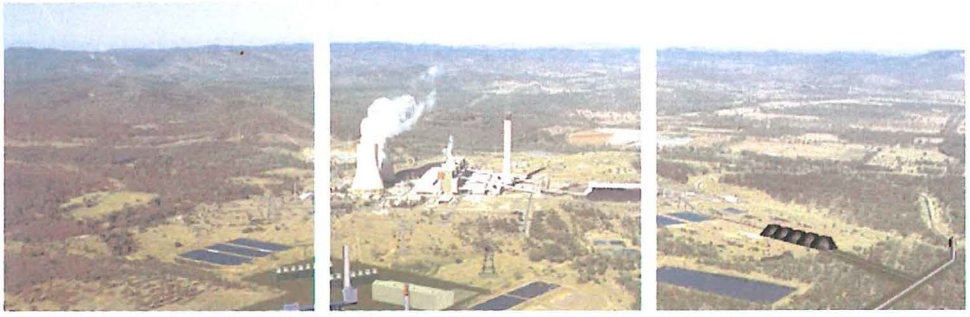
A Appendix A

EIS Submissions



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QUEENSLAND COKE & ENERGY

STANWELL CORPORATION LIMITED

Response No 1 18/127

Queensland Government

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Your reference TN82077/FF02/CG
Our reference ROK4897

-T418

Environmental Protection Agency
operating the Queensland Parks and Wildlife Service

27 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 01.03.06	Action Officer R. ROLFE
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The Coordinator-General
Queensland Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002
Attention: Mr Fergus Fitzgerald

Dear Sir

COMMENTS ON ENVIRONMENTAL IMPACT STATEMENT – QUEENSLAND COKE AND POWER PLANT PROJECT, JANUARY 2006

Please find attached comments by the Environmental Protection Agency on the Environmental Impact Statement (EIS) January 2006 for the proposed Queensland Coke and Power Station Project. These comments have been provided in response to a letter received 16 January 2006.

While many relevant issues have been addressed, there are a number of areas including air and odour emissions and their associated impacts, water, noise and greenhouse gas emissions and matters relating to port facilities, requiring clarification and provision of required information. Details of information sought are outlined in the attached comments. Considering the nature and scope of the information required, the EPA is unable at this stage to propose conditions for any Development Approval associated with the project.

Should you have any queries or concerns with the comments, please contact Cliff Jones on (07) 4036 0585.

Yours Sincerely

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Response from the Environmental Protection Agency (EPA) on the Environmental Impact Statement, (EIS) January 2006 for the Queensland Coke Plant and Power Station Project

The Environmental Protection Agency has assessed the Environmental Impact Statement (EIS) for the above project and offers the following comment.

For a number of issues, clarification and explanation of various aspects are sought. Where possible, requests for information have been specific. Where this is not the case, it is recommended that the proponent contact the EPA for clarification on what is requested.

Comments are provided under the following EIS headings:

EIS Section 1.6.2 Environmental Protection Act 1994

EIS Section 1.6.3 Integrated Planning Act 1997

EIS Section 5 Water Resources

EIS Section 6 Nature Conservation

EIS Section 7.0 Air - General

- **7.1 Air - Emissions and modelling estimates**
- **7.2 Air - Best Practice Environmental Management**

EIS Section 8 Greenhouse Gas Emissions

EIS Section 9 Noise and Vibration

EIS Section 14.5 Port Facility

References

Specific Comments

EIS Section 1.6.2 Environmental Protection Act 1994

Issue: *Environmental Protection Regulation 1998*

1.6.2

The EIS, in describing potential Environmentally Relevant Activities (ERAs) associated with the project (EIS page 1-18), has omitted ERA 18 Power Station – generating power by consuming fuel at a rated capacity of 10 MW electrical or more. While there are some exceptions to the application of this ERA for co-generation, its inclusion is considered appropriate for this project.

Recommendation

The EIS should include ERA 18 into the project requirements under the *Environmental Protection Regulation 1998*.

EIS Section 1.6.3 Integrated Planning Act 1997

Issue: *Coastal Protection and Management Act 1995*

1.6.3

The EIS does not include reference to *Coastal Protection and Management Act 1995* and subsequent approvals. Insufficient information has been provided in the EIS for an assessment of the impacts of the proposed port works, as a result it is unlikely that a development permit could be issued for the tidal works component of the project.

If dredging is required and this material is to be disposed of on land (above high water mark) an allocation of quarry material or approval of a dredge management plan under the *Coastal Protection and Management Act 1995* will be required. This approval will need to be given before an application for a development approval or preliminary approval is applied for.

Recommendation

The EIS should identify that some of the works proposed in the EIS will require a development approval under the *Integrated Planning Act 1997* assessed against the *Coastal Protection and Management Act 1995*. It should also specify the level of approval required (development approval or preliminary approval).

EIS Section 5 Water Resources

Issue 1: Quality of all wastewater streams is not characterised.

5.1.2

The EIS provides no data to characterise the quality all wastewater streams, including:

- Stormwater runoff from contaminated areas such as coal and coke stockpiles;
- Power plant cooling and blowdown water;
- Stanwell power station cooling and blowdown water;
- Water treatment plant wastewater; and
- Coke quench water.

This impedes assessment of potential effects on water resources and aquatic ecosystems. General statements are included that advise on types of contaminants likely to be present in some wastewater streams e.g. particulates, polynuclear aromatic hydrocarbons (PAH) in coal runoff (EIS p. 5-17) and salinity, suspended solids and some metals in power plant blowdown (EIS p. 5-18).

Although some aspects of wastewater quality may be inferred (e.g. by complying with the referenced guidelines for sediment control in EIS Appendix N, a suspended solids limit may be inferred), this does not sufficiently characterise the wastewater.

The possible impacts on the receiving environment due to water discharges cannot be properly assessed, as the quality of these discharges and expected contaminant loads are not specified. This is particularly of concern as the EIS shows that Neerkol and Quarry Creeks are already under stress.

To understand which contaminant species are likely to be present, further information is also needed on:

- The types of water treatment chemicals and processes used e.g. antifouling chemicals in cooling towers, water treatment chemicals in demineralisation plant;
- The likely runoff quality from coal stock piles;
- The likely runoff quality from coke stock piles;
- The likely quality of quench water;
- The likely construction of the cooling towers e.g. some materials such as treated wood leach contaminants into cooling water;
- Types of boiler tubing used e.g. some types leach metals into blow down stream; and
- The likely quality of blowdown and cooling waters.

Recommendation:

The EIS should present relevant concentrations of wastewater contaminants as required by terms of reference section 3.3.2 Potential Impacts and Mitigation Measures. The factors that result in the various contaminants being present (or not present) should be discussed in characterising the nature of the waste waters and explaining how best practice measures have been incorporated in the proposal as required by terms of reference section 2.7.1 Solid and Liquid Wastes.

Issue 2: Water quality monitoring is not specified.

5.1.2

In the EIS, wastewaters are proposed for release to surface waters. It is considered best practice to monitor volumes discharged and relevant quality parameters. Similarly, where wastes are held in containment structures such as dams, monitoring of ground water is considered best practice to check the structures do not cause environmental harm due to seepage of contents.

The EIS proposes monitoring, including discharge monitoring, receiving water monitoring and groundwater monitoring (e.g. see EIS page 5-39, environmental

management plan page 16-16), but doesn't advise which quality parameters will be monitored apart from particulate matter.

The effectiveness of water quality monitoring thus cannot be properly assessed. Evaluation of what quality characteristics are necessary or desirable to monitor needs to be informed by the quality of the wastewater discharges and expected contaminant loads. This information is also necessary to inform the setting of appropriate conditions for a development approval for the project.

Recommendation:

The EIS should present proposed water quality monitoring for wastewater discharges, receiving waters and groundwater as required by terms of reference section 3.3.2 Potential Impacts and Mitigation Measures. The quality characteristics included in the monitoring program need to be informed by the quality of the wastewater discharges and expected contaminant loads.

Issue 3: Compliance with *Environmental Protection (Water) Policy 1997*

5.1.2

Wastewaters are proposed to be released to surface waters (see EIS 5.1.2). Section 91 of the *Environmental Protection Act 1994* states that the administering authority must comply with any applicable environmental protection policy requiring it to follow stated procedure in evaluating an application for an environmental authority. The *Environmental Protection (Water) Policy 1997* includes a number of procedures in Part 5. These include the waste management evaluation procedure under Section 15.

Section 15 applies as the environmental management decision is about an activity that may affect a water. It essentially involves applying a waste management evaluation procedure to the assessment such that release of wastewater is a last resort option, as opposed to avoidance, recycling and reuse. It is noted that this procedure is mandatory for wastewater discharges under section 2.4.2 of the State Coastal Management Plan (2001).

The EIS in states that power plant blowdown may be reused or may be discharged to Quarry Creek. In addition, some of the Stanwell Power Plant stormwater and blowdown may be reused for coke quenching (EIS page 5-21).

Reuse of blowdown and stormwater for coke quenching and other uses is supported. In leaving open the option of discharging this wastewater to Quarry Creek, justification is needed as to why this is necessary in the light of reuse possibilities. The EIS would thus need to detail water quality requirements for quench water, water quality of blowdown water, any water quality constraints to reuse and how these constraints may be minimised or overcome.

Recommendation:

The EIS should explain the practicalities in reusing various blowdown waters for quenching and how such reuse can be maximised as required by terms of reference section 3.3.2 Potential Impacts and Mitigation Measures, and 3.8 Waste Impacts, so as to avoid or minimise releases of wastewater to surface waters.

EIS Section 6 Nature Conservation

Issue 1: Impacts of important wetlands.

6.3.2

Important wetlands, called the Fitzroy River Floodplain, are located fifteen kilometres downstream of the project on Neerkol Creek. The EIS does not discuss the potential impact of water discharges on this wetland environment e.g. of increased flows or contaminants.

Recommendation:

EIS should discuss potential impact on this environment.

EIS Section 7.0 Air - General

Comments on section 7 Air are divided into a number of themes. These are:

- Emissions and modelling estimates;
- Best Practice Environmental Management;

These issues are set out and discussed below according to these themes.

7.1 Air - Emissions and modelling estimates

Issue 1: Multiple Bypass Stack Impact Assessment

7.2 and Supplement Appendix C

It is mentioned during the EIS presentation that a number of bypass stacks will be built at the site. During the non-heat recovery mode it is intended that all combustion gases will be released through these bypass stacks. In the EIS, air dispersion modelling was conducted for the non-heat recovery mode assuming that all combustion gasses will be released through the four 90 m main stacks at large efflux velocities. In the light of the new information, that up to 32 shorter 45 m bypass stacks will be used for discharging the waste gases under non-heat recovery mode, it is important to determine the potential impact on the surrounding environment from these bypass emissions and the implications for framing appropriate development approval conditions.

Recommendation:

The EIS should provide the following for the planned stages of project construction and commissioning as required in terms of reference section 3.5.2:

- Information on the bypass stack parameters such as the number of stacks, diameter, exit velocity, temperature and the concentration of pollutants in terms of standard pressure and temperature and provide moisture and oxygen contents of the flue gases.
- Details of emission controls, including operational controls, on by-pass stacks to minimise emissions.
- Estimates of the ground level concentrations of emissions from the coke plant and assess the impact when the waste gases from the ovens will be released through the bypass stacks.

Issue 2: Cumulative impact of Peaker Plant not included in Impact Assessment

7 . 2 and Supplement Appendix C

A gas fired Peaker Plant is planned for the Stanwell site near the existing power station (SKM 2005). Although interactions between the existing power station units and the coke plant are discussed, emissions from the Peaker Plant do not appear to have been taken into account in modelling the cumulative impacts on the air shed. As the Peaker Plant will only operate during times of peak electricity demand, it is more likely to affect short-term air quality goals rather than annual averages. Fuel will be either natural gas or distillate. Emissions of relevance to the coke plant are emissions of sulphur dioxide and oxides of nitrogen (SKM 2005).

Recommendation:

The EIS should address the potential interactions between the coke plant emissions and other likely emissions to the air shed, namely the Stanwell power station and Peaker Plant, as required by section 3.5.2 of the terms of reference. The interactions should be shown as predicted cumulative concentrations of relevant air quality contaminants e.g. oxides of nitrogen, sulphur dioxide.

Issue 3: Characterisation of flue gases at standard conditions

7 . 2 and Supplement Appendix C

It is mentioned in the TOR that the concentration of pollutants in the flue gases must be presented in terms of standard pressure and temperature. Many standards for the control of air pollutants are referenced to standardised conditions including temperature, pressure and moisture level. Oxygen level is also used as a reference for some tests e.g. nitrogen oxides. This is because in a gas, concentration of contaminants can vary with such factors.

To make meaningful comparisons against relevant air pollution standards, characterisation of the flue gas emissions at standard conditions is necessary. This information is necessary for preparing the development approval conditions. The above information is not given in the EIS.

Recommendation:

The EIS should present concentrations of air pollution contaminants at standard temperature and pressure (i.e. dry, temperature of 273K (0°C) and 101.3 kPa (1 atmosphere)) and specify oxygen content and moisture level of the flue gases as required by section 2.7.2 of the terms of reference.

Issue 4: Characterisation of maximum air emissions likely to occur during normal operations.

7 . 2 and Supplement Appendix C

In determining necessary or desirable emission limits for an activity, it is necessary for worst case emissions to be evaluated to determine whether these conditions are likely to cause environmental harm e.g. breach air quality goals. This involves evaluating the maximum emissions expected under normal operations, assuming proper operation of the adopted emission control measures.

The emission rates modelled in the EIS are derived from annual emission rates and, as advised in the EIS, represent "average hourly emission rates of pollutants" (page I.2-

3). This infers that some emissions will be higher than the average levels. These higher emission levels have not been modelled. This is important as while some air quality goals are annual averages, others have much shorter averaging times e.g. 10 minute goal for SO_2.

Typical development approval conditions also limit the maximum levels that may be emitted, assuming proper operation of the adopted emission control measures, when collected using recognised sampling methods. Hence, it is necessary for proponents to advise proposed maximum levels so these may be evaluated against environmental goals and best practice benchmarks.

The potential impacts on the receiving environment due to air discharges and appropriate conditions cannot be confidently assessed, as the maximum emissions levels from the coke plant have not been specified nor modelled.

Recommendation:

- The EIS should identify worst case emissions as may occur during plant upsets, green pushes, start up and shut down. It should also describe the backup measures that would act in the event of failure of primary measures to minimise likelihood of plant upsets and adverse air impacts as required by section 3.5.2 of the terms of reference.

- The EIS should evaluate the impacts on the receiving environment due to maximum air discharges by specifying and modelling the maximum emissions levels expected from the coke plant as required by section 3.5.2 of the terms of reference.

Issue 5: Uncertainty in air emissions data sourced from emissions factors.

7 . 2 and Supplement Appendix C

It is mentioned on Page 7-9 of EIS that at the time of this study the air emissions from the potential technology provider was not available. Therefore, a permit application of a similar overseas proposed coke plant was used to estimate emissions from the different coking stages and emission points. This was largely based on the emission data published in AP-42 (USEPA, 2000). Adjustments were made for the capacity of the plant and the differences in the composition of trace elements between the proposed coal for the overseas plant and the Australian coal.

The emission factors compiled in US EPA's AP-42 relate to the quantity (mass) of pollutants emitted to a unit of activity of the source. It is not clear how accurate these emission factors are under Australian conditions. The overseas permit application might have made some assumptions while applying the US EPA's AP-42 emission factors (for example the flue gas may be treated by a scrubber and or bag house filter).

It is considered that it would greatly assist an assessment of the potential impacts of the project if reliable air emission data were obtained from an operating plant using the proposed technology. It is considered that such data, as set out in section 2.7.2 of the terms of reference, would substantially enhance the reliability of modelling and the assessment of potential air quality impacts, and enable the setting of suitable conditions for any subsequent development approval.

Recommendation:

The EIS should present, if at all practicable, source specific data such as actual test data from similar equipment and information from equipment vendors in characterising air emissions. A more reliable source would be using a reliable air emission data obtained from an operating plant using the proposed technology (including emissions controls). If this is not practicable, the limitations of using emissions factors needs to be discussed, including significance for any conclusions drawn from that data. This would include specifying the accuracy or degree of uncertainty of emission factors used in the calculation of air emissions and the assumptions made in the estimation of emission inventory.

Issue 6: Dioxin and Furan Emissions

7 . 2 and Supplement Appendix C

Dioxins and furans are unintentionally formed in combustion related processes such as waste incineration. Carbon, oxygen, hydrogen and chlorine, whether in elemental, organic or inorganic form, are needed. There are two main pathways by which these compounds can be synthesized: from precursors such as chlorinated phenols or de novo from carbonaceous structure in fly ash, activated carbon, soot or smaller molecule products of incomplete combustion. The EIS must specify the potential of dioxins and furans formation in the process of coke making. Another potential source of chlorine that needs to be considered in this assessment is the apparently high levels in proposed quenching waters recycled from blowdown sources. No emissions data was provided on dioxin and furan emissions or on likely compliance with best practice emission limit (0.1 ng/Nm^3 I(TEQ)).

Recommendation:

The EIS should discuss the potential formation of dioxins and furans in the activity, provide estimated emissions levels for dioxins and furans and advise on likely compliance with and commitments to best practice emission limit (0.1 ng/Nm^3 I(TEQ)) as required by section 2.7.2 of the terms of reference.

Issue 7: The EIS incorrectly assumes that *Environmental Protection (Air) Policy 1997* allows eight exceedances of short-term goals per year.

7 . 2 and Supplement Appendix C

The EIS assumes that *Environmental Protection (Air) Policy 1997* allows eight exceedances of short-term air quality goals per year (see page 7-7) and then evaluates the number of exceedances more than eight (pages 7-15 – 7-16). This approach is incorrect and will not adequately protect air quality. The *Environmental Protection (Air) Policy 1997* does not allow exceedances of air quality goals for indicators (refer Schedule 1 of Policy).

This assumption in the EIS appears to be derived from a misrepresentation of percentile approaches employed in the air dispersion modelling. It should be noted that 99.9th percentile value that has been used in air dispersion modeling is a statistical parameter. These parameters are sometimes used to filter what may be extreme values generated by modeling. This approach should not be interpreted as allowing harmful air emissions or failure of emission controls for 8 hours per year.

Ambient monitoring data for relevant areas already exists showing impact of the power station operations without a coke plant. This data shows exceedances of some air quality goals on occasions (e.g. SO_2 air quality goal, see EIS page 7-6). These were caused by operation of the power station at average levels rather than its maximum capacity (EIS Appendix I, page 28).

Model predictions and use of the 99.9 percentile output needs to be validated and evaluated in the light of measured air quality data showing current breaches of the SO_2 air quality goal (see page 7-6). In other words, how closely does the model 99.9 percentile (or some other percentile or maximum) prediction align with the maximum measured ambient concentration? It is inappropriate to use a percentile without validation.

A typical approach is to chart the maximum and high percentile values (e.g. 99.9, 99.8. 99.7 ... 99.0) of measured ambient concentrations against the maximum and high percentile of predicted concentrations. In this way, it can be determined whether the 99.9, maximum or some other percentile best represents the maximum measured ambient concentration. The model input would match to the operations of the Stanwell power plant at the time when ambient monitoring was carried out, which appears to be the average SO_2 emission scenario outlined in EIS Appendix I.

One model validation exercise was discussed in the EIS (see Appendix A to Appendix I, page 61). This did not evaluate the accuracy of the 99.9 percentile in predicting maximum levels. Most relevant to validation is the average scenario as this represents the load conditions of the power station when ambient monitoring was conducted. It did however show a general good fit but with some under-prediction of the ambient values when ground level concentrations were at the highest levels.

Recommendation:
The potential impacts on the receiving environment due to air emissions need to be evaluated against compliance with the *Environmental Protection (Air) Policy 1997,* which does not allow any exceedance of prescribed air quality goals. If percentiles e.g. 99.9th percentile are used to represent likely maximum ambient pollutant concentrations, this needs to be justified by charting the maximum and high percentile ambient concentration values (e.g. 99.9, 99.8. 99.7 ... 99.0) against the maximum and high percentile predicted concentrations. This will show which model statistic best correlates with the expected maximum ground level concentration.

Issue 8: The EIS air dispersion modelling output does not show all places potentially adversely affected by the air emissions.

7 . 2 and Supplement Appendix C

The EIS representations and discussions of air impacts mention Stanwell Township and several other receptors (e.g. see EIS page 7-17). The charts of predicted concentration for ten-minute sulphur dioxide (see EIS figure 7.2) show levels exceeding guideline values (inside yellow dotted line) continuing off the page to the left. Perusal of a topographic map shows residences and a small railway station called Warren to the west and southwest. Impacts from air emissions on these receptors are not evaluated. Note that the yellow dotted line in figure 7.2 corresponds to the 99.9 percentile and hence is subject to comments about validation in issue 10.

Recommendation:

The EIS should evaluate the impact of air emissions on all potential receptors as required by sections 3.5.2 of the terms of reference. Charts showing contour plots of predicted air contaminants should include all potential receptors. Where premises are within contours delineating unacceptable air quality, specific predictions for these points should be made.

Issue 9: Stack discharge parameters appear very high, with no basis explained.

7 . 2 and Supplement Appendix C

Factors which are employed to promote dispersion of air pollutants and upon which impact predictions are based are typically incorporated into approval conditions. Two very important factors are the minimum temperature of a plume, which determines thermal buoyancy and the minimum efflux velocity, which governs the momentum rise from the stack. The higher these two factors, in general, the greater the dispersion and the lesser the air quality impact on ground level receptors.

Based upon comparison with other major air emission sources, the efflux velocities and temperature (in the case of bypass of the heat recovery boilers) appear very high. With heat recovery boilers in operation, efflux velocity is nominated as 20.7 metres per second and with out heat recovery at 62 metres per second. For perspective, the latter figure equates to approximately 223 kilometres per hour. Similarly, the exhaust temperature of 827 degrees Celsius for heat recovery bypass is quite high.

Observations of non-recovery coke plants in New South Wales is that combustion stacks have dampers fitted to reduce flows (and hence efflux velocities) when it is desired to retain heat in the ovens and optimise the coking processes. This is apparently more important in plants with above ground ducting to stacks versus below ground ducting as heat losses from ducting is greater. The QCE proposal is for above ground ducting. It is uncertain whether dampers will be fitted to adjust stack gas flows in this proposal.

The derivation of the efflux velocities is not explained in the EIS. For example, are they based upon measured parameters from other plants? Are dampers to be fitted, and if so, how does this affect efflux velocity. Before recommending these measures that govern air dispersion as conditions, the EPA needs to be confident that the levels are achievable.

Recommendation:

The EIS should clarify the derivation and practicality of stack process gas efflux velocities and gas exhaust temperatures used in evaluating air impacts and advise whether these constitute the commitments for minimum efflux velocities and minimum exhaust temperatures. This type of information is required under section 3.5.2 of the terms of reference.

Issue 10: Odour Impact Assessment Methodology

7 . 2 and Supplement Appendix C

It is mentioned in the EIS that the combined odour impact was estimated by predicting the impact of all odorous compounds emitted from the coke plant, dividing

the predicted impact by the odour threshold for each compound and then adding up the potential odour due to each compound to determine a combined odour impact.

However, one of the main gases responsible for offensive odour at coke plants, namely hydrogen sulphide, is not included. Hydrogen sulphide emissions have been identified from quench tower operations at other coke plants. Reduced sulphur compounds, such as mercaptans, may also be present in such emissions but are not included.

A list of odour thresholds for estimating odour concentration is given in Appendix B of Appendix I.1. No references to this data are given in the EIS. Odour threshold values in the literature are highly variable and depend on the test methods. It is highly recommended if such approaches are used, then data from the literature should be from determinations in recent years using dynamic dilution olfactometer techniques.

The method used in the EIS does not allow for fluctuations in concentration within one hour since odour threshold is determined for a very short time-period.

In order to prevent odour and to provide an allowance for fluctuations in concentration within one hour, select and apply a peak-to-mean ratio from the literature or this could be based on the field assessment using the site-specific data. Peak-to-Mean Ratio is a conversion factor that adjusts mean-hourly model predictions to the peak concentrations perceived by the human nose.

It is considered more reliable to use measurements of odour obtained from dynamic olfactometry rather than trying to estimate odour from detection thresholds. Such data should be used preferentially in assessments. For example, odour levels from untreated NSW coke works emissions appear to be of the order of 340,000 odour units (Illawarra Coke Company 2003).

Recommendation:

- Use measurements of odour obtained from dynamic olfactometry rather than trying to estimate odour from odour detection thresholds, as this is more likely to be reliable. If there is no alternative but to use odour detection thresholds, use odour threshold data from the literature preferably that has been determined in recent years using dynamic dilution olfactometer techniques and provide references.
- Include odour likely from hydrogen sulphide and reduced sulphur compounds in assessments.
- For combined odour impact, include "peak to mean ratio" in the equation to provide an allowance for fluctuations in concentration within one hour (see the next dot point).
- For an odour causing substance (i.e. single chemical specie), conduct impact assessment using odour threshold from the literature, minimum dilution factor from modelling and peak-to-mean ratio. In order to prevent odour and to provide an allowance for fluctuations in concentration within one hour, select and apply a peak-to-mean ratio from the literature. Alternatively, the peak-to-

mean ratio could be based on the field assessment using the site-specific data. For individual chemical species use the following benchmark for assessment:

Stack emission standard = (Odour threshold [1]) x ((Minimum Dilution factor [2]) ÷ (Peak to mean ratio [3]))

Note 1 For odour thresholds, refer to the data from the literature preferably that has been determined in recent years using dynamic dilution olfactometer techniques.

Note 2 Calculated minimum dilution factor from modelling under worst-case conditions including minimum efflux velocity and stack temperature.

Note 3. A conservative default peak to mean ratio for stacks is 10 and for ground-level or down-washed plumes from short stacks is 2. Peak to mean ratios can be measures in the field for site-specific conditions.

Issue 11: Use of NO_2 to NO_X ratio of 30%

7 . 2 and Supplement Appendix C

The ratio of 30% has been used when modelling impacts of nitrogen dioxide on air quality (Appendix I page 40). Data for the Seierups air quality monitoring site, which is relatively close to the project site, has been presented in the EIS. This shows that for a significant proportion of measurements, nitrogen dioxide is greater than 30% of nitrogen oxides when the site is likely monitoring the power station plume (see data points EIS Figure 10 a, Appendix I page 41).

One would expect impacts from nitrogen dioxide to be higher than predicted if ratios are higher than 0.3 (i.e. 30%) as appears likely from this chart, but the degree is not clear. Likely impacts at higher ratios e.g. 0.5 should be discussed to show whether such differences would be significant or not to conclusions about nitrogen dioxide.

Recommendation:
The EIS should explain the likely impact on nitrogen dioxide concentrations if higher nitrogen dioxide to nitrogen oxide ratios occur as have been measured.

Issue 12: Incremental Loadings in Pollutants to the Air shed and need to consider interaction of Power Station and Coke Plant Plumes

7 . 2 and Supplement Appendix C

Total SO_2 emissions from the coke plant were estimated as 14,900 tonnes/year (EIS Table 1 of Appendix I.1, Katestone report). This is equivalent to 472 g/s. Total SO_2 emissions from the Stanwell power station for year 2005 are reported as 1040 g/s (EIS Table 13 of Appendix I.1, Katestone report). This is based on the NPI calculations as reported by Stanwell Corporation. By comparing the above two values, it is revealed that coke plant will increase the overall SO_2 loading to the air shed by 45 percent. This shows a significant increment in the loading of SO_2 emissions to the air shed from the coke plant.

Table 15 of Appendix I.1, Katestone report indicates that GLC of SO_2 from coke plant in isolation at Receptor 2, 1-hour average, 99.9th percentile, is 223 $\mu g/m^3$. From Table 17, GLC of SO_2 from coke plant plus Stanwell power station at Receptor 2, 1-hour average, 99.9th percentile, is 384 µg/m3. Annual average GLC at the same receptor is also increased from 7.7 to 9.3 µg/m3 under the above situations. On the

other hand, at receptor 4, 1-hour average, 99.9th percentile GLC will increase from 136 to 333 µg/m3 under the same situations (i.e. coke plant in isolation and coke plant plus Stanwell power station). This is a much larger incremental increase.

This shows that GLC at various receptors is site specific. This is likely due to the dispersion characteristics of the area over which the plume trajectories traverse. It also depends on the stack conditions such as the stack height, exit velocity and exit temperature. It also shows that for the situation of 1-hour average 99.9th percentile GLC at the worst receptor location (i.e. Receptor 2) the project SO_2 emissions seem to dominate. However, this can be better understood if information is provided on GLC at all potentially affected receptors when Stanwell power station is running in isolation. This information is not given in the EIS. Only overall concentrations contours are provided.

Recommendation:

- The EIS should specify the coke plant increment in the loading of SO_2, NOx and particulate emissions to the air shed.
- The EIS should provide estimated GLC from the Stanwell power station in isolation at all receptors. Using this information discuss a strategy for effectively controlling the emissions from the coke plant taking into account the major sources in the air shed.

7.2 Air - Best Practice Environmental Management

Issue 13: Meeting Best Practice and Preserving Air Shed Capacity for future Industries

7 . 2 and Supplement Appendix C

The terms of reference (Section 2.7 Waste management) provides that that the EIS should detail the waste management methods that demonstrate that waste minimisation and cleaner production techniques and designs are in keeping with international best practice environmental management and have been implemented through the selection of processes, equipment and facilities to prevent or minimise environmental impacts. The EIS does not review any international best practice pollution control technology for coke making plant.

In providing EPA advice to the Co-ordinator General and determining necessary or desirable conditions under the *Environmental Protection Act 1994*, the EPA must consider if "best practice environmental management" (BPEM), a standard criterion, has been incorporated in the proposal.

An proposal to increase emissions into the air shed without applying readily available emission control technology to treat or recycle increased emissions would be considered contrary to best practice environmental management, and the waste management hierarchy and the polluter pays principle prescribed under the *Environmental Protection (Waste Management) Policy 2000.*

Constraints are already evident for some contaminants that have on occasion breached air quality goals prescribed under the *Environmental Protection (Air) Policy 1997* e.g. sulphur dioxide, particulates, nitrogen dioxide (see EIS page 7-7). This air shed is considered likely to face additional future demands on its assimilative capacity, given the planning for future development in the "Stanwell Gracemere Industrial Corridor" (see EIS page 13-16). Industries favoured for this estate such as energy intensive industries, manufacturing, stockfeed and meat processing are all likely to require emissions to the air shed.

The EIS approaches air issues by checking compliance with ambient air quality (EIS page 7-13). Whilst this is necessary, emission rates need also to comply with best practice standards if some capacity is to be preserved for future industry. Limitation of increases in emissions to an air shed that has reasonable likelihood of undergoing future industrial development to levels commensurate with best practice would be considered necessary and desirable to achieve ecologically sustainable development.

Although comparison against all relevant emission standards is not possible, as standard gas conditions for the emissions have not been provided in the EIS, some comparisons are possible where standards relate to tonnes of coke produced or tonnes of coal used. These show that proposed emissions are much larger than those permitted for other coke plants internationally. Examples are provided below.

Recommendation:
The EIS should review the international best practice pollution control technologies and emission standards and consider applying these technologies to the proposed plant as required by sections 2.7 and 3.5.2 of the terms of reference. The capacity of the air shed for assimilation and dispersion of emissions in view of existing and future users should be evaluated once best practice emission levels have been determined, as required by section 3.5.2 of the terms of reference.

Issue 14: Pollution Control Equipment for Particulate Emissions – Coking Process Flue Gas, Pushing and Charging emissions

7 . 2 and Supplement Appendix C

Flue gases from the coking process are a major potential source of air pollutants. Modern non-recovery coke plants in the United States treat air emissions from the coking process for particulate removal using fabric filters e.g. Havershill and FDS coking plants in Ohio (Battelle 2004) and Cambria Coke, Pennsylvania (Pennsylvania DEP 2005 (a)). There is no particulate removal for coking process flue gases evident in the EIS. Similarly, prescribed requirements for coke plants in Germany provide for a high level of particulate removal, namely 10 Nmg/m^3 (TA Luft 2002). Failure to provide particulate removal for stack flue gases is contrary to best practice techniques.

Modern coke plants overseas are also typically required to collect and treat emissions from pushing and charging operations. Although the EIS in Appendix I (page I.2-2) states that these emissions will be collected and treated in a bag filter, these are not included in the commitments. At a meeting on 14 February 2006 to discuss the proposal, the proponent advised that the emission treatment had been revised to remove the bag filters. As they are based on the Chinese travelling hood design that is fitted with bag filters, they could be fitted later if necessary. Failure to capture and treat charging and pushing emissions would appear to be contrary to best practice techniques.

Recommendation:

The EIS should incorporate techniques to minimise particulate emissions in the coking process flue gases, pushing, and charging off-gases, consistent with international best practice methods for coke plants, as required by sections 3.5.2 and 3.8 of the terms of reference.

Issue 15: Pollution Control Equipment -Sulphur Dioxide emissions – Coking Process Flue Gas

7 . 2 and Supplement Appendix C

Flue gases from the coking process are a major potential source of air pollutants. Modern non-recovery coke plants in the United States treat air emissions from the coking process for sulphur dioxide removal using dry scrubbers e.g. Havershill plant, Ohio and lime spray dryers e.g. FDS plant in Ohio and Cambria Coke, Pennsylvania (Battelle 2004; Pennsylvania DEP 2005). There is no sulphur dioxide removal for coking process flue gases evident in the EIS. Similarly, prescribed requirements for coke plants in Germany provide for a high level of sulphur dioxide removal by requiring sulphur to be removed from fuel fired (TA Luft 2002).

Although the EIS mentions using low sulphur coal to limit emissions, this technique reportedly produces around 11 - 12 ½ times as much sulphur dioxide per unit of production as use of pollution control equipment (Battelle 2004). Relying only on use of low sulphur coal may not meet best practice emission levels.

Recommendation:

The EIS should demonstrate adoption of techniques to minimise sulphur dioxide emissions from the coking process flue gases consistent with international best practice methods for coke plants, as required by sections 3.5.2 and 3.8 of the terms of reference.

Issue 16: Potential for emissions during transit of quench car to quench towers

7 . 2 and Supplement Appendix C

Fugitive emissions from the very hot coke on the quench car/coke car whilst it travels from the pushed oven to the quench tower are not discussed or estimated. These would include particulates, PAH and VOCs. The emissions will depend upon a number of factors including whether the push is to any extent green, ambient wind, and time taken to reach the quench tower. For a plant spread out over a very large area, travel times are expected to be longer than for smaller plants.

The Australian Corrimal coke works has modified its coke cars such that the cars are covered to minimise fugitive emissions during travel to the quench tower. This is a 100,000 tonne per year plant serviced by a single quench tower. The QCE proposal is a 3,200,000 tonne plant serviced by four quench towers. Travel distances are expected to be greater than for the Corrimal works.

Recommendation:

The EIS should describe and adopt techniques to minimise fugitive emissions during travel of the coke car/quench car consistent with international best practice methods for coke plants, as required by sections 3.5.2 and 3.8 of the terms of reference.

Issue 17: Negative pressure operations

7 . 2 and Supplement Appendix C

One of the key measures incorporated in the proposal to manage air emissions is operation of the coke ovens under negative pressure, helping to reduce fugitive emissions, including when pushing and charging the ovens. Practices are normally adopted to assure and monitor the performance coke oven door seals. US non-recovery coke plants reportedly monitor pressure in ovens to ensure that it is with correct levels.

Recommendation:

- The EIS should explain the minimum degree of coke oven negative pressure needed to maintain control of fugitive emissions, and how this will be monitored and maintained, particularly when the power plant is not operational.
- The EIS should discuss sealing and monitoring of coke ovens doors. The EIS should include a commitment to zero percent visible emissions from doors and off-takes in line with best practice standards as required by terms of reference section 2.7 and 3.5.2.

Issue 18: Water for Dust Suppression

7 . 2 and Supplement Appendix C

It is mentioned in EIS Appendix I.2 that water sprays will be used at a variety of points to minimise dust emissions e.g. coal unloading, coal stockpiles, coal reclaiming, coke stockpiles and coke loading. While water sprays are a common dust suppression measure, it is not clear from the EIS what demand this is likely to generate and whether this will be practicable for all dry times given the water balance for the plant.

How the system will be managed is not clear in the EIS. The Australian Blue Scope Steel steelworks for example, which includes a large coke plant and coal stockpiles, has implemented a meteorological early warning system, which gives notice of changing winds, to improve performance by enhancing appropriate use of automatic water sprays to dampen steelworks stockpiles.

Recommendation:

The EIS should clarify how water demand for dust suppression is catered for in the plant water balance to provide confidence that sufficient water will be available for dust suppression, particularly during dry times. How the dust suppression system will be managed should also be clarified so that it may be compared to best practice measures.

Issue 19: Fugitive Emissions from Material Handling and Storage Facilities

7 . 2 and Supplement Appendix C

The Katestone Environmental report (EIS Appendix I.1 Page 7) advises that the fugitive emissions from material handling and storage facilities were supplied by consultants URS. Details of the levels of control that has been assumed in the calculation of emission rates have not been supplied and the expected emissions are very low. This is also mentioned in the EIS (see Appendix I page 7).

In the EIS fugitive particulate emissions were estimated using the emission rates published in AP-42. The emission factors given in AP-42 are based on measurements on a limited number of different sources under varying operating conditions. These emissions factors must be used with caution and in accordance with the conditions for their use, recognising the numerous assumptions that go into their calculation. Some of the dust sources covered in AP-42 include paved and unpaved roads, heavy construction activities, aggregate handling and storage piles, industrial wind erosion, surface coal mining, sand and gravel processing and various forms of mineral process. With fugitive emissions, it can be difficult to measure the emissions directly because sources can be diffused, and emission rates can be intermittent, and variable. For this reason the published emission factors have a high degree of uncertainty, and the predicted emission rates should be treated with caution. Dispersion modelling for fugitive emissions can add another layer of uncertainty to the emission estimates.

Despite the proposal including a number of significant potential dust sources (e.g. unloading, loading, sizing, stockpiles, charging, pushing and quenching), the EIS fails to include commitment to avoid dust nuisance or meet a dust deposition or dust fallout standard for example.

Recommendation:

The EIS should specify the accuracy of estimates of fugitive emissions from material handling and storage facilities (or the degree of uncertainty) and the assumptions that have been considered in calculation of emissions. The EIS should explain and provide information supporting the low estimates adopted.

The EIS should include a commitment to avoid any dust nuisance and also to meeting a dust deposition of 120 milligrams per square metre per day, when monitored in accordance with Australian Standard AS 3580.10, 2003.

Issue 20: Air Emission Monitoring Program not specified

7 . 2 and Supplement Appendix C

High temperature coke process gas incineration as proposed for the coke plant is a recognised method of treating volatile organic compound emissions. Monitoring is a key feature of incineration processes to verify systems performance and EIS predictions. Such monitoring programs typically continuously monitor and record parameters that indirectly give confidence that effective incineration is occurring whilst periodically sampling and analysing stack emissions for the contaminants of concern e.g. PAH, Benzo[a]pyrene and VOCs.

Indirect parameters typically monitored include temperature and combustion efficiency. Alarms typically operate to warn operators of conditions that indicate likely poor incineration efficiency and high risk of elevated emissions e.g. low combustion efficiency.

Monitoring of other flue gas parameters e.g. particulates or opacity, sulphur dioxide and oxides of nitrogen are also common environmental management measures. For particulate emissions sources e.g. outlets of dust control equipment, opacity monitoring is a common management technique to ensure effective operation.

In respect of attainment of air quality goals, monitoring of ambient air quality at convenient locations representative of potentially affected places is considered reasonable. These would include criteria air pollutants e.g. SO_2, NO_X, ozone, particulate as well as hazardous air pollutants e.g. PAH. Ideally, this would be carried out jointly by the major emitting industries.

Dust deposition (or dust fallout) measurements and high volume samplers typically evaluate dust emissions offsite e.g. windblown dust from stockpiles.

Australian coke plants e.g. Blue Scope Steel at Port Kembla, Corrimal Coke Works are required to carry out continual video surveillance and recording of key plant areas so that incidents that occur that may go unnoticed can identified and remedied. This also assists in any complaint investigations as operators can evaluate whether the operations are the likely source and what could be the cause.

The EIS does not present a monitoring program in EIS section 7.2.7 mitigation measures or Appendix N Commitments. The environmental management plan proposes that a monitoring plan will be developed during licensing of the project. This infers a belief that conditioning will occur after the Coordinator General's report, whereas the administering authority is required to recommend to the Co-ordinator General necessary or desirable conditions that should be considered in any approval pursuant to the *Environmental Protection Act 1994*.

Recommendation:
Monitoring of air emissions is an important mitigation measure and an element of best practice environmental management. The EIS should detail proposed monitoring of air emissions, operational surrogates of effective air emission control and ambient air quality to enable appropriate conditioning.

Issue 21: Comparison of Coke Plant Emissions with other plants

7 . 2 and Supplement Appendix C

Total air emissions from the proposed Stanwell facility are very high when compared against the recently proposed US coke plants. The Ohio EPA issued a draft air permit to FDS coke plant located in Oregon, Lucas County, Ohio, USA (April, 2004). The permit allowed the company to operate two non-recovery coke batteries consisting of 240 coke ovens, which would produce about 1.26 million tonnes of coke. This plant is about 40 percent of the size of Queensland coke plant. The total allowable emissions from this plant in tonnes per year are given in the following table.

In April 2005, Commonwealth of Pennsylvania, Department of Environmental Protection processed an application for a coke plant proposed at Cambria Coke Company, a subsidiary of Sun Coke Inc (Pennsylvania DEP 2005 (b)). This application seeks departmental approval to allow the construction of a heat recovery coke plant in Cambria Township, Cambria County, Pennsylvania. The plant will produce 1.542 million tonnes of coke each year using 280 heat recovery coke ovens and generate 165 megawatts of electricity using waste heat from coke batteries. This

plant is about 50 percent of the size of Queensland coke plant. The total allowable emission limits from this plant are also given in the following table:

Pollutant	Queensland coke plant (Tonnes per year)	Oregon, Lucas Ohio (Tonnes per year)	Cambria Coke, Penny (Tonnes per year)
PM	2580	757	493
PM_{10}	2370	270	361
SO_2	14900	1327	3321
NO_x	2700	950	1239
CO	293	276	339
Lead	0.835	0.227	0.335
VOC	93.2	85.3	43.96

Note: In this table PM, PM_{10} and lead emissions from the US plants include fugitive and point source emissions while Queensland coke plant emissions do not include any fugitive emissions.

By comparing the emission values in the above table, it is revealed that PM, PM_{10}, SO_2 and lead emissions from the proposed Queensland coke plant are much higher than the US plants. Waste gases from coking process in these US plants are treated by lime spray dryer (scrubber) and baghouse filters. While acknowledging that differences in plant size account for some of the differences in the table above, comparison with best practice emission standards gives a similar picture of the proposed emissions not meeting best practice levels. There are also contaminants for which emissions in relevant units are not stated in the EIS (see Table below).

Comparison of some proposed QCE emissions against best practice emission standards

Air Contaminant/Emission Unit	QCE Proposal [1]	Best Practice Standard [2]
Total Particulates – Main Stack	45 mg/Nm^3 (% 0_2 not known)	10 mg/Nm^3 at 5% 0_2
Particulates – Pushing	23 g/t of coke; and Concentration not stated	5g/t of coke; and 5 mg/Nm^3 at 5% 0_2
Particulates – Charging	Concentration not stated	10 mg/Nm^3 at 5% 0_2
Particulates – Quenching	96 g/t of coke	10g/t of coke
Dioxins & Furans	Concentration not stated	0.1 ng/Nm^3 I (TEQ).
Sulphur Dioxide	2.96 kg SO_2/ton coal processed	0.44 kg SO_2/ton coal processed
Waste Gas bypass venting	Not stated	Limit venting to one heat recovery steam generator at a time; and Limit venting to <4% of operating hours

Carbon monoxide - coking	Not stated	20 ppm
Carbon monoxide – bypass venting	Not Stated	20 ppm
VOC – coking	Not stated	10 ppm
VOC – bypass venting	Not Stated	10 ppm

1 Data derived from EIS, Table 1 Appendix I page3 3-4
2 TA Luft (2002) Section 5.4.1.11 Facilities for Dry Distillation of Hard Coal (Coking Plants); for SO_2 based on 0.88 lb SO_2/ton coal coked based on Haverhill Ohio Plant (Batelle 2004) as TA Luft SO_2 requirements (under firing limits) not relevant; waste gas venting, carbon monoxide and VOC based on Haverhill Ohio Plant (Batelle 2004); Dioxin & Furan limits Qld EPA & several overseas jurisdictions.

Queensland EPA is required to consider the environmental values that are likely to be affected from emissions from a proposed development. A review of air quality data for the area of the proposed development also indicates some stresses with regard to contaminants such as sulphur dioxide and particulates. A scrubber and baghouse system for the proposal would be likely to assist in minimising potential coke plant process gas impacts on the air quality.

Recommendation:

The EIS should:

- Compare Queensland coke plant emissions against the recently built best practice US plants.
- Consider reducing PM, PM_{10}, NO_X, SO_2 and lead emissions from the proposed Queensland coke plant.

EIS Section 8 Greenhouse Gas Emissions 8.2

Issue 1: Greenhouse gas emissions from the Coke Plant (Phase 1)

The development of a cogeneration facility (Power Plant) as part of this project is strongly supported and is an essential component of the project's ability to reduce its significant greenhouse impacts.

However, the EIS identifies no strategies for how greenhouse gas emissions from the Coke Plant will be avoided, mitigated or offset prior to completion of the Power Plant (i.e. in the project's first 2 years).

Based on the information provided in the EIS, total greenhouse gas emissions from the coke process are estimated at 2,581,403 tonnes of carbon dioxide equivalent per annum (t/CO2e).

While the emissions may appear to be low, the cumulative affect of these greenhouse gas emissions requires significant abatement activities to counteract it. The abatement that was achieved through large scale vegetation reforms illustrates the significance of these emissions. According to the Australian Greenhouse Office '*Tracking to the Kyoto Target*', the savings from the vegetation reforms in New South Wales and Queensland is estimated at around 17.9 million t CO2e/year for the 2008-2012 period.

While significant greenhouse gases will be mitigated once the Power Plant is constructed, there is still a need to address the greenhouse gas emissions in the first two years.

For possible measures to minimise greenhouse gas emissions, see:

- *Northern Territory Impact Assessment Guideline – Greenhouse Gas Emissions.* Northern Territory Office of Environment and Heritage. May 2005.
- *Guidance for the Assessment of Environmental Factors (in accordance with the Environmental Protection Act 1986) – Guidance Statement for Minimising Greenhouse Gas Emissions No. 12.* Western Australian Environmental Protection Authority. October 2002.

Recommendation

The EIS should explore strategies for avoiding, mitigating or offsetting greenhouse gas emissions prior to commissioning the Power Plant, and implement them as part of the project.

Issue 2: Timing of the Power Plant and greenhouse gas emissions 8.2

The EIS does not provide any certainty as to when the Power Plant will be operational and recent advice from the proponent indicates a longer delay in having the Power Plant operational may occur due to reduced initial coking capacity.
While the proponent's commitment to the Power Plant is acknowledged, there is a lack of detail in the EIS about feasibility requirements to ensure this part of the project is completed. No contingency plans have been included for how greenhouse gas emissions will be addressed from the project should the Power Plant component be determined as unfeasible and not eventuate.

Recommendation

The EIS should provide more detail about the construction and operation timetable for the Power Plant, including details about the Plant's feasibility requirements. Emission calculations for average annual greenhouse gas emissions over the project life in the absence of the Power Plant need to be estimated and a contingency plan for avoiding, mitigating or offsetting these emissions developed.

Issue 3: Additional greenhouse reduction strategies 8.2

The EIS does not provide sufficient detail on strategies that will be implemented in addition to the Power Plant to avoid, mitigate or offset emissions over the project life.

Recommendation

The EIS should provide more detailed analysis and description of options available to reduce the long-term greenhouse emissions from the project.

Overall Recommendation on Greenhouse Gas Emissions

That the Coordinator-General consider the implications of greenhouse gas emissions resulting from the QCE project and that the proponents be requested to develop a greenhouse gas emissions strategy which addresses issues 1, 2, and 3. In particular, identifying what actions will be undertaken to avoid, mitigate or offset greenhouse gas emissions:

- In the first phase of the Coke plant, prior to construction of the Power Plant;
- In the event that the Power Plant facility is delayed;
- In the absence of a Power Plant facility; and
- Post year 2 following the implementation of the Power Plant.

EIS Section 9 Noise and Vibration

Issue 1: Poor characterisation of some noise sources

9 . 2 and Supplement Appendix D

The EIS provides estimates of noise emissions for some noise sources only, e.g. quenching. Wherever practicable, actual measurements e.g. of sound power should be used as this increases confidence in the conclusions.

Recommendation:

The EIS should wherever practicable, utilise actual measurements from a similar coke plant e.g. of sound power.

Issue 2: Coke Plant Process Gas Stack Noise may be underestimated

9 . 2 and Supplement Appendix D

The EIS assumes low gas flows and hence little likelihood of creating a stack roar. Stack roar from large industrial facilities can be a source of noise complaints, including low frequency noise nuisance. The air section of the EIS nominates a very high efflux velocity in the stack and presumably, in some associated ductwork.

With heat recovery boilers in operation, efflux velocity is nominated as 20.7 metres per second and with out heat recovery at 62 metres per second. For perspective, the latter figure equates to approximately 223 kilometres per hour.

Recommendation:

The EIS should re-evaluate the potential for stack roar to cause noise impacts based on expected coke plant process gas flows.

Issue 3: Noise abatement measures not decided.

9 . 2 and Supplement Appendix D

There is uncertainty as to what noise abatement measures will be installed. The measures nominated in the EIS are termed indicative only (EIS page 9-19 – 9-20). The EIS mentions that if sound power levels of equipment are greater than those nominated, additional noise reductions will be needed. However, as some of the included noise reductions are very large at the moment e.g. 25 dB(A), there is concern as to whether greater reductions may be practical for some equipment. This would mitigate against meeting noise standards in such a case and thus raises uncertainty about the noise impact conclusions.

Recommendation:

The EIS should, for items of equipment that are near the limit of practicable noise abatement, nominate specific sound power levels of equipment and appropriate abatement measures; these may include a range of alternatives.

Issue 4: Sleep disturbance criteria in low background noise climate

9 . 2 and Supplement Appendix D

WHO (1999) recommendations on sleep disturbance require that special attention should be given to noise sources in an environment with a low background noise level, such as occurs in this case. More stringent sleep disturbance criteria in low background noise environments would be noise events not to exceed 45 dB(A) [as Max_{LpA}]. The WHO (1999) also notes that for continuos noise, the equivalent sound pressure level indoors should not exceed 30 dB(A). Meeting this criterion inside should be readily achievable if the nominated outside equivalent sound pressure levels in EIS Table 9.14 are met.

Recommendation:

The EIS should ensure that emissions at nighttime do not exceed 45 dB(A) [as Max_{LpA}] in equivalent sound pressure levels in EIS Table 9.14.

Issue 5: Noise sensitive places are not clearly identified

9 . 2 and Supplement Appendix D

The EIS does not clearly identify all noise sensitive places. Predictions are given only for a selection of premises (see Figure 9.1) Perusal of a topographic map shows residences to the north, west and southwest of the site.

Recommendation:

The EIS should evaluate the impact of noise emissions on all potential receptors as required by sections 3.7.2 of the terms of reference. Charts showing contour plots of noise emissions should include all potential receptors. Where premises are within contours delineating unacceptable noise impacts, specific predictions for these residences should be made.

Issue 6: Noise reports show noise currently at levels likely to be annoying

9 . 2 and Supplement Appendix D

Noise reports included in the EIS show noise already at levels likely to be at nuisance levels, including a 160 Hz low frequency source (see EIS Appendix e.g. 160 Hz emission J). The report recommends that appropriate noise control measures be implemented to remedy outstanding noise issues prior to commencement of additional noise sources (referring to AMC Plant). The levels measured in the Stanwell area exceed both nuisance noise criteria and design criteria for the proposed coke plant. The report also notes the possibility of new noise sources exacerbating "existing noise complaints".

The EIS provides no advice as to whether these excessive noise emissions from the Stanwell power plant have been abated nor of the combined impact of the Stanwell Power Station (including its new Peaker Plant) and the proposed Coke Plant/Heat Recovery Plant. It is also noted that the noise monitoring reported in the EIS dates from 2000 and may not represent current conditions.

Recommendation:

The EIS should advise on current noise levels to determine if previously measured nuisance noise levels have been abated, and predict the combined noise impact of proposal and existing noise sources. Where exceedance of noise criteria is found or predicted, the assessment should evaluate which noise source is primarily responsible for the exceedance viz. the Power Station, the proposal or both.

Issue 7: Incorrect estimation of background noise and compliance levels at location A4 and nearby homes.

9 . 2 and Supplement Appendix D

The proposed noise compliance levels for homes nearer to the site are considered too high. They have been calculated using background noise levels that included a power station operating at nuisance levels and assume the homes are zoned industrial land.

Compliance levels to protect the amenity of these residences should be based on background noise levels representative of the location without power station noise and the relevant land use zoning for the locality. Abatement measures, which may include source controls at the proposed facility, path controls and acoustic treatment of the residences, should aim to meet compliance levels based on correctly determined compliance levels.

Recommendation:
The EIS should use representative background noise levels and land uses in determining noise compliance levels for nearby residences.

Issue 8: Inconsistency between abatement measures (noise & air) in EIS.

9 . 2 and Supplement Appendix D

There is some inconsistency between some noise abatement measures and corresponding air emission abatement measures. For example, the noise section recommends fully enclosing conveyors (e.g. EIS page 9-19) whereas the air section only recommends partial enclosure. For some measures such as enclosure of major noise sources of quench stations, it is not explained how this may be practically achieved and still allow quench cars and coke in and out. There thus appear to be inconsistencies between the two EIS sections.

Recommendation:

The EIS should clarify inconsistencies between the air and noise abatement measures. Where enclosure of a noise source is the recommended treatment method, this needs to be practicable from air pollution control and practicable viewpoints.

Issue 9: Views of potentially affected persons.

9 . 2 and Supplement Appendix D

Views of potentially affected persons are a prescribed matter under the *Environmental Protection (Noise) Policy 1997.* These would include any complaints as well as favourable views. No views are mentioned in the EIS.

Recommendation:

The EIS should present views of persons potentially affected persons, including any noise complaints.

Issue 10: Tonal and impulsive noise sources do not appear to have been taken into account

9 . 2 and Supplement Appendix D

Some noise sources are expected to exhibit tonal characteristics e.g. fans, stack noise and other impulsive characteristics e.g. train bangs, coal and coke dumping into receptacles, reversing beepers. Noise with these characteristics are inherently more annoying and are penalised in determining compliance with noise criteria (up to 5 dB(A)). Tonality and impulsiveness of noise sources does not seem to have been taken into account in evaluating noise impacts and compliance. This is explained in EPA's noise guideline titled Planning for Noise Control, which is mentioned in the terms of reference.

Recommendation:

The EIS should evaluate tonality and impulsiveness of noise sources in assessing noise impacts and compliance as required in section 3.7.2 of the terms of reference.

Issue 11: Noise from mobile plant appears excessive.

9 . 2 and Supplement Appendix D

Noise levels predicted for mobile plant may reach up to 43 dB(A) (see EIS page 9-20). This would exceed nuisance criteria levels at certain times e.g. 33 dB(A) for evening periods (see EIS Table 9.14. It appears that further noise mitigation measures are needed to address noise from mobile noise sources. This appears to derive from assessment focussing on whether persons once asleep, will be awakened, rather than also considering prescribed environmental values that apply when persons are awake such as relaxation and amenity. These would most likely be affected at quieter times of the evening when people are awake.

Recommendation:

The EIS should evaluate mitigation measures for mobile noise sources to ensure these do not cause adverse noise impacts as required in section 3.7.2 of the terms of reference.

EIS Section 14.5 Port Facility

Issue: Port Facilities for the Export of Coke 14 . 5

The EIS provides no detailed information or plans on the proposed port facilities necessary for the export of coke.

Recommendation

Port facilities are a component of the proposed development. The EIS needs to clearly define the extent of proposed development and works within tidal waters. Details of all port facilities required needs to be addressed including associated dredging and spoil disposal for berth and apron construction.

Provide details of whether dredging and reclamation is required for berth construction. If larger vessels are required for the export of coke provide details of whether this will necessitate deepening of existing navigation channels. Describe spoil disposal options, the impact of these works on coastal management and details of the physical and chemical characteristics of the dredge spoil.
Refer to EPA guidelines for 'Constructing tidal works' and 'Allocation of quarry material' 'Approval of Dredge Management Plan', and 'Reclaiming land under tidal water' for details of information required to assess port development works.

For land based dredge spoil disposal, a detailed assessment, with appropriate staging plans, to demonstrate that the quality of the water discharged from dredge spoil disposal areas will meet standards necessary to achieve water quality objectives and therefore maintain receiving water environmental values throughout the period of dredge spoil disposal on land. Consideration should be given to:

- Quantities of tailwater likely to be generated from dredging activities;
- The settling rate of fine sediments from all dredge material types;
- The residence time within settling ponds prior to discharge (related to dredge pumping rate, ratio of solids to water in spoil, settling rates, available capacity of the disposal and settling areas, potential bulking factor, intensity and duration of rainfall events with consideration given to the worst case scenario for these factors);
- Source of material for bunds and bund wall stability;
- Measures to limit channelling and sediment resuspension in settling ponds;
- Measures to limit erosion and sediment resuspension in discharge channels; and
- Contingency measures in the event that discharge limits are exceeded.

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End comment

Response No. 2

T86981

Queensland Government

24 February 2006

-T418

Department of Main Roads

The Coordinator-General
Att. EIS Project Manager – QLD Coke & Power Plant Project
Major Projects
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BRISBANE CITY EAST QLD 4002

Department of the Premier and Cabinet	
Date Rec'd in Work Area 01.03.06	Action Officer R. ROLFE
Tracking No.	Mail No. 519
Folio ID 24.02.06.17	File No.

Dear Mr Fitzgerald

Capricorn Highway (Rockhampton – Duaringa)
Comments on Review of EIS - Queensland Coke & Power Plant Project

Thank you for your letter of the 16 January 2006 advising this department of the release of the EIS for public comment and inviting this department to review and make a submission on the above project.

Attached is my response for your consideration. This response includes the input from the Central District Office. A number of significant omissions have been identified that will adversely impact on the departments ability to fully assess the projects impacts on the transport network. It would be beneficial if you could seek this additional information from the project proponents.

We look forward to further close consultation with your office and the project proponents in the course of preparing an addendum to the EIS. Please contact Don Seiler, Regional Advisor (Strategic Planning) on 4931 1640 if you have any queries concerning the comments. He is also the contact point for the project proponents in preparing the addendum to the EIS.

Yours sincerely

Mal Hellmuth
Executive Director (Central Queensland)

Enc (1)

Central Queensland Region
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Queensland Government

Department of **Main Roads**

File N°. 890/00028 RMF P15374

B/c **Director – Network Planning & Policy**
Attn: Chris Murphy
Mineral House
GPO Box 2595
BRISBANE QLD 4001

For your information.

District Director (Central)

For your information.

Regional Advisor (Strategic Planning)

For your information.

Mal Hellmuth
Executive Director (Central Queensland)

24 February 2006

Department of Main Roads
Review of Environmental Impact Statement for
Queensland Coke & Power Plant Project

Section 1 - EXECUTIVE SUMMARY

Section ES 2.12 Transport Infrastructure 14 . 3 . 1 and Supplement Appendix E

Sub-section **Road**

Para (1)

The first statement of this section and I quote "The project will primarily generate private vehicle traffic relating to operation and construction, ..." is inconsistent with the last sentence of the paragraph. These statements are misleading and should be amended as outlined below.

The proponent should clarify this inconsistency and fully address the traffic generation issues in the body of the report.

14 . 3 . 1 and Supplement Appendix E

Para (2)

The project will impact on the intersection at Gladstone Road /Port Curtis Road/Lower Dawson Road. Furthermore the project will have other road traffic impacts not mentioned in this brief summary. See detailed comments below.

The proponent should revise the executive summary once the main report is revised or supplemented.

Section 2 - PROJECT DESCRIPTION

Supplement Appendix E

Section 2.3.1 Coke Plant.

The EIS does not provide sufficient and detailed information on the origins, transport transfer points, haulage route and destination of materials and equipment for the coke plant, as well as the types of vehicles used and so on. Maps of sufficient detail and of appropriate scale should be provided.

The proponent should provide more precise and detailed information (including maps) on the origins, transport transfer points, haulage route and destination of materials and equipment for the coke plant.

Section 2.3.2 Power Plant

2 . 3 . 2

Section 2.3.1 provides a table of all the major quantities for the coke plant. Section 2.3.2 provides a description of the major components for the power plant, but does not tabularise these components for ease of assessment.

The proponent should provide a tabulation of all the major components of the power plant including volumes and tonnages of materials to be transported and the origin / destination of trips to clarify the impacts on the adjacent transport network.

Section 2.4.1 Transport – Road, Rail and Shipping

2.4.1

Sub-section **Roads**

The EIS does not provide adequate maps of the regional road system (Rockhampton, Yeppoon, Stanwell, Gladstone Port Area and Port Alma) or the local road system that may be used by project related traffic (e.g. Rockhampton to Stanwell, Gracemere Town and the Gladstone area). It appears that almost the same description is provided in this section as is contained in the Executive Summary. This section should cover the transport aspects of the project description, not the impacts which belong in subsequent sections of the report.

The proponent should describe the transport support infrastructure for the project in greater outline, with the full details provided in Section 14. The information should cover the "Infrastructure" requirements as well as the use of the infrastructure in the form of the transport task and transport services. Suitable large scale maps of the regional road system (Rockhampton, Yeppoon, Stanwell, Gladstone Port Area and Port Alma) should be included in this section or included in section 14 and crossed referenced in this section. Specific local small scale maps of the road system that may be used by project related traffic (e.g. Rockhampton to Stanwell, Gracemere Town and the Gladstone area) should also be included.

Section 13 - ECONOMIC ENVIRONMENT

13.2

The draft report provides a socio-economic impact assessment for the project including input-output analysis. Whilst interesting work has been done (refer Appendix K Socio-Economic Impact Assessment) with this modelling, the results do not appear to be well integrated or linked with the rest of the report.

For example, taking into account the direct, indirect and induced effects of the project, what are the expected changes in the size of the transport (and communication) sector at various years within the region or the impact on the rate of growth? The report does indicate changes in output, income and employment over a 4 year period for the construction phase, but what does this mean for the growth in transport demand (freight and passenger routes)? More linkage is required as the demand drivers underpin projections of traffic growth.

Figures are provided for total impacts for the Rockhampton region in terms of output, income and jobs, but what do these impacts mean in terms of an increased rate of regional growth as a result of the project? What is the relative level of economic stimulus? Further, how are these increases translated into sectoral increases, for example, the transport and communications sector?

The proponent should address the points raised in these paragraphs immediately above.

Section 14 - TRANSPORT INFRASTRUCTURE

Section - 14.3.1 Existing Infrastructure

14.3.1 and Supplement Appendix E

Para (2) of the Introduction

This indicates that no road works are planned for the project. Main Roads believe that there has not yet been adequate analysis to arrive at this conclusion. Further analysis is required as suggested below with likely improvements being required at the intersection of Power Station Road / Capricorn Highway and also access from the construction camp at Gracemere to the Capricorn Highway.

The proponent should amend this statement to reflect the need to carry out works on the network and compensate for bringing forward the need for future works to address the project traffic impacts. Specific works can be referred to once further analysis is carried out.

14 . 3 . 1 and Supplement Appendix E

Sub-section - **Existing Road Network** (pages 14-5 & 6)

The EIS only provides a narrow focus on parts of the existing road network. Maps are required which show the broader road network in relation to the project components. The map showing the "Road Network Study Area" (Figure 14.1) should also indicate the broader context of what catchment lies beyond the immediate road connections to the Capricorn Highway. This would include the locations of the plant, the "suggested" rail siding at Stanwell, the road system around Stanwell, Kabra and Gracemere, the location of the proposed 900 person construction camp/village at Gracemere and other key features and/or traffic generators.

The figure does not show the transport route of the buses from the construction village to the State-controlled road. This route is essential for Main Roads to identify / confirm the impacts. At the information meeting on the 9 February 2006, there was some uncertainty as to which site would be utilised. If the route for the buses is other than the Gavial-Gracemere Road, the proponent should provide details of the alternative and discuss the advantages / disadvantages of the alternatives.

Similar local transport details are required for the Gladstone, Rockhampton and possible Port Alma transfer operations.

The proponent should provide information on the wider road network and indicate all roads proposed to be used for haulage of materials, haulage of equipment, transport of workers, movement of sub-contractors and service vehicles. Information should also be provided on the various route options evaluated by the proponents and the reasons for choosing the preferred routes. Maps should be provided covering each area of interest and the wider region at appropriate scales.

14 . 3 . 1 and Supplement Appendix E

Sub-section - **Existing Road Network** (page 14-5)

In line five (5) of the first paragraph, the statement "The Project will primarily generate private vehicle traffic relating to the operation and construction of the facility.....". This is inconsistent with the second paragraph of page 14-10, which states "Construction staff are likely to be housed in village style or private accommodation to the east of the project site (eg. Gracemere and Rockhampton) and transported to the site via 45-seat passenger buses."

It is Main Roads view that a combination of private vehicle traffic and bus travel is the most likely scenario. This is based on historical experience of other similar projects such as Stanwell Power Station and Comalco Aluminium Refinery (Stage 1). In the case of Stanwell, the anecdotal evidence was only 80 - 85% of the construction workforce housed in the construction village used the free bus service provided. In the case of Comalco, initially there was a high percentage use of the bus service; however, within three months of commencement of construction, the contractor had to provide a substantial increase in the number of car parks at the site to accommodate private vehicles. The temporary carpark was constructed in the State-controlled road reserve. Bus occupancy had fallen to approximately 50% of the construction workforce.

The proponent should revise the EIS construction traffic along more realistic lines as follows:

- Assume 65% of the 900 Gracemere construction village occupants will travel by bus and the remainder by private vehicle with an occupancy level of 2 persons / vehicle.
- Assume 30% of the Rockhampton construction worker residents will travel by bus and the remainder by private vehicle with an occupancy level of 1.2 persons / vehicle.

Note these proposed assumptions are still considered conservative, with actual private car use likely to be even higher.

14 . 3 . 1 and Supplement Appendix E

Sub-section - **Intersection Geometry** (page 14-6)

The EIS overlooks several key intersections that should be included in the impact assessment. Main Roads believe the intersection of Lower Dawson Road with Upper Dawson Road and Jellicoe Street should also have been assessed. A significant increase in traffic on the Lower Dawson Road as well as more project traffic along the Upper Dawson Road associated with the movement of workers to the Range and Allenstown areas may cause the significant impacts at this intersection.

As insufficient information is provided on haulage routes and the location and movement of the work force, it is premature to discount impacts on other intersections such as Gavial-Gracemere Road/Bruce Highway, Gavial-Gracemere Road/Burnett Highway, Kabra-Mt Morgan Road/Capricorn Highway (and rail crossings), as well as others.

There is potential for private vehicles from Gracemere to want to access the Capricorn Highway across minor level crossings just west of Gracemere. Only if the proponent can adequately demonstrate that these various routes are not going to be used (by haulage, workers, contractors, service providers) can the proponent reasonably not address them.

The operational performance and safety of the Kabra Road and other level crossings near Gracemere will need to be assessed as there is likely to be both increased rail traffic (growth plus the project impacts) and increased road traffic.

The proponent should include the following key intersections in the impact assessment:

- Lower Dawson Road / Upper Dawson Road / Jellicoe Street
  - This is the first access point for residential traffic into South Rockhampton (Allenstown and The Range). Jellicoe Street gives access to Hastings Deering
- Lawrie Street / Ranger Drive on the Gavial – Gracemere Road
  - This intersection would provide one alternative access to the 900 person construction village
- Capricorn Highway / Somerset Road (first open level crossing west of Gracemere Sale Yards)
  - This intersection would provide another alternative access to the 900 person village.
- Capricorn Highway / Malchi Nine Mile Road (second open level crossing west of Gracemere Sale Yards)
  - This intersection may provide a second alternative access to the 900 person village.
- Capricorn Highway / Kabra Road
  - This intersection would provide one alternative access to Mt Morgan for construction workers seeking low cost family rental accommodation.
- Intersections such as Bruce Highway/Gavial-Gracemere Road, Gavial-Gracemere Road/Burnett Highway, as well as others need to be considered.

Amend figures 14.2 and 14.3 to include these intersections.

14 . 3 . 1 and Supplement Appendix E

Sub-section - **Existing Traffic Demand** (page 14-8)

The EIS does not provide sufficient road link traffic information to cover all of the links that will be used not just the four mentioned in table 14.2 and 14.3. We note that the Kabra Road is indicated as a significant point within the traffic system, which appears inconsistent with omitting it from the intersections.

The proponent should amend this section once all the transport and travel routes are designated. All routes should be indicated on suitably scaled maps. Information on link volumes should show 1, 5 and 10 year growth rates. It should also show hourly, daily and weekly traffic profiles.

14 . 3 . 2 and Supplement Appendix E

Section 14.3.2 - Potential Impacts and Mitigation Measures

The EIS does not clearly outline the extent and origin / destination of all construction materials and equipment associated with the project.

a) At the agency briefing meeting in Rockhampton on the 9 February 2006, the issue of delivery of the refractory bricks was further clouded. The possibility of delivery of the brick materials into Port Alma and subsequent transport from that port should be addressed. The proponent also indicated at the agency briefing that a temporary siding may be established at Stanwell on the central western rail line for offloading of the brick materials, however no information is provided on this component.

b) In the **Rail** sub-section of The Executive Summary (page ES-25) if makes reference to "A new eastern angle connection from the SPS rail loop to the central Blackwater line is proposed to be constructed." There is no reference to the quantity of materials required for this work and no account appears to be made for the construction traffic in the EIS.

c) In the **Port** sub-section of the Executive Summary (Page ES-26) it makes reference to "A coke unloader will be constructed on a second spur line of the Cement Australia loop" There is no reference to the quantity of materials required for this work and no account appears to be made for the construction traffic associated with this component in the EIS.

The proponent should provide the following information to assist Main Roads in assessing the full impacts of the activities associated with the project.

1. A full materials listing for each of the components of the project including volumes / tonnages for:
   - Coke plant
   - Power plant
   - New rail loop at Stanwell
   - New spur line, coke unloader and ship loader at Fisherman's Landing

2. An origin / destination tabulation of all construction materials and construction equipment which clearly identifies the movement of the materials through each link and intersection being assessed and along each segment of road. As several different ports and points of origin may be used (eg Brisbane, Gladstone, Port Alma, Townsville) it may be necessary to develop several different options. The road impacts and road use management plan may need to be amended subsequently once more contractual details are known. Consideration of these changes would be incorporated into conditions related to the EIS approval.

   A tabulation shall provide the following alternative delivery modes of the refractory bricks:
   - Delivery into Brisbane, rail transport to Rockhampton and road transport to the project site,
   - Delivery into Brisbane, rail transport to a temporary siding at Stanwell and road transport to the site,
   - Delivery into Port Alma and road transport to the site.

14 . 3 . 2 and Supplement Appendix E

Second paragraph of the introduction to this section (page 14-9)

The meaning of this paragraph with regard to staging the project is unclear. What staging scenario do the peak employment figures and the maximum traffic generation refer to? Since the staging is only regarded as "likely" then information on employment and traffic should relate to each option. Alternatively, the specific option for which the EIS approval is sought should be defined.

The proponent should clarify the staging of the project and the consequent employment traffic generation associated with each stage.

14 . 3 . 2 and Supplement Appendix E

Sub-section **Construction Traffic demands**

Light Vehicle Traffic (page 14-9)

See comments above under Existing Road Network in relation to the location of the construction village and assumptions with respect to the number of bus trips. It is unlikely that all will travel by bus and that all will travel before 6 am or after 6pm. What of the transport of contractor staff, other service providers, trips to Rockhampton for shopping and a whole range of services? Some personnel will also travel from Mt Morgan, Yeppoon and Gladstone.

Paragraph two of this section does not reflect an acceptable proportioning of trips between buses and light vehicles as discussed above.

The proponent should provide further information and analysis for each option for origin and destinations of trips, time of travel and trip generation. Paragraph two of this section should be amended to reflect a more acceptable proportioning of trips between buses and light vehicles as discussed above.

14 . 3 . 2 and Supplement Appendix E

Sub-section **Construction Traffic demands**

Heavy Vehicle Traffic (page 14-10)

Insufficient information and analysis is provided with respect to heavy vehicle traffic – types of vehicles, types of materials and plant, volumes of materials and equipment for different stages or part stages, origins and destinations of materials and plant, hours and days of movement of material and plant and so on.

This section does not appear to take account of the rail siding works and the works in Gladstone identified in the EIS as being a part of the project works. There may also need to be some works in relation to hard stand development or container loading facilities at Rockhampton and or Port Alma. More information and analyses are required.

Table 14.4 provides insufficient detail.

The EIS identifies the use of B-double vehicles hauling materials to the site. The proponent has not addressed the design and safety aspects of these vehicles turning from the Capricorn Highway off ramp into Power Station Road at Stanwell. The turning paths of large vehicles at this part of the intersection needs to be investigated by the proponent. The acceleration and merging of B-double vehicles as they enter the traffic streams on the Capricorn Highway needs to be fully addressed.

Table 2.1 indicates that 100 000m^3 of concrete is required for construction. Pioneer Construction Materials is establishing a quarry to the north of Stanwell township. Quarry products are likely to be transported from the west to the site.

The proponent should provide further information and analysis for each option for origin and destinations of trips, time of travel and trip generation, vehicle type, types of materials & plant, volumes etc - for each aspect of the construction process. This shall include providing adequate information on the proposed rail sidings at Stanwell and Gladstone, and alternatives at Rockhampton and Port Alma.

The proponent will need to demonstrate that B-double vehicles can turn from the Capricorn Highway off ramp into Power Station Road without crossing the centre of Power Station Road. The proponent will also need to demonstrate that B-double vehicles have sufficient acceleration lane length to accelerate to 100km/h before merging with the Capricorn Highway east and west bound traffic streams.

14 . 3 . 2 and Supplement Appendix E

Sub-section - **Operation Traffic Demand**

Light Vehicle traffic (page 14-10)

Similar comments to the section above on light vehicle traffic for the construction phase apply.

The proponent should provide further information and analysis for each option for origin and destinations of trips, time of travel and trip generation, vehicle type, types of materials & plant, volumes etc - for each stage of the operational phase.

Heavy Vehicle Traffic (page 14-11)

Similar comments to the section above

Table 14.4 provides insufficient detail.

The proponent should provide further information and analysis for each option for origin and destinations of trips, time of travel and trip generation for each stage of the operational phase.

14 . 3 . 2 and Supplement Appendix E

Sub-section - **Project Traffic distribution and assignment** (page 14-12)

The estimates in this section appear to adopt very broad- brush assumptions that do not appear to be based on any analysis of the potential workforce nor any clear presentation of options for haulage with respect to materials and equipment for construction, operational inputs and outputs. Assumptions are made without reference to analysis or credible advice or external documents. In the absence of analysis, unreferenced assumptions and uncertainty about options and/or scenarios it behoves the proponent to develop a range of different options and assumptions that will provide estimates with upper and lower limits.

In dot point two (2) the proponents make reference to "There may also be a small component living to the west of the project site (5%)." This percentage of the workforce would more likely come from Mt Morgan than to the west of the site.

The proponent should provide significantly more work on this area of the EIS to address the above concerns. Figures 14.5 and 14.6 should be revised to reflect the additional traffic linkages.

14 . 3 . 2 and Supplement Appendix E

Sub-section - **Future Traffic Volumes**

Subsection Background Traffic Growth (without Project) (page 14-13)

The traffic growth rate of 3% adopted in the EIS is not supported by the historic data and extensive discussions with Fitzroy Shire Council. Historical growth rates have been significantly higher (even by the proponents own admission) than the 3% background growth rates assumed.

Furthermore, the 3% linear assumption has been arbitrarily applied for all intersections. The combination of a low growth rate and the assumption of linearity (arithmetic straight line progression) rather than geometric or exponential growth Main Roads believes leads to serious underestimation. The growth rate assumed does not appear to have been discussed with Main Roads officers to arrive at an agreed rate of growth for different road sections.

The proponents should adopt a minimum 6% per annum growth rate for the Capricorn Highway from the intersection with the Bruce Highway to Stanwell. Adopt a minimum 3% per annum growth rate for the Capricorn Highway west of Stanwell. Adopt a minimum 4% per annum growth rate for the Bruce Highway south of Port Curtis Road. This may consequently lead to capacity limits being reached at intersections sooner than the proponent has projected.

Sub-section - **Network Operation**

14 . 3 . 2 and Supplement Appendix E

Sub-section Intersection Operation (page 14-14)

Paragraph 2

This paragraph refers only to operational traffic, however given that construction will be spread over a considerable length of time, traffic issues could be caused by intersection saturation at an earlier date if construction traffic is included.

The proponent should amend tables 14.5 and 14.6 to provide the analysis for scenarios C & E and provide information not just for the five intersections listed but also for the other intersections identified by Main Roads in our comments above.

Paragraph 4 -6 (page 14-16)

The proponent argues in paragraph six of this section, that because the project will not impact on the "critical" (right turning out of Port Curtis Road) and thus they bear no responsibility for upgrading works at that intersection. Main Roads rejects this logic as more through traffic will render the intersection more difficult for exiting right turn traffic at the intersection to find a gap during peak periods.

The proponent should re-evaluate the impacts on all intersections including the key roundabout that is the intersection between the Bruce Highway and the Capricorn Highway to provide a more thorough and realistic approach to assumptions with respect to trip generation as discussed above. Additionally, management of impacts will need to be addresses in the Road Use Management Plan.

We confirm that the Stanwell intersection requires a permit for the operation of B-Double or Road Train vehicles. Conditions on this permit are likely to be linked to operations in accordance with the Road Use Management Plan.

Last paragraph of the section (pages 14-16 & 17)

No safety assessment appears to have been carried out. *'The Main Roads Guidelines for Road Impact Assessment of Development Proposals'* requires such a safety review for all intersections and other road and road use aspects that are impacted by the project. This review is likely to show significant issues; for example, in relation to the Capricorn Highway/Power Station Road intersection at Stanwell.

The proponent should undertake a Road Safety Audit in accordance with Austroads Road Safety Audit requirements. Some of these issues raised in the audit may need to be addressed by infrastructure improvements, while others may need operational controls that would be incorporated in the Road Use Management Plan. In the case of the intersection at Stanwell there are significant issues with turning paths of large vehicles and deceleration and acceleration lanes as vehicles exit and enter traffic streams on the Capricorn Highway. These issues need to be fully addressed by the proponent.

Sub-section **Pavement Impact Assessment** (page 14-17)

14 . 3 . 2 and Supplement Appendix E

Main Roads has raised a number of issues concerning the actual extent of the road network impacted on by the project traffic. The type and mix of traffic and the origin / destination of this traffic should be reviewed by the proponent.

This section is very scant in detail. Various assumptions have been made by the proponent and great effort and knowledge is required by reviewing officers to make sense of the tables. The proponent has suggested that because sections of the network have reached their theoretical design life - specifically in reference to the Gavial - Gracemere Road (refer GHD Study), the impacts of the project traffic will not be considered. It is ridiculous (or naïve) for the proponent to suggest that Main Roads would undertake works on a pavement that is still in reasonable working order.

The proponent should put forward engineering logic that indicates how much remaining pavement life could be expected from the existing pavement and how this remaining life will be affected by the proposed project traffic.

The proponent should re-evaluate the impacts of all of the project traffic on the road network taking into consideration the issues raised above. Identify on suitable sized maps the regional and local extent of the pavement impacts and obtain Main Roads written agreement on the extent of the study. The proponent should then undertake a revised assessment of the pavement impacts. The assessment should include contribution amounts for each segment of the road network impacted on by the various stages of the project.

14 . 3 . 2 and Supplement Appendix E

Sub-section **Conclusion** (page 14-18)

Section 14 provides no assessment of environmental issues relating to transport and transport infrastructure such as road traffic noise, visual impacts, dust control, hydraulic and hydrological impacts, road works in the road reserve, access control, on site and road side parking, ancillary works and encroachments and over-dimensional vehicles. The proponent should refer to the Main Roads Guidelines referenced above for guidance.

The proponent should provide specific proposals with respect to impact mitigation of pavements, intersections, signage, safety and so on. This will include entering into compensation and infrastructure agreements with Main Roads. It will also require a more comprehensive Road Use Management Plan. The proponent should also incorporate a roads component into their Communication/Consultation Plan

Section 16 - ENVIRONMENTAL MANAGEMENT PLAN

16 . 3 and Supplement Appendix E

Section 16.3 Road Use Management Plan

The draft Road Use Management Plan (RUMP) is inadequate with respect to scope, content and the level of detail. We appreciate that many aspects with respect to haulage will not be known by the proponents at this stage, but the RUMP should at least provide the appropriate framework into which the subsequent specific details can be inserted and agreed prior the project proceeding.

The proponent should provide more specific details in the draft Road Use Management Plan (RUMP). At a minimum it should contain the following:

- A brief description of the project including maps showing location of facilities, access points and transport routes.
- A description of the scope of the transport tasks.
- Information on management haulage tasks – by whom, what sort of vehicle, etc.
- A more detailed statement of general and specific objectives of the plan rather than simply a one-line statement of "policy" to manage impacts.
- A more detailed statement of the specific performance criteria including specific targets and measures.
- A strategy that provides specific responses to manage foreseen issues relating to heavy vehicles, buses and cars, service vehicles, dangerous goods movement, over-dimensional loads, and so.
- Some aspects to be covered should include:
    - The transport related legislative/regulatory framework
    - Safety Management – particularly fatigue, drugs and alcohol, and so on.

- Personnel Management – control and direction of staff and contractors, lines of responsibility and accountability
- Traffic Management
  - traffic counts
  - operating speed
  - pavement/road surface management
  - stopping/parking
  - platooning/convoying and passing opportunities
  - operational issues at intersections
  - improvement works at intersections
  - over-dimensional vehicle movement
  - school bus routes
  - curfews/hours of operation
- Vehicle Management
  - inspections and maintenance
  - refuelling
  - night time operations
  - loading and unloading operations
- Compliance
  - weights and loading issues
- Environmental Management
  - noise
  - waste disposal
  - spillage
  - dust management
  - moisture management
  - other
- Accident & Incident Management
  - emergency actions
  - corrective actions
- Monitoring and Reporting
  - Monitoring and reporting should cover each of the main headings above. A brief monthly report of a couple of pages plus any attached information as required.
  - Reporting to Main Roads and Queensland Transport.
    - Haulage Information – tonnages, commodity types, vehicle types, number of trips
    - Travel and Traffic Information – information on the movement of staff, contractors and others to and from the various component sites of the project including the method of transport, origins and destinations, etc.
- Review & Amendment

- A process for review and amendment of the operation of the Road Use Management Plan in consultation with Main Roads and Queensland Transport in response to the regular monitoring and reporting, changed transport tasks, changed circumstances and significant issues that arise.

By way of specific comments relating to the existing draft, and as an example of the vague, non-specific and non-detailed information we simply raise two points.

- "Use of car pooling and bus services will be implemented where possible to reduce vehicle numbers."
- "In the event of a complaint ---------- traffic patterns will be investigated and traffic will be rescheduled or re-routed if possible."

These statements are entirely unsatisfactory. While they indicate some intent to address issues they provide no details of actions to address them and no assurance that such will indeed take place. Consequently, the impacts have no adequate mechanisms to mitigate them.

VOLUME 2 APPENDICES

EIS Appendices

Appendix L - Road Impact Assessment Study

This section of the EIS has a range of issues that Main Roads has concerns with as outlined in the comments above.

The proponent should review the content of the appendix having regard to the issues raised above.

Main Roads, Central Queensland

24 February 2006

Response No. 3 TN88275

Queensland Government

Queensland **Health**

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Scientific Officer
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File No: 4005-3000-069
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-T418

Mr G Dickie
Assistant Coordinator-General
Major Projects
The Coordinator-General
Attention: EIS Project Manager
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Department of the Premier and Cabinet	
Date Rec'd in Work Area 14.03.06	Action Officer G. DICKIE
Tracking No.	Mail No. 595
Folio ID 09.03.06.6	File No.

Dear Mr Dickie

I refer to your recent letter seeking comments on the Environmental Impact Statement for the Queensland Coke and Power Plant Project. Queensland Health is pleased to participate in the project as an Advisory Agency and have reviewed the Environmental Impact Statement.

As there is increasing recognition that environmental quality and human health cannot be considered in isolation this document should be strengthened to more explicitly acknowledge these links. Attached are detailed comments that reflect the breath of Queensland Health's interests in this project.

Thank you for the opportunity to participate in this process.

For further inquiries on this matter, please contact Mr Steven Begg, Scientific Officer, Assessment and Research, Environmental Health Unit on telephone (07) 323 40850.

Yours sincerely

Dr Linda Selvey
Deputy Chief Health Officer and Senior Director Population Health
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7 / 03 / 2006

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Queensland Health Comments on the Environmental Impact Statement for the Queensland Coke and Power Plant Project

PART B SPECIFIC REQUIREMENTS – CONTENTS OF THE EIS

Section	Section Title	Type of comment	Comment	
1.2.1	Key Project Elements	Additional information required	The EIS does not indicate if any impacts will result by initially constructing and operating an 800,000 tonnes per annum (tpa) plant. Information should be requested for any impacts from an 800,000 tpa plant that are greater than those that will occur for the 3,200,000 tpa plant.	1.2.1
2.4.3	Water Supply and Management	Comment	The proponent indicates that opportunities for water re-use and recycling will be explored and implemented wherever possible. Any use of recycled water should be assessed for its potential to cause infection by the transmission of bacteria and/or viruses by contact, dispersion of aerosols, and ingestion (e.g. via use on food crops). Similarly, the use of recycled water should be assessed for its potential to cause harm to health via the food chain due to contaminants such as heavy metals and persistent organic chemicals. For further information on the requirements of recycled water and its intended use, please refer to the *Queensland Water Recycling Guidelines* (www.epa.qld.gov.au) and the *National Guidelines for Water Recycling* (www.ephc.gov.au). The use of recycled water may require the proponent to seek further advice from the Department of Industrial Relations on workplace health and safety matters related to this activity.	2.4.3
5	Water Supply and Management	Additional information required	The proponent indicates that potable water will be sourced from the existing Stanwell Power Station water facilities or from independent water treatment facilities. Once the source of the supply of potable water is determined it would be appropriate to contact the local Population Health Unit to advise them of the source of the water supply. Currently eight abstraction licences for creek water include domestic supply. If discharges from the project affect these users, alternative water supplies will be required. Does the proponent have any contingency plans in place for these users, if their water supply becomes unusable?	5.1.2
7	Air	Comment / Additional information required	The EIS indicates that the only contaminant that will exceed the relevant guideline value is sulphur dioxide which may exceed the 10 minute average level once a year at nearby residences. Compliance with the sulphur dioxide criteria is important to protect outdoor workers and those in the community with respiratory disorders such as asthma that may be exasperated by exposure to elevated levels of sulphur dioxide. A monitoring program will be required to assess compliance	7.2

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			with air quality criteria. If measurements during the early operational stages of the project indicate that contaminant levels will exceed 50% of the criteria levels, it is recommended that the proponent be required to undertake a health risk assessment of the air emissions and implement appropriate controls if necessary. Fugitive emissions from stockpiles and ovens may pose a problem due to the movement of dust to off-site locations. Non-health related impacts of dust, for example deposits on washing or in houses, should be considered and mitigation measures implemented to minimise complaints.	
9	Noise	Comment	The predicted noise levels for the operation of the coke plant includes noise attenuation of the dominant noise sources. It is critical that the final design includes the proposed noise attenuation measures. Other equipment that will require careful selection and use are conveyor alarms, plant communication systems and reversing alarms on mobile equipment to minimise impacts on nearby residents.	9.2
15.2.4	Emergency response	Comment	The proponent should also include Queensland Health and the Queensland Ambulance Service in the development of the emergency response plan, as appropriate.	15.2.4
	Radioactive Materials	Comment / Additional information required	The proponent has not addressed the potential for radioactive material to be concentrated during the production of coke. The EIS should provide information on the potential for radioactive materials to be concentrated during the production of coke. If there is a likelihood of this occurring, the proponent must undertake a radiological assessment to determine the health risk and opportunity for environmental harm. Please contact Radiation Health, Queensland Health, phone (07) 3406 8000, for further information. Any use of equipment, such as radiation density gauges or soil/moisture density gauges, that contain radiation sources and are used or proposed to be used on the project site must be held under a licence issued under the *Radiation Safety Act 1999*.	15.1

-----Original Message-----

From: Tracey Dawson [mailto:tracey.dawson@datsip.qld.gov.au]

Sent: Wednesday, 1 March 2006 3:53 PM

To: Fergus Fitzgerald

Subject: Queensland Coke and Power Plant Project

DATSIP appreciates the opportunity to comment on the Queensland Coke and Power Plan Project.

The Cultural Heritage study and management plan demonstrate a positive relationship between Stanwell Corporation Limited and the traditional owners of the Rockhampton area.

Recruitment of internal peoples within the area includes up to 33%. DATSIP encourages the proponent to develop a strategy for the employment of Aboriginal and Torres Strait Islander people as part of the training and employment strategy for the project as a whole. 12.3.3

The Rockhampton Regional Officer for the Department of Employment and Training can assist with the development strategies and training programs aimed at increasing Aboriginal and Torres Strait Islander people involvement. Agency contact details for are ph.1300 369 935 and Address: Level 2, State Government Building, 209 Bolsover Street, Rockhampton QLD 4700.

In Table 12.1 General Demographic Characteristics, the terminology '*Aboriginal Origin*' is listed as a distinct cultural group. DATSIP is seeking clarification as to whether this description is for both Aboriginal and Torres Strait Islander people or only refers to Aboriginal people. If both are included in this category, then it would be more appropriate to refer to this group as Aboriginal and Torres Strait Islander peoples. If the table only refers to Aboriginal people, we recommend adding Torres Strait Islander peoples demographic statistics to the list. 12.2.2

Regards

Tracey Dawson
Senior Policy Officer
Policy Directorate
Department of Aboriginal and Torres Strait Islander Policy
ph: 322 48073
fax: 320 43572
email: tracey.dawson@datsip.qld.gov.au

Queensland Government

Queensland Transport

27 February 2006

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
City East Qld 4002

Dear Sir

With reference your letter received in this office on 16 January 2006, Queensland Transport has the following comments on the Environmental Impact Statement (EIS).

Transport of Refractory Bricks

It is noted that refractory bricks will be railed from Brisbane to Rockhampton and then transported by road to site (Section 2.3.1). Should transport arrangements change and bricks are brought into Gladstone, a commitment is required that the bricks will still be railed to Rockhampton. 2.3.1

Stanwell Power Station (SPS) rail loop

The EIS notes (Section 14) that modifications to the existing SPS rail loop will be required to allow the proposed operations, and additional land will be required to make such amendments. There is no discussion of the tenure arrangements for the land required for the extension and modification of the rail loop. 14.2.2

As the existing SPS rail loop is in the QT Headlease, any additional land acquired should also be in the Headlease.

It is requested that the proponent confirms that:

- Queensland Rail (QR) can negotiate the purchase of the additional land for the modification of the SPS rail loop;
- if QR cannot negotiate the purchase of the additional land, QR can request QT to use its formal acquisition powers to secure the land; and
- in either case the land will be added to the State rail corridor headlease and subleased to QR under s240 of the *Transport Infrastructure Act 1997*.

Integrated Transport Planning
Transport Planning
Floor 14 Cromwell House
200 Mary Street Brisbane Queensland 4000
GPO Box 213 Brisbane Queensland 4001
ABN 13 200 330 520

Our ref 890/01379 - E17711
Your ref TN82077/FF02/CG
Enquiries Gary Poulsen
Telephone +61 7 3117 5425
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Website www.transport.qld.gov.au
Email gary.r.poulsen@transport.qld.gov.au

Transport of Construction staff

It is noted that it is proposed to transport employees to site in 45 seater buses – 900 from camp in Gracemere and the rest from the Rockhampton area (Section 14.3.2). Detail is required on what measures are to be taken to ensure that ALL employees actually use the buses. The rationale for the split of employees (that is, about 55% Gracemere and 45% Rockhampton) should also be provided. 14.2.2

Transport of Coal and Coke

It is noted that both coal and coke will be transported by rail and that QR can meet the demand for the infrastructure enhancement works for Stage 1 with less certainty provided for Stage 2 due to less certainty on commencement date for Stage 2 (Section 14.4.2). QT expects that under no circumstances will road transport be considered. 14.2.2

Thank you for the opportunity to comment on the Queensland Coke and Power Plant Project EIS.

Yours sincerely

Bruce James
Director (Transport Planning)

Response No. 6

TN 88733

Network Access
Network Infrastructure

GPO Box 1429
Brisbane Qld 4001
Floor 20
127 Creek Street
Brisbane Qld 4000
Telephone
07 3235 1567
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mark.batstone@qr.com.au

17/3/06

Your ref: TN82077/FF02/CG
Our ref:

-T418

Department of the Premier and Cabinet	
Date Rec'd in Work Area 20/3/06	Action Officer F. fitzgerald
Tracking No	Mail No. 622
Folio ID 17/3/06.1	

The Coordinator - General
Attention: EIS Project Manager
Coke and Power Plant Project
PO Box 15009
CITY EAST QLD 4002

NETWORK ACCESS

Dear Sir

RE: Queensland Coke & Power Plant Project - Environmental Impact Statement (EIS)

Thank you for the opportunity to comment on the draft EIS.

This formal response reiterates comments made to the proponent and the author of the EIS at the Brisbane briefing session 8th February 2006.

Section 2.4.1 specifically refers to *"Transport – Road, Rail and Shipping"*, however, the majority of the EIS is presented in sections (e.g. Land Characteristics and Water Resources), which cover the whole project as well as the supporting transport infrastructure (the proposed Fisherman's Landing facility at Gladstone Port being an exception). 2.4.1

This is appropriate, as it is necessary to consider all aspects of the proposal at the assessment stage. However, sometimes it is difficult to ascertain which part(s) of the assessment and recommendations pertain to the core facility and which pertain to the supporting infrastructure. Some may apply to both.

This ambiguity would make it difficult to prepare work briefs, and to subsequently assess potentially highly variable tenders, in an equitable way.

Also, we understand that some property owners have concerns about aspects of the construction and operation of the proposed rail spur; particularly flooding.

We would be happy to assist in developing appropriate responses to the concerns. We estimate that flooding modelling would take about four months.

Perhaps the most efficient way to address these issues would be to prepare an addendum to the existing EIS, which summarised findings and recommendations that specifically relate to *"Transport – Road, Rail and Shipping"*.

A.B.N. 47 564 947 264

If the four month time span for preparation of the flood study is too long to wait for finalisation of the 'core EIS', inclusion of the following paragraph (or similar) may be adequate as an interim measure: 5.1.2 (response to DNRMW)

> *"Prior to approval being sought for the proposed rail spur, the proponent in conjunction with QR would undertake flood modelling. This would be used to design the proposed rail spur such that current flood levels would not noticeably change as a result of the works. The modelling results would be made publicly available and any comments would be appropriately considered."*

Detailed comments are as follows:

Volume 1

Section 9 (Noise & Vibration) and Section 12.3.6 (Direct Community Impacts & Mitigation Strategies), page 12-31 12.3.6

Consider cross-referencing these sections to aid understanding.

Section 7 (Air) and Section 14.4.2 (Rail – Potential Impacts & Mitigation Measures – Environmental Issues), on page 14-22 14.4.2

Consider cross-referencing these sections to aid understanding.

Generally, most sections could benefit from more cross-referencing.

Executive Summary, Section ES2.7 (Noise), page ES-20; Section 9 (Noise & Vibration) – Summary (page 9-1), Predicted Noise Levels (page 9-22), Traffic Noise (page 9-23) 9.2

Legislation (*Environmental Protection (Noise) Policy 1997*) sets down target ('planning') noise levels for rail operations in Queensland as follows:

- 87 dB(A) as a single event maximum sound level
- 65 dB(A) as the average sound level over a 24-hour period

These are measured at the most exposed façade of a noise sensitive place and are referenced in our Code of Practice for Railway Noise Management.

They are the only legislated criteria for rail noise in Queensland, but appear to be absent from the EIS. Rather, the EIS refers to more stringent 'sleep disturbance criteria', which are certainly admirable and desirable targets, but there is no compulsion to achieve them.

Notwithstanding the above, we note that the predicted rail noise from the proposal is within these sleep disturbance criteria. Therefore, applying them in this case makes little difference to this proposal. However, we are concerned about how these stringent 'desirable-but-not-compulsory' criteria may influence other proposals in the future.

Therefore, we suggest that it should be made repeatedly clear in the EIS, that the sleep disturbance criteria are by no means compulsory and that the 87/65 legislated criteria

mentioned above be used as the measure of acceptability or otherwise of rail noise for this proposal.

A further issue is that it is unclear whether or not the predicted noise levels for shunting or wagon banging during loading/unloading activities include adjustments for noise characteristics (e.g. impulsiveness) as set down in AS1055. 9.2

We suggest this be clarified and the text amended as appropriate.

Executive Summary, Section ES2.7 (Noise), page ES-20; Section 9.2.5 (Noise & Vibration) – Mitigation Measures, page 9-25 9.2

To summarise the findings regarding rail noise, consider adding the following at the end of these sections:

> *"Predicted rail noise levels as a result of the proposal are below the applicable criteria. Therefore, no specific noise mitigation measures would be required for rail operations."*

Table 16.4.2 - Air Quality Management Plan – Operational phase, page 16-7 16.4

We suggest adding the following as an additional dot point in "Implementation Strategy" cell:

> *"The potential effect on air quality from increased rail operations would be separately assessed as part of the "Access Agreement" process administered by QR."*

Table 16.5.2 Noise Management Plan – Operational Phase, page 16-9 9.2 and 16.5

We suggest adding the following as an additional dot point in "Implementation Strategy" cell:

> *"The potential effect on the noise environment from increased rail operations would be separately assessed as part of the "Access Agreement" process administered by QR."*

Volume 2 EIS Appendix J

It may be necessary to amend some sections to accommodate certain of the above comments.

We look forward to working with the project team toward mutually beneficial outcomes.

For further information, please contact Mark Batstone (Noise Projects Coordinator – Network Access) as detailed above.

Yours sincerely

Graham Brown
A/ General Manager (Network Infrastructure)

February 2006

COPY TO:

Alan Ronaldsen
Rail Ports & Freight Division
Rail Network & Strategy Branch
Queensland Transport
GPO Box 1549
Brisbane Qld 4001

TN873321

Response No. 7

Queensland Government

27/2/06.1

Department of
Employment and Training

Mr Fergus Fitzgerald
EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
City East QLD 4002

Department of the Premier and Cabinet	
Date Rec'd in Work Area 01.08.06	Action Officer F. FITZGERALD
Tracking No.	Mail No. 522
Folio ID 27.02.06.2	File No.

T418

Dear Mr Fitzgerald

I refer to undated correspondence received by this department in January 2006 from Mr Geoff Dickie, Assistant Coordinator-General, Major Projects regarding the Environmental Impact Statement for the proposed Coke and Power Plant Project (the "Project").

The Department of Employment and Training notes that the proposed joint venture will provide for significant infrastructure development and consequently an opportunity for employment and skills development in both the construction and operational phase of the Project.

While it is considered likely that the majority of personnel required for the construction phase of the Project will be sourced externally to the region, the department welcomes the proponents aim to recruit up to 40% of its requirements through local sources.

It also noted that the operational phase of the Project will potentially involve increases in long-term employment in the Coke and Power Plant, as well as flow-on effects into transport, coal production, equipment maintenance and service industries.

Positive impacts on Indigenous people are likely to be realised, largely through increased employment opportunities, particularly in semi-skilled jobs.

The EIS recognises the importance of government and training providers building partnerships with industry to develop a coordinated approach to addressing skills shortages in the region.

This relates directly to the potential workforce of approximately 800 to 1,000 during the construction phase, and a total of 250 to 300 additional jobs may be created covering the Coke Plant, Power Plant, rail and port operations and direct contracts.

Education House
30 Mary Street Brisbane
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LMB 527 Brisbane
Queensland 4001 Australia

Website www.trainandemploy.qld.gov.au

ABN 54 456 676 679

The department proposes that there is an opportunity to collaboratively develop an employment and skilling strategy to ensure the project and local community workforce outcomes are achieved.

In this regard, I understand that discussions will shortly commence between the proponent and Central Queensland Institute of TAFE and the department's regional office to explore a structured training strategy, including emergent apprenticeship and related training and employment opportunities with the local community.

Consideration should also be given to a strategy for minimum level training and employment outcomes, similar to the State Government Building and Construction Contracts Structured Training Policy (10% Policy) and the Indigenous Employment Policy for Queensland Government Building and Civil Construction projects (20% Policy), at the tendering and selection phase of the Project. 12. 3 . 3

It is recommended that both these policies be cited in paragraph 1.3.5 Policies and Regulatory Frameworks on page 1-9. The reference to the Central Queensland Training and Employment Strategy: A Smart State Initiative (Department of Employment and Training, 2002) should be removed, as this strategy has now concluded. 1 . 3 . 5 and 12 . 3 . 3

I trust this information is of assistance to you, however, should you wish to discuss the matter further, please contact Mr Trevor Torrens, Director Industry and Stakeholder Engagement (telephone 07 32378 1355; e-mail trevor.torrens@det.qld.gov.au) or Mr Bill Fry, Director, Central Queensland Institute of TAFE (telephone 4920 2677, email bill.fry@det.qld.gov.au).

Yours sincerely

KIRSTINE HARVIE
A/Executive Director
Industry Development
27 / 2 / 2006

OICD/000594

Response No. 8

Queensland Government

TN87080/8698

Natural Resources and Mines

Author : Jacki Wirth
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Department of the Premier and Cabinet	
Date Rec'd in Work Area 27.2.06	Action Officer G.Litfin
Tracking No.	Mail No.
Folio ID 23926	File No. [redacted]

T418

23rd February 2006

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Sir,

Environmental Impact Statement – Queensland Coke and Power Plant Project

I am writing in response to your request for submissions on the draft Environmental Impact Statement (EIS) for this project. Copies of the EIS were received by the Department of Natural Resources Mines and Water (NRMW) on 17 January 2006.

NRMW has reviewed the EIS in relation to out portfolio of State Interest and considers that the EIS substantially addresses the Terms of Reference. However, there are a number of matters that the Department considers should have been explored in more depth in the EIS and could be dealt with in a Supplementary Report to the EIS.

The principal areas of concern involve issues surrounding the primary and secondary water supplies and subsequent requirements for approvals under the *Water Act 2000*. Specific comments on these matters have been provided in the Attachment to the letter.

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www.nrm.qld.gov.au

The Department would like to thank you for the invitation to review the EIS and if you require any clarification in relation to this response, please contact Ms Jacki Wirth on 4967 0975. A copy of this response will be suppled to Mr Fergus Fitzgerald in electronic form.

Yours sincerely,

JN Kelly
Regional Manager
Landscapes and Community Services
Central West Region

CC.
Director-General
NRMW
GPO Box 2454
BRISBANE QLD 4001

1.6.3 Integrated Planning Act 1997 1.6.3

Paragraph 2 – Please note that a MCU and/or RaL application under IDAS may also trigger assessment against the *Vegetation Management Act* 1999 for clearing of native vegetation.

Paragraph 2 - Reference to the Land Act is now no longer correct. Clearing of native vegetation on all land tenures is regulated by the *Vegetation Management Act* 1999 via the *Integrated Planning Act* 1997.

1.6.6 Policies 1.6.6

The EIS fails to mention State Planning Policy (SPP) 1/03, *Mitigating the Adverse Impacts of Flood, Bushfire and Landslide.* NRMW has a shared role and responsibility in relation to providing advice on the impact of flooding under SPP 1/03. The proponent should provide a detailed assessment of the impact of any fill on the flood immunity of surrounding properties, upstream and downstream of the proposed development. They should also demonstrate how the specific outcomes of SPP1/03 in relation to flooding will be met by the development.

Another State Planning Policy relevant to this project is State Planning Policy (SPP) 2/02, *Planning and Managing Development Involving Acid Sulfate Soils* and associated guideline. SPP 2/02 applies to all land, soil or sediment at or below 5 metres AHD where the natural ground level is less than 20 metres AHD. SPP 2/02 applies to development that would result in:

- excavations at or below 5 m AHD of 100 m^3 or more; or
- filling of land at or below 5 m AHD with an average depth of 0.5 m or more, with 500 m^3 or more of material.

Furthermore, NRMW are an Advice Agency for Acid Sulfate Soils (ASS) where the development will involve:

- excavation at or below 5 m AHD of 1000 m^3 or more and the surface of the land is below 20 m AHD; or
- filling of land at or below 5 m AHD with 1000 m^3 or more

Where it has been determined that SPP2/02 applies, the applicant is expected to provide the assessment manager (and NRMW if relevant), with a detailed ASS investigation report to determine whether ASS are present in the area to be disturbed. If such soils are present, the report needs to define the location, depth and existing /potential acidity of ASS relative to the proposed disturbance as per SPP2/02 guidelines.

3.2.1 Geology & Soils 3.2.1 and Appendix B

The alluvial Terrain Unit Qa2/7-8 with non-cracking and cracking alluvial clays (refer Fig.3.2a) is part of a large alluvial plain along Neerkol Creek. For this study, it has been assessed as Class B, marginal for cropping due to severe limitations. However the limitations for this Terrain Unit listed on page D.5-3 of Appendix D.5 are only minor to moderate, indicating that it should really be assessed as Class A, suitable for

cropping, due to moderate erosion hazard, and not Class B (refer Fig. 3.9 and p. 3.29).

NRMW has prepared an Agricultural Land Class map for Fitzroy Shire which has been used to delineate Good Quality Agricultural Land for the Fitzroy Shire Planning Scheme. The alluvial area along Neerkol Creek (i.e. the area of Terrain Unit Qa2/7-8) has been mapped by NRMW as Class A1, suitable for rainfed cropping. Whether it is Class A or B, the area is assessed as Good Quality Agricultural Land.

Based on the soil description (refer p D.1-3 of Appendix D.1), the small area of Terrain Unit Qa26 should be assessed as Class C, suitable for grazing. A severe moisture limitation should be listed for this soil along with the moderate erosion limitation (refer p. D5-1 of Appendix D.5). These limitations would preclude rainfed cropping on this soil. The remaining Terrain Units are assessed correctly as Class C and D.

3.4.2 Potential Impacts and Mitigation - Future Land Use Implications 3.4.2

The proposal will result in the loss of approximately 8.45 ha of Class B agricultural land as a result of the rail spur. The report notes that a further impact will be the severance of Lot 214/P4047 which will result in the loss of 2.8ha of cropping land. Further discussion is required on how access to the severed land will be maintained.

There is limited discussion about the alienation of Good Quality Agricultural Land, specifically Terrain Unit Qa2/7-8 on the alluvial plain if this project proceeds. Further discussion on the overriding need for the project to justify the loss of valuable agricultural land should be addressed in relation to the loss of GQAL, specifically in the area designated as K – Rural Village Balance (see Figure 3.8).

3.4 Land Use and Tenure

The proposed rail spur will dissect Lot 161 on LN2211 (USL). Tenure related issues in relation to the proposed use of State land will need to be resolved with NRMW prior to construction. 3.4.2

3.2.2 Acid Sulfate Soils 3.4.2

NRMW concur with the statement that it is unlikely that there will be ASS disturbance and would agree with this statement as the stockpile area is located on made land within the bund walls of Fisherman's Landing Wharf. Any disturbance, associated with the conveyor system is likely to be minor.

However, without the precise location of activities such as the proposed conveyor system and rail loop to the wharf, it is not possible to provide credible comment in relation to potential ASS disturbance.

For example, the location of the proposed conveyor system (Figure 3.5 from the rail loop to the wharf) should be determined and presented on an air photo base (similar to Figure 3.7), and an assessment of ASS undertaken as per the requirements outlined in SPP2/02. Figure 3.3

5.1.2 Potential Impacts and Mitigation Measures - Water Use

5.1.2

The site is within the area covered by the Fitzroy Basin Water Resource Plan. Any take of water will need an authorisation which can only be issued if it is in accordance with the principles of the plan and the subsequent Resource Operations Plan.

It is noted that the applicants are considering utilising the water discharged into Neerkol Creek from Stanwell Power Station (SPS). Once the water is discharged into the creek it becomes the responsibility of the State. If this option is to be pursued, a pipeline directly from SPS to this site should be considered instead of applying for an authorisation to take the discharged water from the creek.

In relation to the proposed construction of dams on the site, the following should be noted. The Fitzroy Basin Water Resource Plan (WRP) authorises landholders to take overland flow for environmentally relevant activities and for a diversion around a site. New works are self-assessable under the *Integrated Planning Act* 1997 (provided they are only for purposes allowed for by the Fitzroy WRP and comply with the 'Code for self-assessable development' for taking overland flow water to satisfy the requirements of an environmental authority or a development permit for carrying out an environmentally relevant activity'. (This code is being finalised and will be available soon.)

To ensure that these works don't adversely affect other water users and the environment, the code puts conditions on the size of the works and requires that landholders notify NRMW of any works built within 12 months of completion. This enables the department to monitor changes in water use within the catchments. The data obtained will be used in future water resource planning.

A landholder who wants to build an overland flow storage that is larger than, or is to be used for purposes other than the code permits, will require a development permit from NRMW.

There is currently no avenue for granting additional allocation for waterharvesting from watercourses in this area. The other options mentioned in the report would need to be pursued to obtain the main raw water supply for this proposal.

Please note that any referable dam will require authorisation under *Water Act* 2000. If the proponent requires an overland flow storage that is larger than, or is to be used for purposes other than the code permits, a development permit from NRMW will be required.

Any works which involve excavation, placing fill or clearing native vegetation within a watercourse will require authorisation. Advice should be sought from NRMW well in advance of any proposed works.

5.1.2 Flooding

5.1.2

Figure 5.3 is the indicative 100 year average recurrence (inferred flood plain). This shows a substantial section of the rail spur and link will be affected by flood, however there is no discussion on this aspect in the EIS. Further discussion is required on how the affects of flooding will be mitigated.

5.2 Groundwater

NRMW consider the proposed groundwater monitoring regime is adequate, provided all monitoring is carried out in accordance with industry best practice.

Nature conservation

6.1.2 Potential Impacts and Mitigation Measures

6.1.2

The EIS states that all relevant permits for clearing of vegetation required under the *Vegetation Management Act* 1999 and *Integrated Planning Act* 1997 will be obtained. In Table 6.1.4 and the Mitigation section (page 6-12), it is advised that the proponents should consider the use of offsets for the proposed clearing of remnant of concern and endangered vegetation.

Similarly, the Flora Management Plan does not consider the potential use of offsets to meet performance requirements relating to of concern and endangered vegetation. This approach should be considered when applying for vegetation clearing permits.

Response No. 9

Queensland Government

Contact: *Kate Rose*
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Facsimile: *4938 4057*
Email: *Kate.Rose@dlgpsr.qld.gov.au*

Department of
Local Government, Planning, Sport and Recreation

-T418 [redacted]

Department of the Premier and Cabinet	
Date Rec'd in Work Area 09.03.06	Action Officer G.DICKIE
Tracking No.	Mail No. 573
Folio ID 06.03.06.7	File No.

6 March 2006

Mr Geoff Dickie
Assistant Coordinator-General
Major Projects
Office of the Coordinator-General
PO Box 15009
CITY EAST QLD 4002

ATTENTION: Mr Fergus Fitzgerald

Dear Mr Dickie

Re: EIS for the Proposed Coke and Power Plant at Stanwell Energy Park

Further to your letter received by this Department requesting a review of the above EIS, please find our comments as follows:

Section ES1.5 Consultation EIS Appendix B

The Fitzroy Basin Association (FBA) is responsible for the development and implementation of the Regional Natural Resource Management (NRM) Plan for Central Queensland, the *Central Queensland Strategy for Sustainability 2*. This plan and its associated investment strategy have been endorsed by the Australian and Queensland Governments through the National Action Plan for Salinity and Water Quality and the Natural Heritage Trust.

While the draft EIS commits the project to comply with the Regional NRM Plan (Section 3.4.1, Pages 3-27), it is not clear whether comments on the EIS were invited from the FBA as part of the advisory body consultation process.

Section ES2.10 Social Environment

The EIS recognises that in the local area there will be significant impacts on low income families as a result of increases in rental prices, and local employers will find it difficult to retain skilled staff because of higher salaries offered by the project. This will potentially have an impact on existing industries in the region and as such should be quantified. 12.3.3

The social impacts arising from the circumstances where a significant proportion of staff may need to remain in 'non-residential/temporary' accommodation for a long period does not seem to have been recognised and there is no commitment from the proponent to address such impacts. 12.3.4

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In addition, the need for significantly increased services from the State in the areas of health, education, emergency services and police does not seem to have been quantified, despite this project having an extended five year construction phase at the Stanwell site. This feature of the project will result in a higher proportion of families likely to move to the region as opposed to single persons and a resultant greater demand on essential services. Commitments are needed from the proponents as to how they can contribute to the provision of such services. 12.3.2

While the positive economic benefits from this project are obvious, the negative social impacts are unfortunately likely to be significant. This should be acknowledged in the EIS and particularly within the Executive Summary, rather than simply concluding that there will be minimal environmental impacts expected from the project. It is assumed that this conclusion relates only to physical environmental impacts. 12.3.4

Introduction
Section 1.3.5 Policies and Regulatory Frameworks 1.3.5
A comparison of how various facets of the project align with the Central Queensland Regional Growth Management Framework developed through the CQ A New Millennium regional planning project should be made.

Section 1.6 Project Approvals and Legislative Framework
1.6.3 *Integrated Planning Act 1997* (IPA) 1.6.3
This section needs updating where Schedules of the IPA are referred to, and in relation to approval to clear vegetation. All vegetation clearing irrespective of land tenure is assessable under the IPA as per Schedule 8 of the Act as a result of 2004 amendments to the *Vegetation Management Act 1999* and IPA.

It would also be useful to add statements to this section to inform the public that the Coordinator-General, as a result of the EIS process, can require conditions be imposed on subsequent development permits issued by the relevant local governments. These conditions are usually set out in the Environmental Assessment Report produced by the Coordinator-General's office. 1.6.3

Thank you for the opportunity to review the EIS for the proposed project. If you have any questions in relation to our comments please do not hesitate in contacting me on 4938 4801.

Yours sincerely

Kate Rose

Kate Rose
A/Director
Western and Central Queensland Planning Branch
Sustainable Planning

Response No. 10 TN87128

Queensland Government

T418

Department of Communities

13 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 2/3/06	Action Officer F. FitzGerald
Tracking No.	Mail No. 525
Folio ID 13 2 06-4	File No.

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
City East QLD 4002

Dear Sir/Madam

Thank you for your invitation to respond to the Environmental Impact Statement for the 'Stanwell Coke and Power Plant' project. The Department recognises that this project will have significant positive economic and social/cultural impacts on the surrounding communities and regions.
The Department also suggests that several strategies be adopted in partnership with the community and government, to mitigate several expected negative impacts of the proposed development; particularly those that impact upon the most vulnerable in the community.

Injection of labour force from outside the region

According to the proponents own estimates, the region can expect an injection of approximately 1000 workers during the first 18 months of the construction phase of the project. In the project's EIS, the proponents point towards the following impacts of this labour population influx:

Housing and rental market impacts

12.3.4 of the EIS states that 'the initiation of the Project could trigger a surge in the rental and house price market due to timing, cyclical and structural reasons.' The EIS also recognises that those most affected by such a rise, if it were to occur, would be those on lower or fixed incomes, such as those on Disability, Aged, Carer or Sole Parent pensions or other welfare benefits. Individuals and families on low and/or single incomes would also be affected. 12.3.4

Recommendations: That the proponents to enter into negotiations with government authorities such as Queensland Housing and Department of Communities, existing community-based housing cooperatives, local Councils and other relevant stakeholders in developing a joint response to the expected housing and rental market impacts of the project.

Fitzroy/Central West Queensland Region
Level 3, State Govt Building
209 Bolsover Street
Rockhampton Queensland 4700

PO Box 1503
Rockhampton Queensland 4700
Telephone 07 4938 6715
Facsimile 07 4938 4118
Website www.communities.qld.gov.au
ABN 38 872 506 567

The construction of a single person's quarters

12.3.2

This Department has some concerns with the proposal to develop a single person's quarters (SPQ) in the Gracemere area as an alternative to accessing the local housing and rental market. While this strategy may mitigate against the increased demand for local housing and rental places, the housing of a large number of single people in close proximity to each other but away from their familiar and communal support networks creates in itself alternative demands on the personal wellbeing of the residents of such a facility as well as the placing strain upon the infrastructure, demographic profile and the perception of community safety in the surrounding district.

Recommendations: That the proponents take a partnership role in funding the development of community infrastructure via the establishment of a community benefit fund to be expended in the location surrounding a SPQ.

That the proponents enter into close liaison with stakeholders involved in building and maintaining safer communities such as the Police Service, Local Government and the Department of Communities. Another strategy to consider would be to make available to employees of the project, a community involvement package, that funds workers' active involvement in community based activities such as sporting, recreational or service clubs as an alternative to adopting less community acceptable activities.

Services infrastructure

12.3.2

Section 12.3.2 of the EIS acknowledges the possible impacts of an increased demand on services infrastructure accruing from an influx of workers particularly where those workers and their families have to deal with issues of dislocation and social isolation. The Department commends the proponent's commitment to active engagement in the community to monitor and alleviate any possible strains on local infrastructure.

Recommendation: That the proponents purchase human support services through the provision of brokerage funds in order to alleviate any strain on community services and improve service responsiveness to workers' needs.

Accessing labour force locally

12.3.3

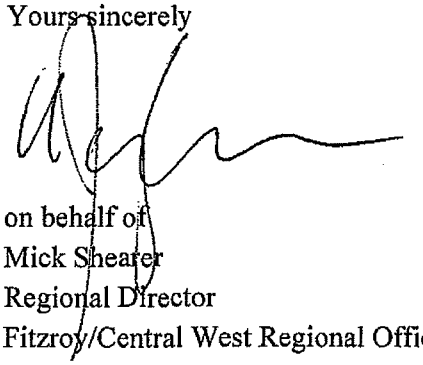
The proponents expect to access forty percent of its workers from the local community. Section 12.3.3 of the EIS states that this may exacerbate current skill shortages and may indirectly contribute to higher wages and the cost of skilled workers in the community. The Department commends the proponents' intention to develop a skills/employment working party with the local community along with utilising local networks and government apprenticeship and training schemes.

The opportunity for local community members to access training and gain skilled employment is a positive impact that the Department would like to see made available across all members of the community. Often certain groups within society do not access such opportunities to their fullest extent. Experience in other communities of Central Queensland has shown that existing inequalities in society can be further exacerbated with the introduction of developments such as is being proposed. With careful and thoughtful intervention on the part of the proponents however, negative impacts can be mitigated and the positive impacts of the development can be more widely shared across the host community.

Recommendation: That the proponents introduce affirmative action for a variety of disadvantaged groups in its recruitment and training programs. The Department of Communities is prepared to help facilitate this if the proponents choose to adopt this recommendation.

If you have any further enquiries regarding this response please contact the Department of Communities' A/Regional Planner in Central Queensland - Mr Eric Boardman, - (07) 4938 4478.

Yours sincerely



on behalf of
Mick Shearer
Regional Director
Fitzroy/Central West Regional Office
Department of Communities

Response No. 11 TN888221

Queensland Government

Ref: H01279/06 -T418

16 MAR 2006

Department of Housing

Department of the Premier and Cabinet	
Date Rec'd in Work Area 17.3.06	Action Officer R. Rolfe.
Tracking No. 88822	Mail No. 613
Folio ID 16 P3 06.1	File No.

Mr R Rolfe
The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Mr Rolfe Ross

I refer to the recent letter inviting the Department of Housing to comment on the Environmental Impact Statement (EIS) for the Coke and Power Plant Project at Stanwell Energy Park and to thank you for the opportunity to comment.

The Stanwell Corporation has devoted a considerable amount of time and resources to identify the potential impacts on housing affordability associated with the project. The University of Central Queensland undertook a comprehensive consultation process on behalf of the proponent that included formal contact with various advisory agencies, including the Central Queensland Area Office Manager, Department of Housing, local governments, local businesses and the wider community in the region. This consultation and subsequent analysis has revealed that there may be significant demands placed on the private rental and home purchase markets during the construction and operational phases of the project.

Section 12.3.4 of the EIS outlines three 'affordable housing strategies' that seek to address the potential shortage of affordable housing throughout the Rockhampton region. These strategies were identified by local stakeholders during the consultation process and are outlined below. 12.3.4

The first option proposes the development of a whole-of Government housing plan similar to the 'Housing Action Plan for Gladstone/Calliope' endorsed by Cabinet in 2002. This action plan was developed in response to the housing affordability impacts associated with several large scale industrial projects in the Gladstone/Calliope region. The development of the action plan for Gladstone/Calliope was informed by the Gladstone Coordination Group, a forum of local stakeholders including State agencies, local governments, industry and community representatives. Key issues that were addressed by the action plan for Gladstone/Calliope included:

- supply, location and design of temporary accommodation
- 'exit strategies' for end-use of temporary dwellings
- reliability of market information
- capacity of local residential development and planning
- strategies for ensuring the best use of public housing stock

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Australia

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Website www.housing.qld.gov.au
ABN 86 504 771 740

The 'Housing Action Plan for Gladstone/Calliope' identified a series of actions to be undertaken by various local stakeholders within agreed timeframes. This approach may provide the best opportunity for project proponents, local governments and State agencies to work together collaboratively to identify short- and medium-term responses to housing issues in the Rockhampton region. Departmental officers would be happy to discuss this option further with the Coordinator-General's office.

The second option proposes the development of an affordable housing trust to provide additional, affordable housing throughout the region in a similar fashion to the Brisbane Housing Company. This option would require careful consideration primarily because of the time and cost involved in establishing a not-for-profit housing entity capable of constructing and managing a significant, affordable housing portfolio. The timeframes involved with the development of the Brisbane Housing Company suggest that this option is unlikely to address the short- to medium-term housing affordability impacts associated with major projects in the region. It should also be noted that this option has the effect of transferring the financial impact primarily to the State (expected to be the key funder of such an initiative) and that there is no such funding available.

The third option proposes the development of single persons quarters in such a way that these facilities could be converted to aged care units once the construction phase of the project is complete. This approach would require detailed consultation with the relevant local government to ensure that the specific requirements of older persons could be met. Primary importance would be given to the proximity of a wide range of essential services and facilities (including public transport) to ensure that older people are not locationally disadvantaged. This option is supported.

If you require further information, please telephone Mr Alan Dick, Director, Private Housing Support on 3227 6223 who will be happy to assist.

Yours sincerely

Natalie MacDonald
Director-General
Department of Housing

Response No. 12 TN86867

Queensland Government

-T418

Department of
Primary Industries and Fisheries

Reference: 06/01304 ROC/140/119(21)

20 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 23/2/06	Action Officer B. French
Tracking No.	Mail No. 479
Folio No. 20/2/06.8	File No.

The Coordinator General
Coke and Power Plant Project
Major Projects
PO Box 15009
Brisbane City East Qld 4002

Attention: EIS Project Manager

Dear Sir/Madam

Queensland Coke & Energy Plant Project, Stanwell Energy Park

I refer to your letter of the 16 January 2006 and wish to advise that the Department of Primary Industries and Fisheries (DPI&F) has reviewed the Environmental Impact Statement and offers the following comments:

Please be advised that the basis of DPI&F's comments lies within the jurisdiction of the *Fisheries Act 1994*, and that a site inspection was not undertaken for the purposes of these comments.

- DPI&F advises that provided the proposed development is appropriately managed, with particular regard for water quality management, impacts on issues relevant to this Department are likely to be minor.

- DPI&F recognises the expertise and responsibility of the Environmental Protection Agency (EPA) in relation to water quality issues.

- DPI&F notes that the development site at Stanwell requires works within a number of drains at the location. It is likely that these drains would not be considered "waterways", however if there is some contention about the classification of the drain/channels, the applicant should be aware of the Waterway Barrier Works (the maintenance of fish passage) legislation. If it is proposed to construct new, or to raise/lower an existing, weir/dam/water-pipe and other barrier across a waterway (both freshwater and tidal), including temporary structures, a Development Approval application under the *Fisheries Act 1994* and *Integrated Planning Act 1997*, must be submitted for consideration by 5.1.2

Cnr Bruce Highway & Yeppoon Road
PO Box 6014
Central Queensland Mail Centre
Queensland 4702 Australia
Call Centre 13 25 23
Website www.dpi.qld.gov.au
ABN 78 342 684 030

DPI&F. Approvals for Waterway Barrier Works are not automatic upon application, and may be issued or refused as appropriate to the individual application, circumstances, impacts, policies and information supplied. The installation of a fishway may be required as part of any approval, to ensure fish passage across the barrier. Further information on 'waterway barrier works' and 'fishways' can be found at www.dpi.qld.gov.au/fishweb.

Thank you for the opportunity to provide advice on this matter. If you require any further information, please do not hesitate to contact Kev McCosker on telephone 07 4936 0326 or email kevin.mccosker@dpi.qld.gov.au.

Yours sincerely

Paul Walmsley
Regional Director, Central

TN 874 85

Response No. 13

Fitzroy Shire Council

-T418

THE BIG RIVER SHIRE

1 March 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 3/3/06	Action Officer F. Fitzgerald
Tracking No.	Mail No. 538
Folio ID 1/3/06. 2	File No.

The Coordinator-General
Attention EIS Project Manager
Coke & Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Sir,

Re: Environmental Impact Statement – Queensland Coke & Power Plant Project – Queensland Coke & Energy

I refer to the Environmental Impact Statement in respect of the above and enclose Council's submission in respect of the project.

Should you need to discuss any of the issues raised or need further clarification, do not hesitate to contact me on 4931 5406.

Yours faithfully,

L V Harman
Chief Executive Officer

Enclosure

FOR ENQUIRIES PLEASE CONTACT:	YOUR REFERENCE:	IN REPLY PLEASE QUOTE:
Mr Lyle Harman Telephone: (07) 4931 5406		09/02/003 LVH:PDA

Shire Administration Centre, 1 Ranger Street, Gracemere, Queensland. Telephone: (07) 4931 5400 Facsimile: (07) 4933 3100
Address all correspondence to -The Chief Executive Officer, P.O. Box 40, Gracemere, Queensland 4702.
Email - ceo@fitzroyshire.qld.gov.au www.fitzroyshire.qld.gov.au

Fitzroy Shire Council

SUBMISSION

ENVIRONMENTAL IMPACT STATEMENT

QUEENSLAND COKE & POWER PLANT PROJECT

(QUEENSLAND COKE & ENERGY / STANWELL CORPORATION LIMITED)

Queensland Coke & Energy and Stanwell Corporation Limited propose to construct and operate a Coke Plant and a Power Plant within the Stanwell Energy Park at Stanwell located in Fitzroy Shire.

An Environmental Impact Statement has been issued seeking submissions from interested parties.

Council has considered the Environmental Impact Statement and has identified the following issues that required further investigation or explanation.

1. Roads and Traffic

14.3.2

a. The Environmental Impact Statement has addressed the impact that traffic from the project will have on declared main roads such as the Capricorn Highway but does not provide any information about the impact the project will have on Council controlled roads. The impact that the project will have on roads such as Power Station Road and Gracemere Streets and other roads, both during the construction and its operational phase, needs to be addressed.

b. The Environmental Impact Statement identifies that there will be an accommodation facility in Gracemere but no detail has been given on the effect that this facility will have on the local roads to be used to transport the construction workers to and from the construction site at Stanwell. It is understood that buses will be used to transport the workers from the accommodation and, therefore, the bus route/s from the accommodation facility to the site at Stanwell needs to be defined and matters such as pavement impacts, intersection layout and capacity need to be considered.

c. The road network surrounding the workers' accommodation facility will need to be upgraded with kerb and channelling, bitumen roads, drainage etc. The matter has not been addressed but could be addressed in the development application for the site.

d. The Environmental Impact Statement does not address the likely sources of construction materials such as quarry products (gravel, sand & concrete aggregate). The volume of these materials will be significant and the provision thereof will have a severe impact on Council's road network as well as an impact on the community / area from which the material is sourced. For example, Council has approved of a quarry in the Stanwell area some time ago and, if this is used, then major upgrading will be required to the haulage route. The necessary approvals to expand the site beyond its current approval would also have to be made.

   The likely source/s of construction materials needs to be identified and potential impacts addressed and proponents made aware of the impacts and the responsibility to mitigate the impacts.

e. Council requires that any access to the construction site must be via the Capricorn Highway and Power Station Road. No entrance to the site is to be from Coombes Road which would necessitate heavy vehicles using Stanwell Township streets.

2. Waste Disposal

10.5.2

The waste streams identified in the report are general refuse, recyclables and coal and coke fines/breeze. The Environmental Impact Statement identifies that 50% of waste output is to

be transported via Gracemere and 25% to Rockhampton and 25% to Gladstone (page 14-12). The Environmental Impact Statement does not identify what volume this represents.

The Environmental Impact Statement also states that the coal and coke fines/breeze will be removed off site for use in the making of briquettes. The volume of this material is stated in the Environmental Impact Statement and, when the plant is in full production, the output would be in the vicinity of 160,000 tonnes per annum. The only briquette making factory in the area is located at Bouldercombe and the shortest route to this facility is from the Capricorn Highway via Lawrie Street / Gavial Gracemere Road to the Burnett Highway. This route, if used, would take the heavy vehicles directly through the main street of Gracemere. Under no circumstances would Council agree to such a proposal. The alternative route would be the Capricorn Highway – Bruce Highway – Burnett Highway. The most sensible manner in dealing with this material is to locate the briquette factory adjacent to, or in close proximity to, the plant within the Stanwell Energy Park.

Queensland Coke and Energy have advised that the waste referred to in the Environmental Impact Statement at page 14-12 is general / domestic refuse and this is estimated to be 1200 square metres per annum and will be disposed of in the Gracemere landfill. If this is the case, this volume is acceptable.

Advice was also received that the coal fines / coke breeze will not be transported to Bouldercombe as the most cost effective and satisfactory solution is for the material to be heated on-site. If this is in fact the proposal, Council has no issue with the waste disposal aspect of the project. However, it would be advisable for Council to receive written confirmation of these issues.

3. <u>Social Impact</u> 12.3.4

a. There will be an impact on the Gracemere community as a number of people employed on the project will locate and live in the township. Additionally, the proposed accommodation village will also impact the community. These impacts can be both positive and negative. It is considered that the positive impacts not only for Gracemere, but for the region, outweigh the negatives.

   Any negative impacts can be softened by providing infrastructure that will provide a community benefit. Consideration should be given to providing recreation and community facilities that are needed to cater for the increase in population that the project will bring to the area.

b. It is understood that the proposed site for the accommodation village is the land set aside for a high school. It is desirable that any substantial structures such as a recreation hall etc could be constructed as a permanent building and not a demountable type. This would be very cost effective. It would require detailed discussions with the appropriate Government Department.

4. Local Government Planning Controls

Council is aware that, should the project proceed, it will require development approval applications under Council's Planning Scheme. These approvals will relate to the plant site at Stanwell and also the proposed workers' accommodation facility in Gracemere.

Council wants to work co-operatively with the proponents and the Coordinator-General on these issues and seeks to hold further in-depth discussion on the appropriate development approval process should approval be given for the project to proceed.

5. Contact Information

Should you require further information or clarification on any of the matters contained in this submission, contact the following:

Lyle Harman
Chief Executive Officer
Telephone: (07) 4931 5406
Facsimile: (07) 4933 3200
E-mail: lyle.harman@fitzroyshire.qld.gov.au

Response No. 14 TN87066.

IN REPLY PLEASE QUOTE OUR REFERENCE
Mrs Krebs:CLK: Project

YOUR REFERENCE
TN82077/FF02/CG

27 February, 2006 - T418

FAXED 27/02/06

Department of the Premier and Cabinet

Date Rec'd in Work Area	Action Officer
3/3/06	F. fitzgerald
Tracking No.	Mail No. 536
Folio ID 27/2/06-7	

The Coordinator-General
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Attention: EIS Project Manager

Dear Sir

RE: COMMENTS ON ENVIRONMENTAL IMPACT STATEMENT QUEENSLAND COKE AND POWER PLANT PROJECT

I refer to your letter received on the 16 January, 2006 and thank you for the opportunity to comment upon the Environmental Impact Statement (EIS) for the Queensland Coke and Power Plant Project.

Please consider the following comments when reviewing the EIS and formulating any proposed conditions of development approval:

Of the potential impacts for the Gladstone region, that of most concern to Council is on local and regional roads, depending upon where construction materials are sourced and how they are transported to the plant site. Whilst the EIS states in section 2.3.1 that oven bricks will be sourced internationally and will be railed from Brisbane to Rockhampton, then transported to site via semi-trailers in shipping containers, verbal advice at the February Rockhampton agency briefing for the project indicates that options remain open to utilize either the Port of Gladstone or Port Alma for the transportation of the bricks. There is no indication of what wharf might be used, making it difficult to determine whether only main roads would be affected or whether any local roads (such as Landing Road) might be effected. Also, the transport infrastructure section of the EIS does not give a pavement impact assessment beyond the intersection of the Capricorn and Bruce Highways, yet states that 50% of construction heavy vehicles will be from Gladstone.

2.3.1

14.3.2

14.3.2

It is therefore recommended that any approval take into account these issues and construction material source scenarios and require the preparation of further information

CALLIOPE SHIRE COUNCIL
Community, Environment & Industry in Partnership

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PLEASE ADDRESS ALL CORRESPONDENCE TO THE CHIEF EXECUTIVE OFFICER

relating to transport infrastructure should methods of transportation of construction materials not be as per the statements made in the EIS. It is recognised that these issues might be of further concern for the Department of Main Roads, given that it is expected that mostly main roads would be involved in the transportation of materials through Calliope Shire.

Once again, thank you for the opportunity to provide comment upon this EIS.

Yours faithfully

RUSSELL SCHULER
DIRECTOR OF DEVELOPMENT SERVICES

Response No. 15

TN86990.

Our Ref: 4925
Your Ref:
Enquiries: (07) 4936 8000
Telephone: 07 4936 8243
Facsimile: 07 4922 7351
Email: palmerr@rcc.qld.gov.au

24 February 2006

-T418

Department of the Premier and Cabinet

Date Rec'd in Work Area	Action Officer
3/3/06	f fitzgerald
Tracking No.	Mail No. 532
Folio ID 24/2/06-18	File No.

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Sir

QUEENSLAND COKE AND POWER PLANT ENVIRONMENTAL IMPACT STUDY

The Rockhampton City Council has considered the draft environmental impact study provided by the proponents of the Queensland Coke and Power Plant project and considered each of the potential environmental, economic and social impacts.

Council carefully noted the considerable economic impacts which the project can bring to the City and surrounding local authorities. In addition, council identified some environmental and social issues on which it seeks further information and discussion

In regard to the environmental impact study, Council resolved as follows:

1. Council endorse the Queensland Coke and Power Plant Project;

2. In accordance with Section 16.3 "Road Use Management Plan", the proponents be requested to consult with Rockhampton City Council regarding specified routes for heavy vehicles within Rockhampton City. — 16.3

3. The proponents be requested to provide further information regarding the proposal to rail 400,000 tonnes of refractory bricks into Rockhampton and then transport these bricks by road to the project site. Information sought includes the location of the delivery point within Rockhampton, the proposed heavy vehicle route to deliver the bricks to site and an analysis of the impacts such as road and intersection capacity and pavement damage to Councils road network. — 14.3.2 and Supplement Appendix E

4. The proponents be requested to carry out a traffic impact analysis of the Lower Dawson Road, Upper Dawson Road and Jellicoe Street intersection. — 14.3.2 and Supplement Appendix E

5. The proponents be requested to carry out a traffic impact analysis of the bridge over the Yeppen crossing and the 2-lane section of road between the bridge and the Yeppen roundabout. — 14.3.2 and Supplement Appendix E

6. The proponents be requested to consult with Queensland Transport, the Department of Main Roads and Rockhampton City Council regarding the proposed locations of bus pick up points and any other associated infrastructure including carparking. 14.3.2

7. The proponents be requested to re-examine the design parameters for the two sedimentation ponds "on the basis that a 1/10 yr overtopping frequency is not considered appropriate". 5.1.2

8. The proponents be requested to look at the susceptibility "and impact" of solids carrying over "in the event of a localised 1/100yr flood event". 5.1.2

9. The proponents be requested to hold discussions with Council and the Department of Housing/Queensland Housing and the Department of Public Works about additional affordable housing for Rockhampton. 12.3.4

10. The proponents be requested to discuss with Council and the Department of Employment and Training about additional training for youth, unemployed and over 40's residents to meet the demand that this project imposes 12.3.3

11. The proponents be requested to hold discussions with Council and the Queensland Education about the increase public primary and secondary school facilities and identify their future strategic direction. 12.3.2

12. The proponents be requested to hold discussions with Council and Queensland Transport about upgrades to the public transport system to cater for members of the Rockhampton community who rely heavily on this system. 14.3.2

13. Council talk with the project proponents about ways in which they can contribute to the City to help offset the results of some of the plant's impacts.

Council looks forward to discussing these issues with the proponents in due course.

Yours faithfully

Gary J Stevenson
Chief Executive Officer

RP:rp

Response No. 16 TN874-29

FITZROY BASIN ASSOCIATION

-T418

27th February, 2006 -3

Department of the Premier and Cabinet	
Date Rec'd in Work Area 2/3/06	Action Officer F. Fitzgerald
Tracking No.	Mail No. 530.
Folio 29 B2 06 5	File No.

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator General
PO Box 15009
CITY EAST Qld 4002

FAXED

To Whom It May Concern,

The EIS is quite a solid document and goes a long way in dealing with the potential environmental impacts this project may have on the environment. There are five items raised for your particular attention. More detail is supplied overleaf but in summary they are:

1. We suggest the minimisation of the millions of tonnes of carbon dioxide being released while the proposed power plant isn't in place by placing the construction of the power plant as a high priority and in operation as soon as there is enough 'waste heat to enable the efficient operation of the Power Plant' and/or developing alternative mitigation strategies until such a time as the power plant is constructed to limit emission effects.
2. There are concerns that securing water allocation may affect targets for overcoming barriers to fish migration. Options for securing water allocation without impeding this target are encouraged. There seemed to be some errors in a quoted figure and there was an incorrect Fitzroy Basin Association reference.
3. We encourage the setting of licence conditions for water discharge to be set using maximum levels tolerable so as not to impact on the waterway's environmental values. This would include calculations from all regulated discharges to this waterway and that licence conditions should not just reflect the conditions of other point source dischargers in the area.
4. We are working with the community to aid in the setting and refining of water quality targets. We aim to work alongside all who can potentially improve water quality to the region to enable our goal of halting the decline in water quality. Modelled and eventually monitored load based estimates of base flow and event overflows for sediments, nutrients and salts would aid us greatly in achieving this outcome together and further opportunities to discuss this with each party
5. That the rail loop be designed to deal with potential aquatic organism migration, flooding and erosion problems

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7 4999 2800
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07 4921 2860
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0 802 469 401

FITZROY BASIN ASSOCIATION

We trust our submission will aid in improving an already outstanding industrial project and aid this region and Queensland lead the way in natural resource management. For more information please contact Nathan Johnston nathan.johnston@fba.org.au.

Regards,

Suzie Christensen
CEO Fitzroy Basin Association

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ABN
30 802 469 401

FBA Submission Coke and Power Plant Project

Thankyou for the opportunity to provide a submission in response to the Environmental Impact Statement released by Queensland Coke and Energy and Stanwell Corporation LTD regarding the Coke and Power Plant Project.

The Central Queensland Strategy for Sustainability 2004 and Beyond (CQSS2), is the Fitzroy Basin Association's Accredited NRM plan that represents the vision for how Central Queensland will use natural resources in a sustainable and balanced way for the prosperity of communities and the health of our natural environment. This document encompasses the shared vision of all communities as we work together to:

- improve the health and maintain the functioning of our natural systems, and conserve the region's biodiversity
- Develop a diversity of economically viable industries that support vibrant regional communities
- Use the region's natural resources in an ecologically sustainable way.
- Integrate natural resource and environmental management, economic development and community development within the region.
- Share decision-making for the allocation of natural resources and the management of the region's environment across all stakeholders.
- Ensure the costs and benefits of achieving sustainable systems are shared equitably across the regional community.

These goals must be seen as a package where no one goal takes precedence over the others. (CQSS2, 2004, piii).

This submission provides commendations and concerns the Central Queensland community have, as they relate to the targets developed within the CQSS2, and how this Environmental Impact Statement is set to impact upon these targets.

It first must be recognised the concept of this project is supported and will bring many benefits to the region including a strong regional economy and prosperous communities. Queensland Coke and Energy and Stanwell Power Corporation along with any potential regional investor can rest assured that a well planned, environmentally sound project that integrates all facets of Natural Resource Management are welcome in Central Queensland.

Item 1 Greenhouse Gas Emissions

Commendation – the EIS supports targets M9 and A143

- This project will use state of the art coking processes that will minimise greenhouse gas emissions at a global scale.
- Transporting coke in place of coal has the benefit of decreasing CO_2 e/yr of 40,774t.
- This project aims to construct a power station to utilise otherwise wasted heat energy thus value adding to the region's resource

Concern – Potential for EIS not meeting targets M9 and A143 for first five years (or longer)

- The power plant may not be constructed for five years due to lack of workforce. Most of the environmental benefits touted in the EIS hinge on the operation of a power plant. Table 8.2 states that Total Annual Average GHG Emissions before Offsets, over 40 years of Operation (t CO_2e/yr) for a full combustion and power plant are 2,801,551. The offset for Electricity Generation stands at 2,458,901 t CO_2e/yr.

  If the power plant is not built for five years there is a potential release of 12,294,505 t CO_2e with no value adding. This waste of resource does not aid in meeting targets M9 and M143.

  It is our recommendation that:

  1. The construction of the power plant be placed as high a priority as the construction of the coking plant.
  2. The power plant should be available for operation as soon as there is enough 'waste heat to enable the efficient operation of the Power Plant' and/or alternative mitigation strategies should be developed until such a time as the power plant is constructed to limit emission effects.
  3. The point at which it is viable to run the power plant should be ascertained and supplied in the EIS.
  4. That an expected Power Plant completion date be provided in the EIS and that this date be in-line with the ethos of the message provided in the objectives of the executive summary of the EIS.

Other References for Item 1

CQSS Target - M9	*Practices and technology developed and implemented to minimise net greenhouse gas emissions within 10 years*
CQSS Target - A143	*Reduced greenhouse gas emissions, per unit of output, by energy producers*
CQE EIS (ES7-8)	The Project also promotes the principles of industrial ecology, whereby industrial processes/technologies are advanced, thereby helping to improve the global environment. This is achieved by: ....Allowing resources (heat/energy) that would otherwise be wasted to be inputs for other processes.
CQE EIS (8-13)	Table 8.4 – with reference to CO2 emissions and offsets.

QCE EIS (ES-5)

The timing of the construction of the Power Plant will be determined by the expected availability of waste heat to enable the efficient operation of the Power Plant. A shortage of potential labour in the region may result in the construction period being extended to five years, with a reduced construction workforce.

QCE EIS (ES-2)

Objectives

The objective of the Project is to produce a superior quality blast furnace coke for the export market on a successful commercial basis. In doing so the Project aims to produce high quality coke using modern heat recovery coke-making technology, in a cost effective and socially responsible manner, with significantly less environmental impacts than conventional coke making technology. In addition, the Project aims to generate "low-emission" electricity through the use of excess heat from the coking process.

Item 2 **Water Allocation**

Commendation
This project will consider options for water re-use and water efficiency that could save up to 1746.9 ML/year (5-20) (Aiding meeting CQSS2 targets A242 and R29).

Concern
Environmental, economic and social implications of securing 10,740ML/year water allocation not thoroughly covered.

This project requires 10,740ML water allocation. Even if all of the water use efficiency options were put into place there is still a requirement for 8993.1 ML/year. Options put forward for securing this allocation include

1. Utilising some of Stanwell Power Stations allocation
2. Water trading arrangements with Rockhampton City Council
3. Construction of new infrastructure (i.e. raising Eden Bann weir or another option)

Option 1 - Utilising some of Stanwell Power Stations allocation

This EIS states that:
'*SPS currently has an allocation of 24 GL/year from the Fitzroy River, approximately 30 km upstream of the Rockhampton Barrage but typically draws **2.01 GL** on average per annum, with the amount being used varying each year depending on climatic factors and SPS plant availability*' (5-21).

This figure seems quite low and should be checked for accuracy. If this figure is inaccurate, there is a concern that this statement would be misleading to those reading it.

Option 2 - Water trading arrangements
This EIS states that:
'*Other options for obtaining existing water allocations would include water trading arrangements with existing users such as Rockhampton City Council.*' (5.21)

The option of water trading is FBA's preferred option as it means the project will not impact target A220 (barriers to fishways)

Option 3 - Construction of new infrastructure
This EIS states that:
'The "Fitzroy Basin Water Resource Plan" (FBWRP) (Fitzroy Basin Association, 2004a) indicates that up to 300,000 ML of unallocated mean annual diversion may still be available from the Fitzroy Basin. However, obtaining a new allocation from DNRM will be dependent on a number of factors including the type of allocation (water harvesting or direct diversion from the river), timescales for the release of allocations, security of supply and cost. Many of the potential options are likely to involve the construction of significant infrastructure and will be subject to relevant assessments and licensing/application processes. For example, a supply from the Fitzroy River upstream of the Rockhampton Barrage to the Stanwell Water Supply Dam may require a new pipeline and an increase in dam capacity.' (5-21)

The reference to the Fitzroy Basin Association is incorrect. It is believed that this quote has come from the Fitzroy Basin Resource Operations Plan (2004) Natural

Resources Mines and Energy (http://www.nrm.qld.gov.au/wrp/fitzroy_rop.html) (Chapter 7, page 52) which states that:

> *'Unallocated water available for future release*
> *The Water Resource Plan (WRP) provides a partition of the available water resource between environmental needs and consumptive use. As identified in the Plan Overview section of the WRP, the balance remaining of the unallocated consumptive use resource over and above existing surface water entitlements comprises:*
>
> - *Up to 300,000 ML of mean annual diversion from the Isaac/Connors and Lower Fitzroy River systems;*
> - *Up to 40,000 ML of mean annual diversion from the Comet/Nogoa/Mackenzie River system;*
> - *Up to 11,500 ML of mean annual diversion from the upper Dawson River.*
>
> *The 'unallocated' water reflects a potential to take additional unsupplemented water without impact on the objectives of the WRP. It generally represents a low reliability resource and it is likely that useful access to this water will require significant new storage infrastructure (either in or off stream).'*

This option is the least preferred option from the FBA's perspective due to the likely requirement to construct or modify in stream infrastructure affecting target A220 (barriers to fishways)

Other references for Item 2

CQSS Target - *A220*	*Fish passages are installed in all new barriers that are likely to affect movement of fish ongoing*
CQSS Target - *A235*	*Restoration of base flows to Fitzroy River estuary within 7 years*
CQSS Target - A242	*50% industrial and urban water users practicing efficient water use within 5 years*
CQSS Target - *R27*	*Achieve WRP Water Allocation Security Objectives post completion of ROP's and ongoing*
CQSS Target - *R28*	*Achieve environmental flow objectives for the region as indicated in the Fitzroy and Boyne Water Resource Plans ongoing, post completion.*
CQSS Target - *R29*	*Highest efficiency use of water use by all users including urban, industrial, and agricultural within 10 years*
CQE EIS (ES 13)	Options for water re-use and recycling will be incorporated into the design of the Project
CQE EIS (14)	The Project will require a substantial water supply, largely for Power Plant cooling and coke quenching purposes. This water is proposed to be sourced from some of the available resource in the Fitzroy Basin either through existing or new water allocations. The sustainability of water use will be addressed through water re-use options as far as possible. The maximum annual water use for Stage 2 production with the Power Plant fully operational would be approximately 10,740ML/year. Some minor impacts on the flow regime and water quality of local creeks may be caused under certain plant scenarios due to

releases of water from the project site. The design strategy for surface water management at the Project focuses on minimising the amount of potential contaminants present in runoff (e.g. coke and coal dust, oil, chemicals) and installation of infrastructure to contain and treat this runoff.

Items 3 & 4 Water Quality

Commendation

This project considers its impacts on water quality and has put into place many measures to reduce the effect the project has on water quality and helps aid targets in the CQSS2.

Concerns

There is a general tone that the licence conditions placed on this project will be the same as other environmental authorities in the area.

The EIS states that:
'*It is assumed that similar discharge constraints would be imposed on the discharge from the Power Plant to those currently designated in the SPS environmental authority to protect downstream water quality.*' (5-18).

Licence conditions should take into account the pressures already exerted on the waterway and therefore what can be discharged without adversely affecting the environmental values of the waterway (i.e. maximum pollution capacity). This means that the licence conditions should take into account what is already released from the power plant and ensure that the combined releases of the two point source discharges doesn't impede the environmental values of the waterway.

There is a message that dilution negates the responsibility this project has towards settlement pond overflows.
The EIS states that:
'Overflows from these ponds are expected on average once in every 10 years. Within the context of the overall catchment area, this will have a very low impact on the overall flow regime.' (5-16)
'The proposed surface water containment system will be lined with low-permeability material and the system will be designed and managed only to discharge during extreme rainfall events where natural dilution will be substantial. Therefore, no detrimental effects on the groundwater by surface water originating from the Project are expected.' (ES-14.)
'Some minor impacts on the flow regime and water quality of local creeks may be caused under certain plant scenarios due to releases of water from the project site' (ES-14).

FBA are responsible for working with the community to set water quality targets. Any modelled and future monitored load based water quality data from the project would aid us in our future regional and catchment based planning. This especially relates to load estimates of nutrients (nitrogen and phosphorus), sediments (total solids and total suspended solids) and salt load released from the project site. It would be great to incorporate information for both base flows and the 10year ARI overflows. CQSS2 targets that relate to this include, M28 (Setting and refining water quality targets), R26 (Maintaining EC levels consistent with guidelines) and R25 (measurable improvement in water quality).

Item 5 Design of rail loop to mitigate aquatic organism migration, flooding and erosion problems. 5.1.2

Concerns
There is no mention of how the new eastern angle connection from the SPS rail loop will be designed to deal with aquatic organism migration, flooding and erosion problems.

The EIS states:
'A new eastern angle connection from the SPS rail loop to the central Blackwater line is proposed to be constructed'. (14.1)

It is recommended that this be designed to deal with aquatic organism migration, flooding and erosion problems.

Response No. 17 TNB7201

FAXED

urbis JHD

-T418

14 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 27/2/06	Action Officer R. Rolfe
Tracking No.	Mail No. 492
Folio ID 1412/06-8	File No.

The Coordinator General
Attention EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST Q 4002

Dear Sir/ Madam

RE Response to the EIA prepared by Queensland Coke and Energy for a Power Plant and Coal Mine Project –Impact on Gracemere Township-

The following is a submission prepared by UrbisJHD on behalf of McConaghy Group Pty Ltd with respect to the Environmental Impact Statement prepared for the proposed Power Plant and Coal mine within the Stanwell Energy Park, east of Gracemere. Properly made submissions are to be received by the Coordinator General by the 27th February 2006 and must contain the following:

- Grounds for the Submission.
- Facts and Circumstances of the Submission.
- Name, Address and Signature of the person making the submission.

Grounds for the Submission

- The Gracemere township is the primary commercial centre for the Fitzroy Shire that contains a number of sensitive land uses and is intended to be developed to encourage pedestrian movement. The proposed development by Queensland Coke and Coal should not result in the use the Gracemere Township as a bypass for heavy vehicles.

Facts and Circumstances in support of the Submission 14.3.2

- Laurie Street is the retail shopping heart of Gracemere and contains a number of sensitive land uses including a primary school and retirement village which encourage active pedestrian movement through the township. Heavy vehicles should only be allowed within this area where they provide local services. Additionally, we make reference to section 4.3.2 (2)6.C of the Fitzroy Shire Planning Scheme, which states that one of the overall outcomes of the Town Centre – Commercial Precinct (refer to Zone Map attached as **Appendix A**), which occupies the majority of the town centre, as being:

  > *"Roads and parking areas are of an* ***urban standard*** *allow for efficient traffic movement and* ***do not*** *by their location or design* ***compromise pedestrian movement*** *in the Town."*

- Gavial – Gracemere Road, which runs through the Gracemere Town Centre, is currently designated as a District Road, which is restricted to the use of semi trailers that predominantly provide services locally. Heavy vehicles that do not provide for local services to Gracemere should be restricted to the

Capricorn Highway that is a State Strategic Road and allows for Type 1 and Type 2 Road Trains, 23m and 25m B-Doubles.

- The proposed major shopping centre development is a high pedestrian generating activity and is intended to have high levels of pedestrian and cycle links to the existing town centre. Heavy vehicles should be restricted from this area to minimise local traffic conflicts and protect the amenity of the local area.
- Council has just recently approved a motel development within close proximity to the shopping centre, and which also has frontage to McLaughlin Street. Heavy vehicle movement should be restricted from this area to minimise adverse impacts on the amenity of the motel development.
- A freight network plan should be prepared as part of the development, which will restrict trucks to higher order more appropriate routes, being the Bruce and Capricorn Highways.

Yours Sincerely

A Allen

Adrian Allen
Senior Planner

TN 86672

Response No. 18

20th February 2006

To:

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
CITY EAST QLD 4002

From: D.Goldsworthy
98 Geihe Road
KALAPA
Queensland 4702
Tel /Fax: 07 49 347210
email: *d.goldsworthy@cqu.edu.au*

-T418

Re: Coke and Power Plant Project. Stanwell. Nr Rockhampton

Dear Coordinator-General

I wish to express concerns regarding the project by Queensland Coke and Energy with Stanwell Corporation Ltd, to construct a Coke and Power Plant at Stanwell, near Rockhampton in Central Queensland. My concerns relate to my land which is described as follows:

Real Property Description:	Lot 80-81 LN196 and Lot 2RP614973
Parish:	Stanwell
County:	Livingstone
Local Authority:	Fitzroy Shire Council
Land Area:	14.06 Ha.

Whilst the Environmental Impact Statement (EIS), is to be commended in its scope, there are some issues which have not been addressed. According to the project design, it is proposed to build a railway spur line from the Coke and Power Plant at Stanwell Power Station, to merge with the existing Central West Line. The lack of information regarding the size, shape, structure and construction mode and ultimate route and time frame for completion of the proposed rail spur is a significant omission from the EIS. Therefore, the following points are offered for consideration.

1 Railway spur construction

14.4.2

The EIS makes reference to the railway infrastructure provider on several occasions (EIS pp 2-17; 3-323,31,31; 5-19; 6-10,12,13). However, the railway infrastructure provider has not been identified, neither does the EIS provide details of the railway spur construction other than the preferred route. Reference is also made to "Further assessment of flood risk...(5-19)", and "vegetation removal further assessed in environmental studies conducted by the rail infrastructure providers as detailed designs for the rail spur are finalised" (6-10). It is unacceptable that a construction with such potential impact as the rail spur be omitted from the EIS. The design size, shape, structure and construction mode and ultimate route and time frame for

completion of the proposed rail spur will impact on the environment, ecology, water management and flooding. It is also unacceptable that environmental and ecological studies should be conducted after the EIS has been completed. The rigour of such studies by the rail spur infrastructure providers outside the scope and parameters of the EIS and its subsequent scrutiny could be considered suspect, particularly in the absence of detailed planning of the spur at such a crucial stage in the project progress. Consequently, I will be denied the opportunity to make submissions to this forum if the studies are conducted after the EIS process is completed.

2 Railway spur proposed route

3.4.2 and 14.4.2

The proposed route for the railway spur traverses part of Lot 2RP614973 (EIS p. 3-24. Figs. 3.4 and 3.6), to join the Central West line at some point along the boundary of Lot 2RP61497, as it runs parallel to the line. The proposed rail spur, will have a considerable impact on the agricultural and residential usage of Lot 80-81 LN196 and Lot 2RP614973, with respect to crop production capacity, financial implications for loss of production revenue and loss of residential rental income. According to the EIS (EIS p 3.30) less than 1 ha of land will be lost from Lot 2RP614973 as a result of constructing the rail spur. However since the route, size, shape and type of railway construction has not yet been determined it is difficult to see how this judgement can be made. Neither does the statement take into account any impact on the land caused by the construction process per se, that is, vehicular movements during the construction phase for access to Lot 2RP61497, excavations and subsequent land disturbance during construction. The only point of access to the site of the bridge construction and rail line, is over my land, which is currently cropped.

3 Access road to Lots 80-81 LN196 and 2RP614973

3.4.2

The most recent survey maps obtained from the Department of Natural Resources and Mines (2006), indicate access to Lots 80-81 LN196 and 2RP614973 is via two roads. One road is enclosed within the railway corridor running parallel to the railway line, along the fence line of Lots 80-81 LN196 and 2RP614973. This road terminates shortly past the boundary between Lot 80-81 LN196 and Lot 2RP614973. It does not continue to the junction of Lot 2RP614973 and Stuart Creek. The second road runs parallel with Neerkol Creek along the boundary of Lots 80-81 LN196. This road terminates at the boundary of Lots 80-81 LN196 and 2RP614973 (copy attached). A third road runs from Lot 161 LN2211, adjacent to Lot 2RP614973, around Stuart Creek terminating on the Capricorn Highway on the distal side of the railway line. At no point does the third road abut to or contact Lot 2RP614973. Therefore, to access the proposed route for the railway spur construction, vehicles would need to traverse Lots 80-81 LN196 and 2RP614973. The result would be land degradation due to excavation and heavy vehicle traffic; loss of crop production due to loss of land; potential for weed spread through Lot 80-81 LN196 and Lot 2RP614973; lack of access to pump sites on Neerkol Creek and Stuart Creeks, for irrigation purposes. Therefore, I do not consent to my land being used ofr access during construction of the bridge or the rail spur line.

4 Loss of land productivity

3.4.2

Lot 2RP614973 is noted in the EIS as Class B (EIS. p 3-28) but the document fails to note the area is used for lucerne and Rhodes grass production. The statement in the EIS that, " The construction of the rail crossing at Neerkol Creek and tributary and the loss of approximately 0.7 ha of riparian vegetation will not impose significant constraints on any future lands use, considering the size of are to be impacted.", is inappropriate and inaccurate. The total area of land comprising Lot 2RP614973 and Lot 80-81 LN196 produces approximately 7200 bales of prime lucerne and Rhodes grass hay per year for sale as horse and livestock fodder. In cost terms and at an average of $8.50 per bale over a 12 month period this equates to $61,200.00 pa. Lot 2RP614973 is a prime lucerne cropping area of the land. Assuming production of at least two thirds of Lot 2RP614973 and Lot 80-81 LN196 will be unusable due to land disturbance, excavations, construction and vehicular traffic, there would be a estimated loss of approximately 3600 bales of prime lucerne ($30,600). Depending on the length of time required for the railway spur construction to be completed, plus rehabilitation of the land, re-seeding and re-establishment of crop viability, the time frame of lost production could be 3-5 years, with a cost of $91,8000-$459,000.

5 Loss of access to creek water for irrigation purposes.

3.4.2

There are two water licences valid for Lots 80-81 LN196 and 2RP614973 for irrigation purposes; one for sourcing water from Stuart Creek, the other for sourcing water from Neerkol Creek. Construction of the railway spur in its proposed location will severely; if not totally restrict access to Stuart's Creek for irrigation purposes. A similar situation though to lesser extent, may occur at Neerkol Creek if this road is used for vehicular traffic. In addition, irrigation pipes are manually moved on a daily basis to ensure even and adequate crop irrigation. When this activity is being undertaken, construction and vehicle movement on and around Lots 80-81 LN196 and 2RP614973 has the potential to create an accident and injury risk.

6 Weed control

3.4.2

It is pleasing to note the EIS identifies strategies for weed control at the Stanwell site. However, Parthenium weed (Parthenium *hysterophorus* L.) a declared weed and a prolific, aggressive rampant coloniser of disturbed and degraded land[1], is noted to be growing in proximity to Lots 80-81 LN196 and 2RP614973 (EIS p3-35; Fig. 6.1 and pages 6-4, 6-5, 6-6). Parthenium can grow from seed to maturity in as little as four weeks in optimum conditions dropping upto 15,000 seeds per plant. Further, seeds can live dormant in the soil for up to 10 years before germinating (Navie, Panettea et al. 1998). Once established, Parthenium is almost impossible to eradicate, the consequence being reduced land value and potential loss of produce sale since any crop is then considered 'contaminated and therefore undesirable' (Land Protection, 2005). At the present time Parthenium weed has been prevented from colonising Lot 80-81 LN196 and Lot 2RP614973 by careful monitoring and early action to remove any opportunistic plant growth.

---

[1] *Weeds of National Significance Parthenium weed (Parthenium hysterophorus) Strategic Plan* (2001). WONS

Best management practice advocates containment and management of Parthenium weed using a combination of prevention of spread, bio-control agents, herbicide application and fire. Prevention of spread is achieved by wash down of vehicles as they enter a Parthenium free site, particularly if coming from an area of Parthenium infestation. Control of Parthenium infestation is by herbicide and in some instances burning prior to the plant flowering and seeding. There is a high risk of Parthenium spread to Lots 80-81 LN196 and 2RP614973 during and after construction phases, due to soil disturbance and land degradation, vehicular movement and seeding by Parthenium from other contaminated sites with the proposed Stanwell Power Station area. (Land Protection, 2005). Should the weed become established, eradication will be extremely difficult, if not impossible. Herbicides and burning are not acceptable due to the risk of waterway contamination and fire hazard respectively. It is unlikely the mitigation strategies suggested in the EIS (p 3-12) will be sufficient to control the spread of Parthenium.
Should Parthenium weed become established on Lots 80-81 LN196 as a consequence of the railway spur construction, it is unlikely the land utilisation as is currently the case, could continue.

7 Loss of rental income. 3.4.2

There is a residential dwelling on Lot 80-81 LN196, not noted or referred to in the EIS (EIS. Fig.3.4). The dwelling is in the process of being upgraded and improved prior to being made available for rental purposes To date, approximately $40,000.00 has been outlaid as the project nears completion (May 2006). On completion, and in today's rental market, a minimum weekly income of $160.00 per week is expected to be realised from property lease. However, given the proximity of an additional railway lines, increased rail activity, accompanying noise, dust and disruption caused by vehicle and construction traffic, it is unlikely that the dwelling would be rentable, with consequential loss of income.

8 Property Improvements 3.4.2

To date $10,000 has been outlaid for pasture improvement in order to increase productivity. This has included old crop clearance, ground rehabilitation, re-seeding for improved pasture, fertilising, fencing, and weed control. Obviously any benefit from these improvements will be lost once railway construction commences since the land will become degraded and unusable.

9 Flooding 5.1.2

Lots 80-81 LN196 and 2RP614973 bordering on Neerkol Creek are upstream of the Quarry Creek discharge point utilised by Stanwell Power Station (EIS p 5-1). The southern boundaries of Lots 80-81 LN196 and 2RP614973 run parallel with Neerkol Creek. The Neerkol-Scrubby Creek tributary has been recognised as making a significant inflow contribution to the Fitzroy river, mainly as a result of storm and flash flood run off (Baddiley 1991). The EIS notes the paucity of data relating to flood levels, flow rates and inundated areas (EIS p 5-5). However, local residents' long term knowledge indicates storm cells (often isolated) with heavy rain and squalls in the area to the west of Stanwell that is Kalapa, Bushley and Wycarbah, are

Response No. 10 TN87128

Queensland Government

-T418

Department of
Communities

13 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 2/3/06	Action Officer F. FitzGerald
Tracking No.	Mail No. 525
Folio ID 13/2/06.4	File No.

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
City East QLD 4002

Dear Sir/Madam

Thank you for your invitation to respond to the Environmental Impact Statement for the 'Stanwell Coke and Power Plant' project. The Department recognises that this project will have significant positive economic and social/cultural impacts on the surrounding communities and regions.
The Department also suggests that several strategies be adopted in partnership with the community and government, to mitigate several expected negative impacts of the proposed development; particularly those that impact upon the most vulnerable in the community.

Injection of labour force from outside the region

According to the proponents own estimates, the region can expect an injection of approximately 1000 workers during the first 18 months of the construction phase of the project. In the project's EIS, the proponents point towards the following impacts of this labour population influx:

Housing and rental market impacts

12.3.4 of the EIS states that 'the initiation of the Project could trigger a surge in the rental and house price market due to timing, cyclical and structural reasons.' The EIS also recognises that those most affected by such a rise, if it were to occur, would be those on lower or fixed incomes, such as those on Disability, Aged, Carer or Sole Parent pensions or other welfare benefits. Individuals and families on low and/or single incomes would also be affected. 12.3.4

Recommendations: That the proponents to enter into negotiations with government authorities such as Queensland Housing and Department of Communities, existing community-based housing cooperatives, local Councils and other relevant stakeholders in developing a joint response to the expected housing and rental market impacts of the project.

Fitzroy/Central West Queensland Region
Level 3, State Govt Building
209 Bolsover Street
Rockhampton Queensland 4700

PO Box 1503
Rockhampton Queensland 4700

Telephone 07 4938 6715
Facsimile 07 4938 4118
Website www.communities.qld.gov.au
ABN 38 872 506 567

The construction of a single person's quarters

12.3.2

This Department has some concerns with the proposal to develop a single person's quarters (SPQ) in the Gracemere area as an alternative to accessing the local housing and rental market. While this strategy may mitigate against the increased demand for local housing and rental places, the housing of a large number of single people in close proximity to each other but away from their familiar and communal support networks creates in itself alternative demands on the personal wellbeing of the residents of such a facility as well as the placing strain upon the infrastructure, demographic profile and the perception of community safety in the surrounding district.

Recommendations: That the proponents take a partnership role in funding the development of community infrastructure via the establishment of a community benefit fund to be expended in the location surrounding a SPQ.
That the proponents enter into close liaison with stakeholders involved in building and maintaining safer communities such as the Police Service, Local Government and the Department of Communities. Another strategy to consider would be to make available to employees of the project, a community involvement package, that funds workers' active involvement in community based activities such as sporting, recreational or service clubs as an alternative to adopting less community acceptable activities.

Services infrastructure

12.3.2

Section 12.3.2 of the EIS acknowledges the possible impacts of an increased demand on services infrastructure accruing from an influx of workers particularly where those workers and their families have to deal with issues of dislocation and social isolation. The Department commends the proponent's commitment to active engagement in the community to monitor and alleviate any possible strains on local infrastructure.

Recommendation: That the proponents purchase human support services through the provision of brokerage funds in order to alleviate any strain on community services and improve service responsiveness to workers' needs.

Accessing labour force locally

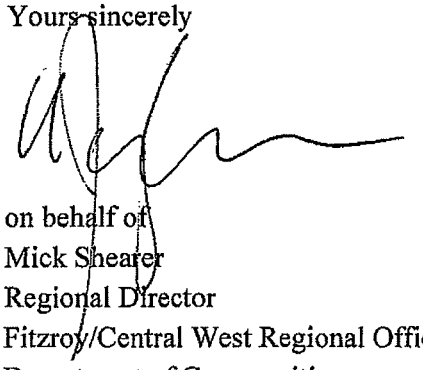
12.3.3

The proponents expect to access forty percent of its workers from the local community. Section 12.3.3 of the EIS states that this may exacerbate current skill shortages and may indirectly contribute to higher wages and the cost of skilled workers in the community. The Department commends the proponents' intention to develop a skills/employment working party with the local community along with utilising local networks and government apprenticeship and training schemes.
The opportunity for local community members to access training and gain skilled employment is a positive impact that the Department would like to see made available across all members of the community. Often certain groups within society do not access such opportunities to their fullest extent. Experience in other communities of Central Queensland has shown that existing inequalities in society can be further exacerbated with the introduction of developments such as is being proposed. With careful and thoughtful intervention on the part of the proponents however, negative impacts can be mitigated and the positive impacts of the development can be more widely shared across the host community.

Recommendation: That the proponents introduce affirmative action for a variety of disadvantaged groups in its recruitment and training programs. The Department of Communities is prepared to help facilitate this if the proponents choose to adopt this recommendation.

If you have any further enquiries regarding this response please contact the Department of Communities' A/Regional Planner in Central Queensland - Mr Eric Boardman, - (07) 4938 4478.

Yours sincerely



on behalf of
Mick Shearer
Regional Director
Fitzroy/Central West Regional Office
Department of Communities

Response No. 11 TN888221

Queensland Government

Ref: H01279/06

-T418

16 MAR 2006

Department of
Housing

Department of the Premier and Cabinet	
Date Rec'd in Work Area 17.3.06	Action Officer R. Rolfe.
Tracking No. 88822	Mail No. 613
Folio ID 16 P 3 06.1	File No.

Mr R Rolfe
The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Mr Rolfe Ross

I refer to the recent letter inviting the Department of Housing to comment on the Environmental Impact Statement (EIS) for the Coke and Power Plant Project at Stanwell Energy Park and to thank you for the opportunity to comment.

The Stanwell Corporation has devoted a considerable amount of time and resources to identify the potential impacts on housing affordability associated with the project. The University of Central Queensland undertook a comprehensive consultation process on behalf of the proponent that included formal contact with various advisory agencies, including the Central Queensland Area Office Manager, Department of Housing, local governments, local businesses and the wider community in the region. This consultation and subsequent analysis has revealed that there may be significant demands placed on the private rental and home purchase markets during the construction and operational phases of the project.

Section 12.3.4 of the EIS outlines three 'affordable housing strategies' that seek to address the potential shortage of affordable housing throughout the Rockhampton region. These strategies were identified by local stakeholders during the consultation process and are outlined below. 12.3.4

The first option proposes the development of a whole-of Government housing plan similar to the 'Housing Action Plan for Gladstone/Calliope' endorsed by Cabinet in 2002. This action plan was developed in response to the housing affordability impacts associated with several large scale industrial projects in the Gladstone/Calliope region. The development of the action plan for Gladstone/Calliope was informed by the Gladstone Coordination Group, a forum of local stakeholders including State agencies, local governments, industry and community representatives. Key issues that were addressed by the action plan for Gladstone/Calliope included:

- supply, location and design of temporary accommodation
- 'exit strategies' for end-use of temporary dwellings
- reliability of market information
- capacity of local residential development and planning
- strategies for ensuring the best use of public housing stock

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The 'Housing Action Plan for Gladstone/Calliope' identified a series of actions to be undertaken by various local stakeholders within agreed timeframes. This approach may provide the best opportunity for project proponents, local governments and State agencies to work together collaboratively to identify short- and medium-term responses to housing issues in the Rockhampton region. Departmental officers would be happy to discuss this option further with the Coordinator-General's office.

The second option proposes the development of an affordable housing trust to provide additional, affordable housing throughout the region in a similar fashion to the Brisbane Housing Company. This option would require careful consideration primarily because of the time and cost involved in establishing a not-for-profit housing entity capable of constructing and managing a significant, affordable housing portfolio. The timeframes involved with the development of the Brisbane Housing Company suggest that this option is unlikely to address the short- to medium-term housing affordability impacts associated with major projects in the region. It should also be noted that this option has the effect of transferring the financial impact primarily to the State (expected to be the key funder of such an initiative) and that there is no such funding available.

The third option proposes the development of single persons quarters in such a way that these facilities could be converted to aged care units once the construction phase of the project is complete. This approach would require detailed consultation with the relevant local government to ensure that the specific requirements of older persons could be met. Primary importance would be given to the proximity of a wide range of essential services and facilities (including public transport) to ensure that older people are not locationally disadvantaged. This option is supported.

If you require further information, please telephone Mr Alan Dick, Director, Private Housing Support on 3227 6223 who will be happy to assist.

Yours sincerely

Natalie MacDonald
Director-General
Department of Housing

Response No. 12 TN86867

Queensland Government

-T418

Department of
Primary Industries and Fisheries

Reference: 06/01304 ROC/140/119(21)

20 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 23/2/06	Action Officer B. French
Tracking No.	Mail No. 479
Folio IF 20/2/06.8	File No.

The Coordinator General
Coke and Power Plant Project
Major Projects
PO Box 15009
Brisbane City East Qld 4002

Attention: EIS Project Manager

Dear Sir/Madam

Queensland Coke & Energy Plant Project, Stanwell Energy Park

I refer to your letter of the 16 January 2006 and wish to advise that the Department of Primary Industries and Fisheries (DPI&F) has reviewed the Environmental Impact Statement and offers the following comments:

Please be advised that the basis of DPI&F's comments lies within the jurisdiction of the *Fisheries Act 1994*, and that a site inspection was not undertaken for the purposes of these comments.

- DPI&F advises that provided the proposed development is appropriately managed, with particular regard for water quality management, impacts on issues relevant to this Department are likely to be minor.

- DPI&F recognises the expertise and responsibility of the Environmental Protection Agency (EPA) in relation to water quality issues.

- DPI&F notes that the development site at Stanwell requires works within a number of drains at the location. It is likely that these drains would not be considered "waterways", however if there is some contention about the classification of the drain/channels, the applicant should be aware of the Waterway Barrier Works (the maintenance of fish passage) legislation. If it is proposed to construct new, or to raise/lower an existing, weir/dam/water-pipe and other barrier across a waterway (both freshwater and tidal), including temporary structures, a Development Approval application under the *Fisheries Act 1994* and *Integrated Planning Act 1997*, must be submitted for consideration by 5.1.2

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PO Box 6014
Central Queensland Mail Centre
Queensland 4702 Australia
Call Centre 13 25 23
Website www.dpi.qld.gov.au
ABN 78 342 684 030

DPI&F. Approvals for Waterway Barrier Works are not automatic upon application, and may be issued or refused as appropriate to the individual application, circumstances, impacts, policies and information supplied. The installation of a fishway may be required as part of any approval, to ensure fish passage across the barrier. Further information on 'waterway barrier works' and 'fishways' can be found at www.dpi.qld.gov.au/fishweb.

Thank you for the opportunity to provide advice on this matter. If you require any further information, please do not hesitate to contact Kev McCosker on telephone 07 4936 0326 or email kevin.mccosker@dpi.qld.gov.au.

Yours sincerely

Paul Walmsley
Regional Director, Central

TN 87485

Response No. 13

Fitzroy Shire Council

-T418

THE BIG RIVER SHIRE

1 March 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 3/3/06	Action Officer F. Fitzgerald
Tracking No.	Mail No. 533
Folio ID 1/3/06. 2	File No.

The Coordinator-General
Attention EIS Project Manager
Coke & Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Sir,

Re: Environmental Impact Statement – Queensland Coke & Power Plant Project – Queensland Coke & Energy

I refer to the Environmental Impact Statement in respect of the above and enclose Council's submission in respect of the project.

Should you need to discuss any of the issues raised or need further clarification, do not hesitate to contact me on 4931 5406.

Yours faithfully,

L V Harman
Chief Executive Officer

Enclosure

FOR ENQUIRIES PLEASE CONTACT:	YOUR REFERENCE:	IN REPLY PLEASE QUOTE:
Mr Lyle Harman Telephone: (07) 4931 5406		09/02/003 LVH:PDA

Shire Administration Centre, 1 Ranger Street, Gracemere, Queensland. Telephone: (07) 4931 5400 Facsimile: (07) 4933 3100
Address all correspondence to -The Chief Executive Officer, P.O. Box 40, Gracemere, Queensland 4702.
Email - ceo@fitzroyshire.qld.gov.au www.fitzroyshire.qld.gov.au

Fitzroy Shire Council

SUBMISSION

ENVIRONMENTAL IMPACT STATEMENT

QUEENSLAND COKE & POWER PLANT PROJECT

(QUEENSLAND COKE & ENERGY / STANWELL CORPORATION LIMITED)

Queensland Coke & Energy and Stanwell Corporation Limited propose to construct and operate a Coke Plant and a Power Plant within the Stanwell Energy Park at Stanwell located in Fitzroy Shire.

An Environmental Impact Statement has been issued seeking submissions from interested parties.

Council has considered the Environmental Impact Statement and has identified the following issues that required further investigation or explanation.

1. Roads and Traffic

14.3.2

a. The Environmental Impact Statement has addressed the impact that traffic from the project will have on declared main roads such as the Capricorn Highway but does not provide any information about the impact the project will have on Council controlled roads. The impact that the project will have on roads such as Power Station Road and Gracemere Streets and other roads, both during the construction and its operational phase, needs to be addressed.

b. The Environmental Impact Statement identifies that there will be an accommodation facility in Gracemere but no detail has been given on the effect that this facility will have on the local roads to be used to transport the construction workers to and from the construction site at Stanwell. It is understood that buses will be used to transport the workers from the accommodation and, therefore, the bus route/s from the accommodation facility to the site at Stanwell needs to be defined and matters such as pavement impacts, intersection layout and capacity need to be considered.

c. The road network surrounding the workers' accommodation facility will need to be upgraded with kerb and channelling, bitumen roads, drainage etc. The matter has not been addressed but could be addressed in the development application for the site.

d. The Environmental Impact Statement does not address the likely sources of construction materials such as quarry products (gravel, sand & concrete aggregate). The volume of these materials will be significant and the provision thereof will have a severe impact on Council's road network as well as an impact on the community / area from which the material is sourced. For example, Council has approved of a quarry in the Stanwell area some time ago and, if this is used, then major upgrading will be required to the haulage route. The necessary approvals to expand the site beyond its current approval would also have to be made.

   The likely source/s of construction materials needs to be identified and potential impacts addressed and proponents made aware of the impacts and the responsibility to mitigate the impacts.

e. Council requires that any access to the construction site must be via the Capricorn Highway and Power Station Road. No entrance to the site is to be from Coombes Road which would necessitate heavy vehicles using Stanwell Township streets.

2. Waste Disposal

10.5.2

The waste streams identified in the report are general refuse, recyclables and coal and coke fines/breeze. The Environmental Impact Statement identifies that 50% of waste output is to

be transported via Gracemere and 25% to Rockhampton and 25% to Gladstone (page 14-12). The Environmental Impact Statement does not identify what volume this represents.

The Environmental Impact Statement also states that the coal and coke fines/breeze will be removed off site for use in the making of briquettes. The volume of this material is stated in the Environmental Impact Statement and, when the plant is in full production, the output would be in the vicinity of 160,000 tonnes per annum. The only briquette making factory in the area is located at Bouldercombe and the shortest route to this facility is from the Capricorn Highway via Lawrie Street / Gavial Gracemere Road to the Burnett Highway. This route, if used, would take the heavy vehicles directly through the main street of Gracemere. Under no circumstances would Council agree to such a proposal. The alternative route would be the Capricorn Highway – Bruce Highway – Burnett Highway. The most sensible manner in dealing with this material is to locate the briquette factory adjacent to, or in close proximity to, the plant within the Stanwell Energy Park.

Queensland Coke and Energy have advised that the waste referred to in the Environmental Impact Statement at page 14-12 is general / domestic refuse and this is estimated to be 1200 square metres per annum and will be disposed of in the Gracemere landfill. If this is the case, this volume is acceptable.

Advice was also received that the coal fines / coke breeze will not be transported to Bouldercombe as the most cost effective and satisfactory solution is for the material to be heated on-site. If this is in fact the proposal, Council has no issue with the waste disposal aspect of the project. However, it would be advisable for Council to receive written confirmation of these issues.

3. Social Impact

12.3.4

a. There will be an impact on the Gracemere community as a number of people employed on the project will locate and live in the township. Additionally, the proposed accommodation village will also impact the community. These impacts can be both positive and negative. It is considered that the positive impacts not only for Gracemere, but for the region, outweigh the negatives.

   Any negative impacts can be softened by providing infrastructure that will provide a community benefit. Consideration should be given to providing recreation and community facilities that are needed to cater for the increase in population that the project will bring to the area.

b. It is understood that the proposed site for the accommodation village is the land set aside for a high school. It is desirable that any substantial structures such as a recreation hall etc could be constructed as a permanent building and not a demountable type. This would be very cost effective. It would require detailed discussions with the appropriate Government Department.

4. Local Government Planning Controls

Council is aware that, should the project proceed, it will require development approval applications under Council's Planning Scheme. These approvals will relate to the plant site at Stanwell and also the proposed workers' accommodation facility in Gracemere.

Council wants to work co-operatively with the proponents and the Coordinator-General on these issues and seeks to hold further in-depth discussion on the appropriate development approval process should approval be given for the project to proceed.

5. Contact Information

Should you require further information or clarification on any of the matters contained in this submission, contact the following:

Lyle Harman
Chief Executive Officer
Telephone: (07) 4931 5406
Facsimile: (07) 4933 3200
E-mail: lyle.harman@fitzroyshire.qld.gov.au

Response No. 14 TN87066.

IN REPLY PLEASE QUOTE OUR REFERENCE
Mrs Krebs:CLK: Project

YOUR REFERENCE
TN82077/FF02/CG

FAXED 27/02/06

27 February, 2006 -T418

Department of the Premier and Cabinet

Date Rec'd in Work Area	Action Officer
3/3/06	F. Fitzgerald
Tracking No.	Mail No. 536
Folio ID 27/2/06-7	File #

The Coordinator-General
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Attention: EIS Project Manager

Dear Sir

RE: COMMENTS ON ENVIRONMENTAL IMPACT STATEMENT QUEENSLAND COKE AND POWER PLANT PROJECT

I refer to your letter received on the 16 January, 2006 and thank you for the opportunity to comment upon the Environmental Impact Statement (EIS) for the Queensland Coke and Power Plant Project.

Please consider the following comments when reviewing the EIS and formulating any proposed conditions of development approval:

Of the potential impacts for the Gladstone region, that of most concern to Council is on local and regional roads, depending upon where construction materials are sourced and how they are transported to the plant site. Whilst the EIS states in section 2.3.1 that oven bricks will be sourced internationally and will be railed from Brisbane to Rockhampton, then transported to site via semi-trailers in shipping containers, verbal advice at the February Rockhampton agency briefing for the project indicates that options remain open to utilize either the Port of Gladstone or Port Alma for the transportation of the bricks. There is no indication of what wharf might be used, making it difficult to determine whether only main roads would be affected or whether any local roads (such as Landing Road) might be effected. Also, the transport infrastructure section of the EIS does not give a pavement impact assessment beyond the intersection of the Capricorn and Bruce Highways, yet states that 50% of construction heavy vehicles will be from Gladstone. 2.3.1 14.3.2 14.3.2

It is therefore recommended that any approval take into account these issues and construction material source scenarios and require the preparation of further information

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Community, Environment & Industry in Partnership

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PLEASE ADDRESS ALL CORRESPONDENCE TO THE CHIEF EXECUTIVE OFFICER

relating to transport infrastructure should methods of transportation of construction materials not be as per the statements made in the EIS. It is recognised that these issues might be of further concern for the Department of Main Roads, given that it is expected that mostly main roads would be involved in the transportation of materials through Calliope Shire.

Once again, thank you for the opportunity to provide comment upon this EIS.

Yours faithfully

RUSSELL SCHULER
DIRECTOR OF DEVELOPMENT SERVICES

Response No. 15

TN86990.

Our Ref: 4925
Your Ref:
Enquiries: (07) 4936 8000
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24 February 2006

-T418

Department of the Premier and Cabinet	
Date Rec'd in Work Area 3/3/06	Action Officer f.fitzgerald
Tracking No.	Mail No. 532
Cabinet ID 24/2/06.18	File No.

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST QLD 4002

Dear Sir

QUEENSLAND COKE AND POWER PLANT ENVIRONMENTAL IMPACT STUDY

The Rockhampton City Council has considered the draft environmental impact study provided by the proponents of the Queensland Coke and Power Plant project and considered each of the potential environmental, economic and social impacts.

Council carefully noted the considerable economic impacts which the project can bring to the City and surrounding local authorities. In addition, council identified some environmental and social issues on which it seeks further information and discussion

In regard to the environmental impact study, Council resolved as follows:

1. Council endorse the Queensland Coke and Power Plant Project;

2. In accordance with Section 16.3 "Road Use Management Plan", the proponents be requested to consult with Rockhampton City Council regarding specified routes for heavy vehicles within Rockhampton City. — 16.3

3. The proponents be requested to provide further information regarding the proposal to rail 400,000 tonnes of refractory bricks into Rockhampton and then transport these bricks by road to the project site. Information sought includes the location of the delivery point within Rockhampton, the proposed heavy vehicle route to deliver the bricks to site and an analysis of the impacts such as road and intersection capacity and pavement damage to Councils road network. — 14.3.2 and Supplement Appendix E

4. The proponents be requested to carry out a traffic impact analysis of the Lower Dawson Road, Upper Dawson Road and Jellicoe Street intersection. — 14.3.2 and Supplement Appendix E

5. The proponents be requested to carry out a traffic impact analysis of the bridge over the Yeppen crossing and the 2-lane section of road between the bridge and the Yeppen roundabout. — 14.3.2 and Supplement Appendix E

6. The proponents be requested to consult with Queensland Transport, the Department of Main Roads and Rockhampton City Council regarding the proposed locations of bus pick up points and any other associated infrastructure including carparking. 14.3.2

7. The proponents be requested to re-examine the design parameters for the two sedimentation ponds "on the basis that a 1/10 yr overtopping frequency is not considered appropriate". 5.1.2

8. The proponents be requested to look at the susceptibility "and impact" of solids carrying over "in the event of a localised 1/100yr flood event". 5.1.2

9. The proponents be requested to hold discussions with Council and the Department of Housing/Queensland Housing and the Department of Public Works about additional affordable housing for Rockhampton. 12.3.4

10. The proponents be requested to discuss with Council and the Department of Employment and Training about additional training for youth, unemployed and over 40's residents to meet the demand that this project imposes 12.3.3

11. The proponents be requested to hold discussions with Council and the Queensland Education about the increase public primary and secondary school facilities and identify their future strategic direction. 12.3.2

12. The proponents be requested to hold discussions with Council and Queensland Transport about upgrades to the public transport system to cater for members of the Rockhampton community who rely heavily on this system. 14.3.2

13. Council talk with the project proponents about ways in which they can contribute to the City to help offset the results of some of the plant's impacts.

Council looks forward to discussing these issues with the proponents in due course.

Yours faithfully

Gary J Stevenson
Chief Executive Officer

RP:rp

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Response No. 16 TN874-29

FITZROY BASIN ASSOCIATION

-T418

27th February, 2006 -3

FAXED

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator General
PO Box 15009
CITY EAST Qld 4002

To Whom It May Concern,

The EIS is quite a solid document and goes a long way in dealing with the potential environmental impacts this project may have on the environment. There are five items raised for your particular attention. More detail is supplied overleaf but in summary they are:

1. We suggest the minimisation of the millions of tonnes of carbon dioxide being released while the proposed power plant isn't in place by placing the construction of the power plant as a high priority and in operation as soon as there is enough 'waste heat to enable the efficient operation of the Power Plant' and/or developing alternative mitigation strategies until such a time as the power plant is constructed to limit emission effects.
2. There are concerns that securing water allocation may affect targets for overcoming barriers to fish migration. Options for securing water allocation without impeding this target are encouraged. There seemed to be some errors in a quoted figure and there was an incorrect Fitzroy Basin Association reference.
3. We encourage the setting of licence conditions for water discharge to be set using maximum levels tolerable so as not to impact on the waterway's environmental values. This would include calculations from all regulated discharges to this waterway and that licence conditions should not just reflect the conditions of other point source dischargers in the area.
4. We are working with the community to aid in the setting and refining of water quality targets. We aim to work alongside all who can potentially improve water quality to the region to enable our goal of halting the decline in water quality. Modelled and eventually monitored load based estimates of base flow and event overflows for sediments, nutrients and salts would aid us greatly in achieving this outcome together and further opportunities to discuss this with each party
5. That the rail loop be designed to deal with potential aquatic organism migration, flooding and erosion problems

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FITZROY BASIN ASSOCIATION

We trust our submission will aid in improving an already outstanding industrial project and aid this region and Queensland lead the way in natural resource management. For more information please contact Nathan Johnston nathan.johnston@fba.org.au.

Regards,

Suzie Christensen
CEO Fitzroy Basin Association

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FBA Submission Coke and Power Plant Project

Thankyou for the opportunity to provide a submission in response to the Environmental Impact Statement released by Queensland Coke and Energy and Stanwell Corporation LTD regarding the Coke and Power Plant Project.

The Central Queensland Strategy for Sustainability 2004 and Beyond (CQSS2), is the Fitzroy Basin Association's Accredited NRM plan that represents the vision for how Central Queensland will use natural resources in a sustainable and balanced way for the prosperity of communities and the health of our natural environment. This document encompasses the shared vision of all communities as we work together to:

- improve the health and maintain the functioning of our natural systems, and conserve the region's biodiversity
- Develop a diversity of economically viable industries that support vibrant regional communities
- Use the region's natural resources in an ecologically sustainable way.
- Integrate natural resource and environmental management, economic development and community development within the region.
- Share decision-making for the allocation of natural resources and the management of the region's environment across all stakeholders.
- Ensure the costs and benefits of achieving sustainable systems are shared equitably across the regional community.

These goals must be seen as a package where no one goal takes precedence over the others. (CQSS2, 2004, piii).

This submission provides commendations and concerns the Central Queensland community have, as they relate to the targets developed within the CQSS2, and how this Environmental Impact Statement is set to impact upon these targets.

It first must be recognised the concept of this project is supported and will bring many benefits to the region including a strong regional economy and prosperous communities. Queensland Coke and Energy and Stanwell Power Corporation along with any potential regional investor can rest assured that a well planned, environmentally sound project that integrates all facets of Natural Resource Management are welcome in Central Queensland.

Item 1 Greenhouse Gas Emissions

Commendation – the EIS supports targets M9 and A143

- This project will use state of the art coking processes that will minimise greenhouse gas emissions at a global scale.
- Transporting coke in place of coal has the benefit of decreasing CO_2 e/yr of 40,774t.
- This project aims to construct a power station to utilise otherwise wasted heat energy thus value adding to the region's resource

Concern – Potential for EIS not meeting targets M9 and A143 for first five years (or longer)

- The power plant may not be constructed for five years due to lack of workforce. Most of the environmental benefits touted in the EIS hinge on the operation of a power plant. Table 8.2 states that Total Annual Average GHG Emissions before Offsets, over 40 years of Operation (t CO_2e/yr) for a full combustion and power plant are 2,801,551. The offset for Electricity Generation stands at 2,458,901 t CO_2e/yr.

  If the power plant is not built for five years there is a potential release of 12,294,505 t CO_2e with no value adding. This waste of resource does not aid in meeting targets M9 and M143.

  It is our recommendation that:

  1. The construction of the power plant be placed as high a priority as the construction of the coking plant.
  2. The power plant should be available for operation as soon as there is enough 'waste heat to enable the efficient operation of the Power Plant' and/or alternative mitigation strategies should be developed until such a time as the power plant is constructed to limit emission effects.
  3. The point at which it is viable to run the power plant should be ascertained and supplied in the EIS.
  4. That an expected Power Plant completion date be provided in the EIS and that this date be in-line with the ethos of the message provided in the objectives of the executive summary of the EIS.

Other References for Item 1

CQSS Target - M9	*Practices and technology developed and implemented to minimise net greenhouse gas emissions within 10 years*
CQSS Target - A143	*Reduced greenhouse gas emissions, per unit of output, by energy producers*
CQE EIS (ES7-8)	The Project also promotes the principles of industrial ecology, whereby industrial processes/technologies are advanced, thereby helping to improve the global environment. This is achieved by: ....Allowing resources (heat/energy) that would otherwise be wasted to be inputs for other processes.
CQE EIS (8-13)	Table 8.4 – with reference to CO2 emissions and offsets.

QCE EIS (ES-5)

The timing of the construction of the Power Plant will be determined by the expected availability of waste heat to enable the efficient operation of the Power Plant. A shortage of potential labour in the region may result in the construction period being extended to five years, with a reduced construction workforce.

QCE EIS (ES-2)

Objectives

The objective of the Project is to produce a superior quality blast furnace coke for the export market on a successful commercial basis. In doing so the Project aims to produce high quality coke using modern heat recovery coke-making technology, in a cost effective and socially responsible manner, with significantly less environmental impacts than conventional coke making technology. In addition, the Project aims to generate "low-emission" electricity through the use of excess heat from the coking process.

Item 2 **Water Allocation**

Commendation
This project will consider options for water re-use and water efficiency that could save up to 1746.9 ML/year (5-20) (Aiding meeting CQSS2 targets A242 and R29).

Concern
Environmental, economic and social implications of securing 10,740ML/year water allocation not thoroughly covered.

This project requires 10,740ML water allocation. Even if all of the water use efficiency options were put into place there is still a requirement for 8993.1 ML/year. Options put forward for securing this allocation include

1. Utilising some of Stanwell Power Stations allocation
2. Water trading arrangements with Rockhampton City Council
3. Construction of new infrastructure (i.e. raising Eden Bann weir or another option)

Option 1 - Utilising some of Stanwell Power Stations allocation

This EIS states that:
'*SPS currently has an allocation of 24 GL/year from the Fitzroy River, approximately 30 km upstream of the Rockhampton Barrage but typically draws **2.01 GL** on average per annum, with the amount being used varying each year depending on climatic factors and SPS plant availability*' (5-21).

This figure seems quite low and should be checked for accuracy. If this figure is inaccurate, there is a concern that this statement would be misleading to those reading it.

Option 2 - Water trading arrangements
This EIS states that:
'*Other options for obtaining existing water allocations would include water trading arrangements with existing users such as Rockhampton City Council.*' (5.21)

The option of water trading is FBA's preferred option as it means the project will not impact target A220 (barriers to fishways)

Option 3 - Construction of new infrastructure
This EIS states that:
'The "Fitzroy Basin Water Resource Plan" (FBWRP) (Fitzroy Basin Association, 2004a) indicates that up to 300,000 ML of unallocated mean annual diversion may still be available from the Fitzroy Basin. However, obtaining a new allocation from DNRM will be dependent on a number of factors including the type of allocation (water harvesting or direct diversion from the river), timescales for the release of allocations, security of supply and cost. Many of the potential options are likely to involve the construction of significant infrastructure and will be subject to relevant assessments and licensing/application processes. For example, a supply from the Fitzroy River upstream of the Rockhampton Barrage to the Stanwell Water Supply Dam may require a new pipeline and an increase in dam capacity.' (5-21)

The reference to the Fitzroy Basin Association is incorrect. It is believed that this quote has come from the Fitzroy Basin Resource Operations Plan (2004) Natural

Resources Mines and Energy (http://www.nrm.qld.gov.au/wrp/fitzroy_rop.html) (Chapter 7, page 52) which states that:

> *'Unallocated water available for future release*
> *The Water Resource Plan (WRP) provides a partition of the available water resource between environmental needs and consumptive use. As identified in the Plan Overview section of the WRP, the balance remaining of the unallocated consumptive use resource over and above existing surface water entitlements comprises:*
>
> - *Up to 300,000 ML of mean annual diversion from the Isaac/Connors and Lower Fitzroy River systems;*
> - *Up to 40,000 ML of mean annual diversion from the Comet/Nogoa/Mackenzie River system;*
> - *Up to 11,500 ML of mean annual diversion from the upper Dawson River.*
>
> *The 'unallocated' water reflects a potential to take additional unsupplemented water without impact on the objectives of the WRP. It generally represents a low reliability resource and it is likely that useful access to this water will require significant new storage infrastructure (either in or off stream).'*

This option is the least preferred option from the FBA's perspective due to the likely requirement to construct or modify in stream infrastructure affecting target A220 (barriers to fishways)

Other references for Item 2

CQSS Target - *A220*	*Fish passages are installed in all new barriers that are likely to affect movement of fish ongoing*
CQSS Target - *A235*	*Restoration of base flows to Fitzroy River estuary within 7 years*
CQSS Target - A242	*50% industrial and urban water users practicing efficient water use within 5 years*
CQSS Target - *R27*	*Achieve WRP Water Allocation Security Objectives post completion of ROP's and ongoing*
CQSS Target - *R28*	*Achieve environmental flow objectives for the region as indicated in the Fitzroy and Boyne Water Resource Plans ongoing, post completion.*
CQSS Target - *R29*	*Highest efficiency use of water use by all users including urban, industrial, and agricultural within 10 years*
CQE EIS (ES 13)	Options for water re-use and recycling will be incorporated into the design of the Project
CQE EIS (14)	The Project will require a substantial water supply, largely for Power Plant cooling and coke quenching purposes. This water is proposed to be sourced from some of the available resource in the Fitzroy Basin either through existing or new water allocations. The sustainability of water use will be addressed through water re-use options as far as possible. The maximum annual water use for Stage 2 production with the Power Plant fully operational would be approximately 10,740ML/year. Some minor impacts on the flow regime and water quality of local creeks may be caused under certain plant scenarios due to

releases of water from the project site. The design strategy for surface water management at the Project focuses on minimising the amount of potential contaminants present in runoff (e.g. coke and coal dust, oil, chemicals) and installation of infrastructure to contain and treat this runoff.

Items 3 & 4 Water Quality

Commendation

This project considers its impacts on water quality and has put into place many measures to reduce the effect the project has on water quality and helps aid targets in the CQSS2.

Concerns

There is a general tone that the licence conditions placed on this project will be the same as other environmental authorities in the area.

The EIS states that:
'*It is assumed that similar discharge constraints would be imposed on the discharge from the Power Plant to those currently designated in the SPS environmental authority to protect downstream water quality.*' (5-18).

Licence conditions should take into account the pressures already exerted on the waterway and therefore what can be discharged without adversely affecting the environmental values of the waterway (i.e. maximum pollution capacity). This means that the licence conditions should take into account what is already released from the power plant and ensure that the combined releases of the two point source discharges doesn't impede the environmental values of the waterway.

There is a message that dilution negates the responsibility this project has towards settlement pond overflows.
The EIS states that:
'Overflows from these ponds are expected on average once in every 10 years. Within the context of the overall catchment area, this will have a very low impact on the overall flow regime.' (5-16)
'The proposed surface water containment system will be lined with low-permeability material and the system will be designed and managed only to discharge during extreme rainfall events where natural dilution will be substantial. Therefore, no detrimental effects on the groundwater by surface water originating from the Project are expected.' (ES-14.)
'Some minor impacts on the flow regime and water quality of local creeks may be caused under certain plant scenarios due to releases of water from the project site' (ES-14).

FBA are responsible for working with the community to set water quality targets. Any modelled and future monitored load based water quality data from the project would aid us in our future regional and catchment based planning. This especially relates to load estimates of nutrients (nitrogen and phosphorus), sediments (total solids and total suspended solids) and salt load released from the project site. It would be great to incorporate information for both base flows and the 10year ARI overflows. CQSS2 targets that relate to this include, M28 (Setting and refining water quality targets), R26 (Maintaining EC levels consistent with guidelines) and R25 (measurable improvement in water quality).

Item 5 Design of rail loop to mitigate aquatic organism migration, flooding and erosion problems. 5.1.2

Concerns
There is no mention of how the new eastern angle connection from the SPS rail loop will be designed to deal with aquatic organism migration, flooding and erosion problems.

The EIS states:
'A new eastern angle connection from the SPS rail loop to the central Blackwater line is proposed to be constructed'. (14.1)

It is recommended that this be designed to deal with aquatic organism migration, flooding and erosion problems.

Response No. 17 TNB7201

FAXED

urbis JHD

-T418

14 February 2006

Department of the Premier and Cabinet	
Date Rec'd in Work Area 27/2/06	Action Officer R. Rolfe
Tracking No.	Mail No. 492
Folio ID 1492/06:8	File No.

The Coordinator General
Attention EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST Q 4002

Dear Sir/ Madam

RE Response to the EIA prepared by Queensland Coke and Energy for a Power Plant and Coal Mine Project –Impact on Gracemere Township-

The following is a submission prepared by UrbisJHD on behalf of McConaghy Group Pty Ltd with respect to the Environmental Impact Statement prepared for the proposed Power Plant and Coal mine within the Stanwell Energy Park, east of Gracemere. Properly made submissions are to be received by the Coordinator General by the 27th February 2006 and must contain the following:

- Grounds for the Submission.
- Facts and Circumstances of the Submission.
- Name, Address and Signature of the person making the submission.

Grounds for the Submission

- The Gracemere township is the primary commercial centre for the Fitzroy Shire that contains a number of sensitive land uses and is intended to be developed to encourage pedestrian movement. The proposed development by Queensland Coke and Coal should not result in the use the Gracemere Township as a bypass for heavy vehicles.

Facts and Circumstances in support of the Submission

14.3.2

- Laurie Street is the retail shopping heart of Gracemere and contains a number of sensitive land uses including a primary school and retirement village which encourage active pedestrian movement through the township. Heavy vehicles should only be allowed within this area where they provide local services. Additionally, we make reference to section 4.3.2 (2)6.C of the Fitzroy Shire Planning Scheme, which states that one of the overall outcomes of the Town Centre – Commercial Precinct (refer to Zone Map attached as **Appendix A**), which occupies the majority of the town centre, as being:

  > *"Roads and parking areas are of an* ***urban standard*** *allow for efficient traffic movement and* ***do not*** *by their location or design* ***compromise pedestrian movement*** *in the Town."*

- Gavial – Gracemere Road, which runs through the Gracemere Town Centre, is currently designated as a District Road, which is restricted to the use of semi trailers that predominantly provide services locally. Heavy vehicles that do not provide for local services to Gracemere should be restricted to the

Capricorn Highway that is a State Strategic Road and allows for Type 1 and Type 2 Road Trains, 23m and 25m B-Doubles.

- The proposed major shopping centre development is a high pedestrian generating activity and is intended to have high levels of pedestrian and cycle links to the existing town centre. Heavy vehicles should be restricted from this area to minimise local traffic conflicts and protect the amenity of the local area.
- Council has just recently approved a motel development within close proximity to the shopping centre, and which also has frontage to McLaughlin Street. Heavy vehicle movement should be restricted from this area to minimise adverse impacts on the amenity of the motel development.
- A freight network plan should be prepared as part of the development, which will restrict trucks to higher order more appropriate routes, being the Bruce and Capricorn Highways.

Yours Sincerely

A Allen

Adrian Allen
Senior Planner

TN 86672

Response No. 18

20th February 2006

To:

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
CITY EAST QLD 4002

From: D.Goldsworthy
98 Geihe Road
KALAPA
Queensland 4702
Tel /Fax: 07 49 347210
email: *d.goldsworthy@cqu.edu.au*

-T418 · 41

Re: Coke and Power Plant Project. Stanwell. Nr Rockhampton

Dear Coordinator-General

I wish to express concerns regarding the project by Queensland Coke and Energy with Stanwell Corporation Ltd, to construct a Coke and Power Plant at Stanwell, near Rockhampton in Central Queensland. My concerns relate to my land which is described as follows:

Real Property Description:	Lot 80-81 LN196 and Lot 2RP614973
Parish:	Stanwell
County:	Livingstone
Local Authority:	Fitzroy Shire Council
Land Area:	14.06 Ha.

Whilst the Environmental Impact Statement (EIS), is to be commended in its scope, there are some issues which have not been addressed. According to the project design, it is proposed to build a railway spur line from the Coke and Power Plant at Stanwell Power Station, to merge with the existing Central West Line. The lack of information regarding the size, shape, structure and construction mode and ultimate route and time frame for completion of the proposed rail spur is a significant omission from the EIS. Therefore, the following points are offered for consideration.

1 Railway spur construction

14.4.2

The EIS makes reference to the railway infrastructure provider on several occasions (EIS pp 2-17; 3-323,31,31; 5-19; 6-10,12,13). However, the railway infrastructure provider has not been identified, neither does the EIS provide details of the railway spur construction other than the preferred route. Reference is also made to "Further assessment of flood risk...(5-19)", and "vegetation removal further assessed in environmental studies conducted by the rail infrastructure providers as detailed designs for the rail spur are finalised" (6-10). It is unacceptable that a construction with such potential impact as the rail spur be omitted from the EIS. The design size, shape, structure and construction mode and ultimate route and time frame for

completion of the proposed rail spur will impact on the environment, ecology, water management and flooding. It is also unacceptable that environmental and ecological studies should be conducted after the EIS has been completed. The rigour of such studies by the rail spur infrastructure providers outside the scope and parameters of the EIS and its subsequent scrutiny could be considered suspect, particularly in the absence of detailed planning of the spur at such a crucial stage in the project progress. Consequently, I will be denied the opportunity to make submissions to this forum if the studies are conducted after the EIS process is completed.

2 Railway spur proposed route 3.4.2 and 14.4.2

The proposed route for the railway spur traverses part of Lot 2RP614973 (EIS p. 3-24. Figs. 3.4 and 3.6), to join the Central West line at some point along the boundary of Lot 2RP61497, as it runs parallel to the line. The proposed rail spur, will have a considerable impact on the agricultural and residential usage of Lot 80-81 LN196 and Lot 2RP614973, with respect to crop production capacity, financial implications for loss of production revenue and loss of residential rental income. According to the EIS (EIS p 3.30) less than 1 ha of land will be lost from Lot 2RP614973 as a result of constructing the rail spur. However since the route, size, shape and type of railway construction has not yet been determined it is difficult to see how this judgement can be made. Neither does the statement take into account any impact on the land caused by the construction process per se, that is, vehicular movements during the construction phase for access to Lot 2RP61497, excavations and subsequent land disturbance during construction. The only point of access to the site of the bridge construction and rail line, is over my land, which is currently cropped.

3 Access road to Lots 80-81 LN196 and 2RP614973 3.4.2

The most recent survey maps obtained from the Department of Natural Resources and Mines (2006), indicate access to Lots 80-81 LN196 and 2RP614973 is via two roads. One road is enclosed within the railway corridor running parallel to the railway line, along the fence line of Lots 80-81 LN196 and 2RP614973. This road terminates shortly past the boundary between Lot 80-81 LN196 and Lot 2RP614973. It does not continue to the junction of Lot 2RP614973 and Stuart Creek. The second road runs parallel with Neerkol Creek along the boundary of Lots 80-81 LN196. This road terminates at the boundary of Lots 80-81 LN196 and 2RP614973 (copy attached). A third road runs from Lot 161 LN2211, adjacent to Lot 2RP614973, around Stuart Creek terminating on the Capricorn Highway on the distal side of the railway line. At no point does the third road abut to or contact Lot 2RP614973. Therefore, to access the proposed route for the railway spur construction, vehicles would need to traverse Lots 80-81 LN196 and 2RP614973. The result would be land degradation due to excavation and heavy vehicle traffic; loss of crop production due to loss of land; potential for weed spread through Lot 80-81 LN196 and Lot 2RP614973; lack of access to pump sites on Neerkol Creek and Stuart Creeks, for irrigation purposes. Therefore, I do not consent to my land being used ofr access during construction of the bridge or the rail spur line.

4 Loss of land productivity

3.4.2

Lot 2RP614973 is noted in the EIS as Class B (EIS. p 3-28) but the document fails to note the area is used for lucerne and Rhodes grass production. The statement in the EIS that, " The construction of the rail crossing at Neerkol Creek and tributary and the loss of approximately 0.7 ha of riparian vegetation will not impose significant constraints on any future lands use, considering the size of are to be impacted.", is inappropriate and inaccurate. The total area of land comprising Lot 2RP614973 and Lot 80-81 LN196 produces approximately 7200 bales of prime lucerne and Rhodes grass hay per year for sale as horse and livestock fodder. In cost terms and at an average of $8.50 per bale over a 12 month period this equates to $61,200.00 pa. Lot 2RP614973 is a prime lucerne cropping area of the land. Assuming production of at least two thirds of Lot 2RP614973 and Lot 80-81 LN196 will be unusable due to land disturbance, excavations, construction and vehicular traffic, there would be a estimated loss of approximately 3600 bales of prime lucerne ($30,600). Depending on the length of time required for the railway spur construction to be completed, plus rehabilitation of the land, re-seeding and re-establishment of crop viability, the time frame of lost production could be 3-5 years, with a cost of $91,8000-$459,000.

5 Loss of access to creek water for irrigation purposes.

3.4.2

There are two water licences valid for Lots 80-81 LN196 and 2RP614973 for irrigation purposes; one for sourcing water from Stuart Creek, the other for sourcing water from Neerkol Creek. Construction of the railway spur in its proposed location will severely; if not totally restrict access to Stuart's Creek for irrigation purposes. A similar situation though to lesser extent, may occur at Neerkol Creek if this road is used for vehicular traffic. In addition, irrigation pipes are manually moved on a daily basis to ensure even and adequate crop irrigation. When this activity is being undertaken, construction and vehicle movement on and around Lots 80-81 LN196 and 2RP614973 has the potential to create an accident and injury risk.

6 Weed control

3.4.2

It is pleasing to note the EIS identifies strategies for weed control at the Stanwell site. However, Parthenium weed (Parthenium *hysterophorus* L.) a declared weed and a prolific, aggressive rampant coloniser of disturbed and degraded land[1], is noted to be growing in proximity to Lots 80-81 LN196 and 2RP614973 (EIS p3-35; Fig. 6.1 and pages 6-4, 6-5, 6-6). Parthenium can grow from seed to maturity in as little as four weeks in optimum conditions dropping upto 15,000 seeds per plant. Further, seeds can live dormant in the soil for up to 10 years before germinating (Navie, Panettea et al. 1998). Once established, Parthenium is almost impossible to eradicate, the consequence being reduced land value and potential loss of produce sale since any crop is then considered 'contaminated and therefore undesirable' (Land Protection, 2005). At the present time Parthenium weed has been prevented from colonising Lot 80-81 LN196 and Lot 2RP614973 by careful monitoring and early action to remove any opportunistic plant growth.

---

[1] *Weeds of National Significance Parthenium weed (Parthenium hysterophorus) Strategic Plan* (2001). WONS

Best management practice advocates containment and management of Parthenium weed using a combination of prevention of spread, bio-control agents, herbicide application and fire. Prevention of spread is achieved by wash down of vehicles as they enter a Parthenium free site, particularly if coming from an area of Parthenium infestation. Control of Parthenium infestation is by herbicide and in some instances burning prior to the plant flowering and seeding. There is a high risk of Parthenium spread to Lots 80-81 LN196 and 2RP614973 during and after construction phases, due to soil disturbance and land degradation, vehicular movement and seeding by Parthenium from other contaminated sites with the proposed Stanwell Power Station area. (Land Protection, 2005). Should the weed become established, eradication will be extremely difficult, if not impossible. Herbicides and burning are not acceptable due to the risk of waterway contamination and fire hazard respectively. It is unlikely the mitigation strategies suggested in the EIS (p 3-12) will be sufficient to control the spread of Parthenium.
Should Parthenium weed become established on Lots 80-81 LN196 as a consequence of the railway spur construction, it is unlikely the land utilisation as is currently the case, could continue.

7 Loss of rental income. 3.4.2

There is a residential dwelling on Lot 80-81 LN196, not noted or referred to in the EIS (EIS. Fig.3.4). The dwelling is in the process of being upgraded and improved prior to being made available for rental purposes To date, approximately $40,000.00 has been outlaid as the project nears completion (May 2006) . On completion, and in today's rental market, a minimum weekly income of $160.00 per week is expected to be realised from property lease. However, given the proximity of an additional railway lines, increased rail activity, accompanying noise, dust and disruption caused by vehicle and construction traffic, it is unlikely that the dwelling would be rentable, with consequential loss of income.

8 Property Improvements 3.4.2

To date $10,000 has been outlaid for pasture improvement in order to increase productivity. This has included old crop clearance, ground rehabilitation, re-seeding for improved pasture, fertilising, fencing, and weed control. Obviously any benefit from these improvements will be lost once railway construction commences since the land will become degraded and unusable.

9 Flooding 5.1.2

Lots 80-81 LN196 and 2RP614973 bordering on Neerkol Creek are upstream of the Quarry Creek discharge point utilised by Stanwell Power Station (EIS p 5-1). The southern boundaries of Lots 80-81 LN196 and 2RP614973 run parallel with Neerkol Creek. The Neerkol-Scrubby Creek tributary has been recognised as making a significant inflow contribution to the Fitzroy river, mainly as a result of storm and flash flood run off (Baddiley 1991). The EIS notes the paucity of data relating to flood levels, flow rates and inundated areas (EIS p 5-5). However, local residents' long term knowledge indicates storm cells (often isolated) with heavy rain and squalls in the area to the west of Stanwell that is Kalapa, Bushley and Wycarbah, are

a noted occurrence, resulting in flash flooding along Neerkol Creek (Lots 80-81 LN196 and 2RP614973) and its surrounding vicinity. In the floods of 1991 and of 2003, Lots 80-81 LN196 and 2RP614973 were under water. The proposed railway spur site on Lot 2RP614973 could, depending on its structure, result in impeded flow rate and volume with consequential back up effects in Neerkol Creek.

10 Climate change 5.1.2

Although the EIS suggests the anticipated 40 year productivity period for the Coke and Power Plant may be exceeded, the statement not appear to take into account potential results of climate change expected to occur in the same time frame . According to the CSIRO (2004), by 2040 climate patterns for the eastern coast of Australia are likely be summer drought conditions, and more intense, more frequent rainfall events (Ash, 2001). Rising sea levels and extreme weather events result in increased severity and increased occurrence of flood surges. Rising sea levels are also accompanied by stronger tropical cyclones of increased intensity and increased storm surges (Ash, 2001). In this event the CSIRO anticipates a 10-40 cm rise in sea level by 2040 leading to a 40 cm rise in water levels in flooding conditions. Further, strong winds, large seas associated with increased severe weather events, are also accompanied by heavy rain from cyclones or low depression systems (Keane 1992). A consequence for the Central Queensland area particularly Stanwell, could be major flooding of the Fitzroy River and the Fitzroy river in a series of events similar to that preceding the 1991 flood. Again, should this happen, there would be environmental and ecological impacts on Lots 80-81 LN196 and 2RP614973, potentially exacerbated by the proposed rail spur.

In conclusion, I would suggest that until the details regarding the rail loop structure and construction are available, and further studies conducted on the impact with reference to that construction, then the recommendations in the EIS for a rail spur be suspended. However, I am happy to meet with representatives of Queensland Coke and Energy to discuss the above mentioned concerns, so that some resolution can be achieved in the best interests of both parties.

Yours sincerely,

Diane Goldsworthy

Diane Goldsworthy (Ms)

References

Agriculture & Resources Management Council of Australia & New Zealand, Australian & New Zealand Environment & Conservation Council and Forestry Ministers, (2001) *Weeds of National Significance Parthenium weed (Parthenium hysterophorus) Strategic Plan.* National Weeds Strategy Executive Committee, Launceston

Ash, A (2001). *Climate Change. Impacts for Australia.* CSIRO.

Baddiley, P (1991). *Fitzroy River Basin Rainfalls and the 1991 Flood Event.* Forum Papers. Effects of the 1991 Fitzroy River Flooding Workshop

CSIRO (2004). *Climate change to increase extreme rainfall.* CSIRO Media Release. Ref. PR04_198-Nov09, 2004.

Keane, M (1992). *Assessment of the 1991 Fitzroy River Floods. How Much Water?* Workshop on the Impacts of Flooding. Ed. Byron T, GBRMPA, Townsville. Pp 16-35

Land Protection (2005). *Parthenium Weed; Parthenium hysterophorus. Declared Class 2.* Queensland Government, Department of Natural Resources and Mines

Navie SC, Panetta F (1998). *Behaviour of buried and surface sown seeds of Parthenium hysterophorus.* Weed Research 38: 335-341.

TN 86672

22nd February 2006

To:

The Coordinator-General
Attention: EIS Project Manager
Coke and Power Plant Project
Major Projects
The Coordinator-General
PO Box 15009
CITY EAST QLD 4002

From: D.Goldsworthy
98 Geihe Road
KALAPA
Queensland 4702
Tel /Fax: 07 49 347210
email: *d.goldsworthy@cqu.edu.au*

-T418

Department of the Premier and Cabinet	
Date Rec'd in Work Area 23/2/06	Action Officer B Frerk
Tracking No.	Mail No 480
Folio ID 22/2/06	File No

Re: Coke and Power Plant Project. Stanwell. Nr Rockhampton

Dear Coordinator-General

Real Property Description: Lot 80-81 LN196 and Lot 2RP614973
Parish: Stanwell
County: Livingstone
Local Authority: Fitzroy Shire Council
Land Area: 14.06 Ha.

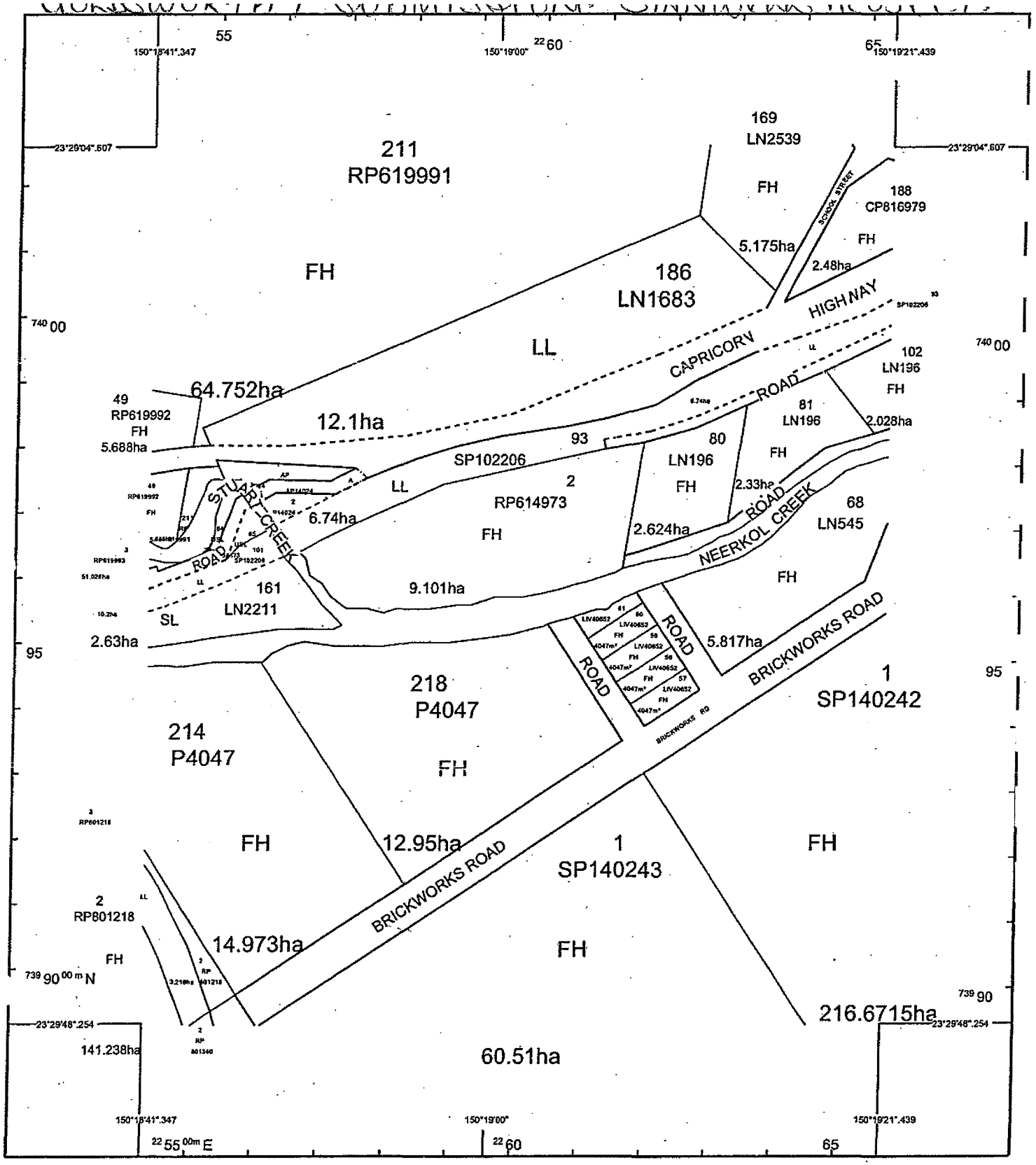
Please find attached a map of the above property as referred to in the document already submitted. The map was inadvertently omitted from the submission sent earlier this week.
My apologies for the oversight and I trust this has not inconvenienced the processing of my submission.

Yours sincerely,

Diane Goldsworthy

Diane Goldsworthy (Ms)

PART OF TN86672.



STANDARD MAP NUMBER
8951-23233

0 163 327 490 654 818 m

HORIZONTAL DATUM:GDA94 ZONE:56 SCALE 1 : 8180

MAP WINDOW POSITION & NEAREST LOCALITY

150°19'01".383
23°28'26".430
STANWELL
1.23 KM

GDA

SUBJECT PARCEL DESCRIPTION

DCDB

Lot/Plan	No Lot/Plan Selected.
Area/Volume	No Lot/Plan Selected.
Tenure	No Lot/Plan Selected.
Local Government	No Lot/Plan Selected.
Locality	No Lot/Plan Selected.
Parish	No Lot/Plan Selected.
County	No Lot/Plan Selected.
Parcel/Segment	No Lot/Plan Selected.

CLIENT SERVICE STANDARDS

PRINTED (dd/mm/yyyy) 08/02/2006

DCDB 07/02/2006

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Queensland Government

Natural Resources and Mines

Response No. 19

The Coordinator General
Attention EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST Q 4002

-T418

17/2/06.1

Dear Sir/Madam

RE Response to the EIA prepared by Queensland Coke and Energy for a Power Plant and Coal Mine Project –Impact on Gracemere Township-

The following is a submission with respect to the Environmental Impact Statement prepared for the proposed Power Plant and Coal mine within the Stanwell Energy Park east of Gracemere. Properly made submissions are to be received by the Coordinator General by the 27th February 2006 and must contain the following:

- Grounds for the Submission
- Facts and Circumstances of the Submission
- Name, Address and Signature of the person making the submission

Grounds for the Submission

- The EIS nominates that 50% of all construction and post construction heavy trucks will travel through the Gracemere Township when an alternative route is available.
- This proposal is inconsistent with the stated aim in Section 14 Transport Infrastructure page 19 that seeks to designate specific routes for heavy vehicles to avoid residential and built up area where possible.
- The report identifies that an alternative route of Capricorn Highway and Bruce Highway is also available which should be designated the preferred route for all trucks and heavy vehicles.
- The current proposal would have a significant impact on the amenity (noise, dust, odour) of the town and pose significant risk to school children and the elderly who make up a significant proportion of pedestrians for the area.

Facts and Circumstances in support of the Submission 14.3.2

- Laurie Street is the retail shopping heart of Gracemere and contains a number of sensitive land uses including a primary school and retirement village which encourage active pedestrian movement through the township. It is poor planning to encourage large trucks to enter the township especially when they will be passing a primary school and an alternate route is available.

- The main township is designed to only cater for local traffic and currently all heavy vehicles entering the township are limited to servicing the local needs. The main street of Gracemere is not a heavy truck bypass or route and no justification has been given as to why the proposed route is deemed suitable or appropriate. Additionally the EIS makes it clear that there is no intent to upgrade any of the roadworks to mitigate any impacts.

- The proposal to encourage trucks through the main street of Gracemere will result in conflict with pedestrians in the locality and with cars that use the local area.

- The volume of heavy vehicles traveling through Gracemere carrying waste product (note the EIS does not specify the types of waste being transported through the town) is based on an assumption than only 50% of heavy vehicles associated with the plant would use this route. There is no enforcement mechanism proposed to limit the proportion of heavy vehicles increasing. An increase in the assumed volume of heavy vehicles "rat running" though Gracemere to avoid using the Capricorn Highway and Bruce Highway is likely, given the shorter trip length. This potential outcome would exacerbate the above impacts.

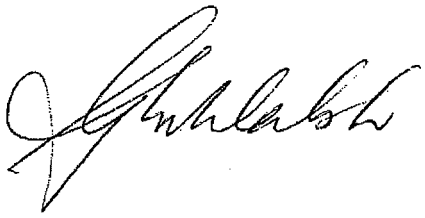
- The impacts of these extra heavy vehicles in Laurie Street would engender:
    - safety issues;
    - an over-dominance of heavy vehicles on pedestrians and drivers of small cars;
    - increased noise and emissions by both full and empty heavy vehicles;
    - Unknown materials being transported through the township; and
    - a sense that the "highly pedestrainised area" (ie. the main street) had been converted into a through truck route, incompatible with the urban form and without consideration of the local community, particularly those shopping in Laurie Street.

    - The proposal to encourage trucks through the town is not supported and the EIS should restrict all heavy vehicles associated with the proposed plant operation to travel via the highways (Capricorn Highway and Bruce Highway) instead of thought the township of Gracemere as impacts of the heavy trucks are incompatible with the surrounding land uses.

Yours Sincerely

Name GARTH MICHAEL WALSH

Address 12 DUNNETT ST GRACEMERE

Signature 

Response No. 19

TN 86761

Department of the Premier and Cabinet	
Date Rec'd in Work Area 20/2/06	Action Officer S. Drabsch
Tracking No. TN 86761	Mail No. 454
Folio ID 17 2 06·1	File No.

The Coordinator General
Attention EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST Q 4002

17/2/06

-T418

Dear Sir/Madam

RE Response to the EIA prepared by Queensland Coke and Energy for a Power Plant and Coal Mine Project –Impact on Gracemere Township-

The following is a submission with respect to the Environmental Impact Statement prepared for the proposed Power Plant and Coal mine within the Stanwell Energy Park east of Gracemere. Properly made submissions are to be received by the Coordinator General by the 27th February 2006 and must contain the following:

- Grounds for the Submission
- Facts and Circumstances of the Submission
- Name, Address and Signature of the person making the submission

Grounds for the Submission

- The EIS nominates that 50% of all construction and post construction heavy trucks will travel through the Gracemere Township when an alternative route is available.
- This proposal is inconsistent with the stated aim in Section 14 Transport Infrastructure page 19 that seeks to designate specific routes for heavy vehicles to avoid residential and built up area where possible.
- The report identifies that an alternative route of Capricorn Highway and Bruce Highway is also available which should be designated the preferred route for all trucks and heavy vehicles.
- The current proposal would have a significant impact on the amenity (noise, dust, odour) of the town and pose significant risk to school children and the elderly who make up a significant proportion of pedestrians for the area.

Facts and Circumstances in support of the Submission 14.3.2

- Laurie Street is the retail shopping heart of Gracemere and contains a number of sensitive land uses including a primary school and retirement village which encourage active pedestrian movement through the township. It is poor planning to encourage large trucks to enter the township especially when they will be passing a primary school and an alternate route is available.

- The main township is designed to only cater for local traffic and currently all heavy vehicles entering the township are limited to servicing the local needs. The main street of Gracemere is not a heavy truck bypass or route and no justification has been given as to why the proposed route is deemed suitable or appropriate. Additionally the EIS makes it clear that there is no intent to upgrade any of the roadworks to mitigate any impacts.

- The proposal to encourage trucks through the main street of Gracemere will result in conflict with pedestrians in the locality and with cars that use the local area.

- The volume of heavy vehicles traveling through Gracemere carrying waste product (note the EIS does not specify the types of waste being transported through the town) is based on an assumption than only 50% of heavy vehicles associated with the plant would use this route. There is no enforcement mechanism proposed to limit the proportion of heavy vehicles increasing. An increase in the assumed volume of heavy vehicles "rat running" though Gracemere to avoid using the Capricorn Highway and Bruce Highway is likely, given the shorter trip length. This potential outcome would exacerbate the above impacts.

- The impacts of these extra heavy vehicles in Laurie Street would engender:
    - safety issues;
    - an over-dominance of heavy vehicles on pedestrians and drivers of small cars;
    - increased noise and emissions by both full and empty heavy vehicles;
    - Unknown materials being transported through the township; and
    - a sense that the "highly pedestrainised area" (ie. the main street) had been converted into a through truck route, incompatible with the urban form and without consideration of the local community, particularly those shopping in Laurie Street.

    - The proposal to encourage trucks through the town is not supported and the EIS should restrict all heavy vehicles associated with the proposed plant operation to travel via the highways (Capricorn Highway and Bruce Highway) instead of thought the township of Gracemere as impacts of the heavy trucks are incompatible with the surrounding land uses.

Yours Sincerely

Name IAN CHURCHILL

Address 42 DAWSON ST
GRACEMERE

Signature

Response No. 19

Department of the Premier and Cabinet	
Date Rec'd in Work Area 20.2.06	Action Officer S. Drabsch
Tracking No. TN8673	Mail No. 456
Folio 17.2.06.3	File No.

TN86731

The Coordinator General
Attention EIS Project Manager
Coke and Power Plant Project
Major Projects
PO Box 15009
CITY EAST Q 4002

17/2/06.2

-T418 [redacted]

Dear Sir/Madam

RE Response to the EIA prepared by Queensland Coke and Energy for a Power Plant and Coal Mine Project –Impact on Gracemere Township-

The following is a submission with respect to the Environmental Impact Statement prepared for the proposed Power Plant and Coal mine within the Stanwell Energy Park east of Gracemere. Properly made submissions are to be received by the Coordinator General by the 27th February 2006 and must contain the following:

- Grounds for the Submission
- Facts and Circumstances of the Submission
- Name, Address and Signature of the person making the submission

Grounds for the Submission

- The EIS nominates that 50% of all construction and post construction heavy trucks will travel through the Gracemere Township when an alternative route is available.
- This proposal is inconsistent with the stated aim in Section 14 Transport Infrastructure page 19 that seeks to designate specific routes for heavy vehicles to avoid residential and built up area where possible.
- The report identifies that an alternative route of Capricorn Highway and Bruce Highway is also available which should be designated the preferred route for all trucks and heavy vehicles.
- The current proposal would have a significant impact on the amenity (noise, dust, odour) of the town and pose significant risk to school children and the elderly who make up a significant proportion of pedestrians for the area.

Facts and Circumstances in support of the Submission

14.3.2

- Laurie Street is the retail shopping heart of Gracemere and contains a number of sensitive land uses including a primary school and retirement village which encourage active pedestrian movement through the township. It is poor planning to encourage large trucks to enter the township especially when they will be passing a primary school and an alternate route is available.

- The main township is designed to only cater for local traffic and currently all heavy vehicles entering the township are limited to servicing the local needs. The main street of Gracemere is not a heavy truck bypass or route and no justification has been given as to why the proposed route is deemed suitable or appropriate. Additionally the EIS makes it clear that there is no intent to upgrade any of the roadworks to mitigate any impacts.

- The proposal to encourage trucks through the main street of Gracemere will result in conflict with pedestrians in the locality and with cars that use the local area.

- The volume of heavy vehicles traveling through Gracemere carrying waste product (note the EIS does not specify the types of waste being transported through the town) is based on an assumption than only 50% of heavy vehicles associated with the plant would use this route. There is no enforcement mechanism proposed to limit the proportion of heavy vehicles increasing. An increase in the assumed volume of heavy vehicles "rat running" though Gracemere to avoid using the Capricorn Highway and Bruce Highway is likely, given the shorter trip length. This potential outcome would exacerbate the above impacts.

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Yours Sincerely

Name Rose Tracy

Address 52657 Burnett Highway Gracemere

Signature