acoustics—Sound Level Meters: Part 2—Integrating—averaging.

"background noise level" has the meaning given the term "background A—weighted sound pressure level" under AS 1055.1—1989 Acoustics—Description and Measurement of Environmental Noise: Part 1—General Procedures.

"commercial place" means a place used as an office or for business or commercial purposes.

"dredge spoil" means material taken from the bed or banks of waters by using dredging equipment.

"mg/L" means milligrams per litre

"ng/L" means nanograms per litre

"noise sensitive place" means—

(a) a dwelling, mobile home or caravan park, residential marina or other residential premises, but excluding a caretaker house for industrial premises; or

(b) a motel, hotel or hostel; or

(c) a kindergarten, school, university, or other educational institution; or

(d) a medical centre or hospital; or

(e) a protected area, meaning—

  (i) a protected area under the *Nature Conservation Act 1992*; or

  (ii) a marine park under the *Marine Parks Act 1982*; or

  (iii) a World Heritage Area, being an area described in the World Heritage List kept under the Convention for the Protection of the World Cultural and Natural Heritage adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organisation on 16 November 1972; or

(f) a park or gardens.

"tailwater" means water that has drained from dredge spoil.

END OF CONDITIONS FOR SCHEDULE I