Surat Gas Project
Environmental Impact Statement (EIS process)
30 April to 10 May 2012
Environmental impact assessment

- All projects have impacts
- How, where and when will they occur?
- Are the impacts significant?
- Can they be managed?
- What are the residual impacts?
Environmental impact assessment methods

- **Compliance**
  - Do predicted impacts meet or exceed guidelines/limits
  - For example, air quality

- **Risk management**
  - Likelihood and consequence
  - For example, hazard and risk

- **Significance**
  - Sensitivity and magnitude
  - For example, terrestrial and aquatic ecology
## Significance of impact and management requirements

<table>
<thead>
<tr>
<th></th>
<th>High</th>
<th>Moderate</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderate</strong></td>
<td>High</td>
<td>Moderate</td>
<td>Low</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Moderate</td>
<td>Low</td>
<td>Negligible</td>
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</table>

- **Design out or specific management measures**
- **Standard management measures**
## Environmental Framework

<table>
<thead>
<tr>
<th>Constraint</th>
<th>Infrastructure</th>
<th>Applicable Framework</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wells</td>
<td>Flowlines &amp; Pipelines</td>
</tr>
<tr>
<td>No Go</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>High</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Moderate</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Low</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Environmental framework cont’d (constraints map)

- Constraint informed by sensitivity of environmental value
- Management measures reflect level of constraint
- Preliminary mapping; to be updated with EIS findings
Environmental framework cont’d

Environmental Impact Assessment
- Environmental values (constraints)
- Commitments (mitigation measures and recommendations)
- Environmental Management Plan

Approvals
- Environmental Authority
  - Conditions
  - Discharge limits
  - Emission limits
- Miscellaneous consents, permits and licences

Planning and Design
- Environmental framework
  - Constraints analysis (GIS layers and maps)
  - Permissible project activities and applicable environmental management controls
- Site and route selection
- Ecological and preconstruction clearance surveys
- Equipment and material selection and facility design

Construction and Operations
- Standard operating procedures
- Construction management plans
- Operations and maintenance procedures
- Risk management plans
- Emergency response plans
- Work plans

Environmental policy
- ARROW HSEMS
- Inspection and monitoring

coffey environments
SPECIALISTS IN ENVIRONMENTAL, SOCIAL AND SAFETY PERFORMANCE
Key environmental impacts

- Groundwater
- Agriculture
- Amenity (noise, air quality, visual)
- Socio-economic
- Roads and traffic
Making a submission

- Content of submission
  - Scope of assessment (Terms of Reference)
  - Adequacy of assessment
  - Management measures

- In writing and signed

- Received by DERM no later than **5 pm Thursday 14 June 2012**
  - Mailing/emailing addresses for submissions on fact sheets
Environmental framework

1. Desktop and Field Studies
2. Project Activities
3. Sensitivity of Environmental Value
4. Potential Impacts
5. Significance of Impact
6. Potential Impacts
7. Environmental Management Criteria
8. Constraints Mapping
9. Suitable Activities and Methods
10. Site Selection
11. Environmental Management Controls
Enquiries about Surat Gas Project EIS

- Hotline freecall 1800 038 856
- Email address: suratgas@arrowenergy.com.au
- Website www.arrowenergy.com.au
## Environmental impact assessment processes

<table>
<thead>
<tr>
<th>EIS</th>
<th>Legislation</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>LNG Plant</td>
<td>SDPWO Act (Qld)</td>
<td>• Draft EIS submitted to Qld Govt Dec 2011</td>
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<tr>
<td></td>
<td>EPBC Act (Cwlth)</td>
<td>• EIS submission period 14 April – 28 May 2012</td>
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<tr>
<td>Arrow Bowen Pipeline</td>
<td>EP Act (Qld)</td>
<td>• Route selection underway</td>
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<tr>
<td></td>
<td>EPBC Act (Cwlth)</td>
<td>• Draft EIS submitted to Qld Govt Dec 2011</td>
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<td>• EIS submission period 23 March – 24 May 2012</td>
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<tr>
<td>Surat Gas Project</td>
<td>EP Act (Qld)</td>
<td>• Draft EIS submitted to Qld Government Dec 2011</td>
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<tr>
<td></td>
<td>EPBC Act (Cwlth)</td>
<td>• EIS submission period 16 March – 14 June 2012</td>
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<tr>
<td>Bowen Gas Project</td>
<td>EP Act (Qld)</td>
<td>• Seasonal ecological surveys commenced Q4 2011</td>
</tr>
<tr>
<td></td>
<td>EPBC Act (Cwlth)</td>
<td>• EIS planning underway, EIS field surveys commence April 2012</td>
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<td></td>
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<td>• ToR for EIS expected June 2012</td>
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<tr>
<td></td>
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<td>• Draft EIS expected to be submitted Q4 2012</td>
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