Environmental Protection Act 1994

Licence No. CR 0018

Section 45(1)

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

To: **Iwasaki Sangyo Co. (Aust) Pty Ltd**
Trading as: **Capricorn International Resort**
Rydges.
Address: **Farnborough Road**
Farnborough
Via YEPPOON QLD 4703

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

15(b) Sewage treatment - operating a standard sewage treatment works having a peak design capacity to treat sewage of 100 or more equivalent persons but less than 1 500 equivalent persons.

at premises/place described as:

Lot 2, Plan RP 615921
County of Livingstone, Parish of Woodlands

located at:

Farnborough Road
FARNBOROUGH QLD 4703

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

The amendments to this licence take effect from 10 January 2000 however, the anniversary date for this licence remains at the **20 May** each year.

Nigel Holmes
Manager (EPA) Rockhampton
Delegate of Administering Authority
Environmental Protection Act 1994
23/12/99

This environmental authority consists of the following schedules:-

SCHEDULE A - GENERAL CONDITIONS

SCHEDULE B - AIR

SCHEDULE C - WATER

SCHEDULE D - STORMWATER MANAGEMENT

SCHEDULE E - LAND APPLICATION

SCHEDULE F - WASTE MANAGEMENT

SCHEDULE G - MONITORING AND REPORTING

SCHEDULE H - DEFINITIONS

SCHEDULE A - GENERAL CONDITIONS

Access to Copy of Environmental Authority

(A1) A copy of this environmental authority must be kept in a location readily accessible to personnel carrying out the activity.

(A2) Any record or document required to be kept by a condition of this environmental authority must be kept at the licensed place for a period of at least five years and be available for examination by an authorised person. For daily and weekly records, 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

(A3) 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.

An example of a substantial increase in the risk of environmental harm is an increase of 10% or more in the quantity of the contaminant to be released into the environment.

Monitoring and Measurements

(A4) All determinations of the quality of contaminants released to the environment and all measurement and reporting of noise levels that are required by this environmental authority must be undertaken by a person or body possessing appropriate experience and qualifications to perform the required determinations and the required measurements.

(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.

Competency

(A6) The holder of this environmental authority shall ensure that the operation and maintenance of the licensed place is carried out by or under the supervision of a person competent to operate and maintain the sewage treatment plant.

END OF CONDITIONS FOR SCHEDULE A

SCHEDULE B - AIR

Noxious or Offensive Odour

(B1) Notwithstanding any other condition of this environmental authority no release of contaminants from the licensed place is to cause a noxious or offensive odour beyond the boundaries of the licensed place.

END OF CONDITIONS FOR SCHEDULE B

SCHEDULE C - WATER

Release of Contaminants to Waters

(C1) Sewage treatment effluent must not be directly or indirectly released from the licensed place to any waters or the bed and banks of any waters.

Groundwater monitoring

(C2) The holder of this environmental authority must:

a) develop and implement a Groundwater Monitoring Program by 1 May 2000;
b) lodge a detailed description of the Groundwater Monitoring Program and its documentation with the administering authority for its review and comment by 1 March 2000; and
c) have due regard to that comment in the finalisation of the Groundwater Monitoring Program.

(C3) The groundwater monitoring system must include a sufficient number of wells installed at locations and depths which yield representative groundwater samples from the uppermost aquifer that establish:

(i) background groundwater quality in hydraulically up-gradient or background well(s) that have not been affected by any potential leakage of contaminants to groundwater;
(ii) quality of groundwater down-gradient of any potential leakage of contaminants to groundwater.

(C4) The holder of the environmental authority must monitor the quality of groundwater quarterly to detect any possible release(s) for twelve months from January 2000 and annually thereafter, for *at least* the following water quality characteristics:

1. Ammonia (as N)
2. Nitrate (as N)
3. Nitrite (as N)

4. Orthophosphate
5. Total phospates
6. pH

(C5) Each groundwater monitoring bore must be fitted with a locked cap at all times other than at the time of sampling.

END OF CONDITIONS FOR SCHEDULE C

SCHEDULE D - STORMWATER MANAGEMENT

Release of Contaminated Stormwater Runoff

(D1) Except as otherwise provided by the conditions of the Stormwater Management Schedule and the Water Schedule of this environmental authority, the environmentally relevant activity must be carried out by such practicable means necessary to prevent or minimise the contact of incident rainfall and stormwater runoff with wastes or other contaminants, and prevent or minimise the release or likelihood of release of any such contaminated runoff from the licensed place.

(D2) Where it is not practicable to prevent contact as required by condition (D1), the environmentally relevant activity must be carried out by such practicable means necessary to minimise any such contact.

Maintenance and Cleanup

(D3) Any spillage of waste, contaminants or other materials must be cleaned up as quickly as practicable. Such spillages must not be cleaned up by hosing, sweeping or otherwise releasing such wastes, contaminants or material to any stormwater drainage system, or waters or the bed and bank of any waters.

END OF CONDITIONS FOR SCHEDULE D

SCHEDULE E- LAND APPLICATION

Release of Contaminants to Land

(E1) The only contaminant to be released to land is treated sewage effluent.

(E2) The defined contaminant release area is described as golf course, as marked on Figure 1 Capricorn International Resort North Course prepared by Karl Litten, Inc. 25 March 1991, and submitted to the administering authority 17 March 1998.

(E3) A minimum of 26 hectares of land must be provided for the contaminant release area.

(E4) The contaminant disposal area must be maintained in a proper condition so as to provide adequate assimilation, percolation, evaporation and transpiration of the released contaminants.

(E5) Notwithstanding condition (E4), there must be no discharge of effluent to any neighbouring property or to any area other than the approved irrigation area/s.

(E6) Public access to any contaminant release area must be denied during the release of contaminants to land and until the release area has dried.

(E7) The release of contaminants to land must not be carried out if soil moisture conditions are such that surface runoff or ponding is likely to occur.

(E8) Spray from any release of contaminants to land must not drift beyond the boundaries of the licensed place.

(E9) Notices warning the public not to use or drink the release of contaminants to land must be prominently displayed and must be maintained in a visible and legible condition.

(E10) Pipelines and fittings for the release of contaminants to land must be clearly identified. Standard water taps, hoses and cocks must not be fitted to contaminant release pipelines, and the contaminant release system must not be connected to other service pipelines. Lockable valves or removable handles must be fitted to the contaminant disposal areas.

Quality of Contaminants Released to Land

(E11) The contaminant release must comply, at the sampling and in-situ measurement point/s specified in Schedule G, with each of the release limits specified in Schedule E Table 1 for each quality characteristic.

Wet Weather Conditions

(E12) When weather conditions or soil conditions preclude the release of contaminants, the contaminants must not be released.

SCHEDULE E TABLE 1 - RELEASE QUALITY CHARACTERISTIC LIMITS

QUALITY CHARACTERISTICS	RELEASE LIMIT	LIMIT TYPE
5-day Biochemical Oxygen Demand.	20 mg/l	maximum
Suspended Solids.	30 mg/l	maximum
pH.	6.5 - 8.0	range
Free Residual Chlorine	1 mg/l	minimum
Faecal Coliforms.	150 thermotolerant coliforms/100 ml	maximum

END OF CONDITIONS FOR SCHEDULE E

SCHEDULE F - WASTE MANAGEMENT

General

(F1) The holder of this environmental authority must not:
(i) allow waste to burn or be burned at or on the licensed place; nor
(ii) remove waste from the licensed place and burn such waste elsewhere.

(F2) The screen waste must be removed from the licensed place in sealed container/s, to a disposal site approved by the administering authority.

(F3) All sludge drying beds must be bunded.

(F4) Sludge must be air dried in the designated drying beds for sufficient period to allow the solids content to increase to a point such that the sludge can be conveniently removed by end loaders or by other means.

(F5) Once removed from the designated drying beds the sludge must be stockpiled for a period of time such that the minimum time between placement on drying beds and ultimate disposal be 12 months.

(F6) Ultimate disposal of sludge must be by a method/route approved by the administering authority.

(F7) All chemicals used in the sewage treatment process must be stored in weather proof lockable enclosures.

(F8) All empty drums must be stored with their closures in place.

END OF CONDITIONS FOR SCHEDULE F

SCHEDULE G - MONITORING AND REPORTING

Complaint Recording

(G1) 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 with the following details:
(a) time, date and nature of complaint;
(b) type of communication (telephone, letter, personal etc.);
(c) 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);
(d) response and investigation undertaken as a result of the complaint;
(e) name of person responsible for investigating complaint; and
(f) action taken as a result of the complaint investigation and signature of responsible person.

Monitoring of Contaminant Releases

(G2) The holder of this environmental authority is responsible for the making of determinations and keeping of records of the quality of the contaminants released for the quality characteristics, and at the frequency specified in Schedule G Table 1.

Sampling and Monitoring Point Details

(G3) Determinations of the quality of released contaminants to check conformity with the release quality characteristics specified in the Land Application Schedule of this environmental authority must be undertaken at the sampling and in situ monitoring point(s) described as after disinfection and before the pump well at maturation lagoon.

Monitoring of Volume of Release

(G4) The daily quantity of contaminants released must be determined by a method and by a person or body possessing appropriate experience and qualifications and approved by the administering authority to perform the required measurements.

(G5) Records must be kept of the results of all determinations of the daily quantity of contaminants released to land.

Report Submission

(G6) The holder of this environmental authority must ensure that the results of all monitoring performed in accordance with this environmental authority for the period covered by the return are submitted with the Annual Return.

Schedule G - Table 1

QUALITY CHARACTERISTIC DETERMINATION	FREQUENCY
5-day Biochemical Oxygen Demand.	Monthly for twelve months from January 2000, then quarterly if all indicators tested are within required parameters
Suspended Solids.	Monthly for twelve months from January 2000, then quarterly if all indicators tested are within required parameters
pH.	Monthly for twelve months from January 2000, then quarterly if all indicators tested are within required parameters
Free Residual Chlorine	Weekly for twelve months from January 2000, then monthly if all indicators tested are within required parameters
Faecal Coliforms. (Organisms/100 ml)	Weekly for twelve months from January 2000, then monthly if all indicators tested are within required parameters

Incident Recording

(G7) A record must be maintained of at least the following events:

(a) the time, date and duration of equipment malfunctions where the failure of the equipment resulted in the release of contaminants reasonably likely to cause environmental harm;
(b) any uncontrolled release of contaminants reasonably likely to cause environmental harm and
(c) any emergency involving the release of contaminants reasonably likely to cause material or serious environmental harm requiring the use of fire fighting equipment.

Notification of Emergencies and Incidents

(G8) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, as soon as practicable after becoming aware of any emergency or incident which results in the release of contaminants not in accordance, or reasonably expected to be not in accordance with the conditions of this environmental authority, the holder of this environmental authority must notify the administering authority of the release by telephone or facsimile.

(G9) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, the notification of emergencies or incidents as required by condition number (H8) must include but not be limited to the following:

(a) The holder of the environmental authority;
(b) the location of the emergency or incident;
(c) the number of the environmental authority;
(d) the name and telephone number of the designated contact person;
(e) the time of the release;
(f) the time the holder of the environmental authority became aware of the release;
(g) the suspected cause of the release;
(h) the environmental harm and or environmental nuisance caused, threatened, or to be caused by the release; and
(i) actions taken to prevent further any release and mitigate any environmental harm and or environmental nuisance caused by the release.

(G10) Where the holder of this environmental authority has not given notification to the administering authority under section 37 of the Environmental Protection Act, not more than 14 days following the initial notification of an emergency or incident, the holder of the environmental authority must provide written advice of the information supplied in accordance with condition number (H9) in addition to:

(a) proposed actions to prevent a recurrence of the emergency or incident;
(b) outcomes of actions taken at the time to prevent or minimise environmental harm and or environmental nuisance.

Exception Reporting

(G11) The holder of this environmental authority must notify the administering authority in writing within 28 days of completion of analysis of any result of a monitoring program required by a condition of this environmental authority which indicates an exceedance of any limit specified in this environmental authority.

(G12) The written notification required by condition number (H11) above must include:

(a) The full analysis results, and
(b) Details of investigation or corrective actions taken, and
(c) Any subsequent analysis.

END OF CONDITIONS FOR SCHEDULE G

SCHEDULE H - DEFINITIONS

For the purposes of this environmental authority the following definitions apply:

(H1) "mg/l" means milligrams per litre.

(H2) "maximum" means that the measured value of the quality characteristic or contaminant must not be greater than the release limit stated.

(H3) "minimum" means that the measured value of the quality characteristic or contaminant must not be less than the release limit stated.

(H4) "range" means that the measured value of the quality characteristic or contaminant must not be greater than the higher release limit stated nor lower than the lower release limit stated.

END OF CONDITIONS FOR SCHEDULE H

END OF CONDITIONS FOR ENVIRONMENTAL AUTHORITY