Guide to Preparation of Data Management Plans (DMPs)

Introduction

This document provides information to assist companies in meeting the requirements of the Petroleum (Submerged Lands) (Data Management) Regulations 2004 (‘the Regulations’), in particular with the preparation of Data Management Plans (DMPs) for exploration and production activities. (The Regulations can be found under the 'Regulations' heading at www.industry.gov.au/petlegislation)

The Regulations require that a DMP be provided for exploration and production activities conducted in the Commonwealth Adjacent Areas and that the activity cannot commence until the DMP has been accepted by the Designated Authority (DA). (Note there can be exceptions to this where the DA grants approval for activities to proceed without an approved DMP.)

Exploration activities include:

- wells (including primary drilling, sidetracking, laterals, deepening and completion);
- seismic surveys (both 2D and 3D);
- other geophysical surveys (e.g. aeromagnetic, swath, gravity);
- reprocessing seismic; and
- analyses and studies done on samples or re-working legacy data to re-interpret the geology (i.e. studies that result in the creation of new data).

Production activities include:

- production of fluids from a reservoir/field on a product by product basis;
- injection of fluids into a reservoir/field;
- disposal of or sale of produced fluids (i.e. flaring gases, disposing of water fraction, allocation of produced gas, oil and condensate);
- work-overs, re-perforation or other work done on a production well; and
- evaluation of reservoirs.

With regard to the content and format of DMPs, as long as companies comply with the requirements of the Regulations, they may choose the approach that best suits them in preparing their DMPs.

To assist companies in preparing a DMP, an example is attached to this document.
**Required contents of a DMP**

The format of a DMP may vary, however it must comply with the provisions of Regulation 17. These include a requirement that the statements and information listed in Schedule 1 be included in the DMP. The required information may be summarised as:

**Holder:**
Name of the holder.

**Titles:**
The permit/licence or other title.

**Activities:**
Name and type of activity.
Brief quantitative description of the activity.
Location and period of the activity.

**Reports and information:**
Description of reports and information that will be made and collected.
Explanation of whether the information will be submitted to DA or kept by the holder.

**Media and formats:**
Description of the media and format that the information will be collected, held and/or submitted on.
Explanation of how the media and formats are appropriate, comply with DA's published guidelines and comply with good industry practice.

**Timetable for submission:**
Timetable that sets out the submission of information and reports will be in accordance with Parts 2 and 3 of Schedule 1 of the Regulations.

**Storage of information:**
Explanation of how the information is to be stored consistent with good archival practice.
Summary of the arrangements for securely storing and maintaining information and reports.

**Access to information:**
Explanation of how the holder will provide access to data that is made publicly available.

**Data Management Performance Objectives:**
Summary of performance objectives in managing data and measurement criteria.
Explanation of how the measurement criteria will confirm whether the objectives are met.

**Acknowledgement of responsibility by holder:**
An acknowledgment by holders of responsibility for collection, storage, and submission of information and samples until submitted to Designated Authority.

**Other information:**
Any other information needed to demonstrate that DMP complies with the Regulations.
Approval processes for DMPs

The key approval processes involved with DMPs are as follows:
1. Company prepares DMP for an activity.
2. DA accepts DMP (through the processes described in Part 4 of the Regulations).
3. If still applicable company will send in a revised DMP after five years to replace current DMP.
4. Variation of DMP (either instigated by the company or DA) under Part 4, Division 2, 22 – 24.
5. If applicable (i.e. DMP for an activity is no longer applicable or for the reasons stated in Part 4, Division 3, 26), the company can terminate a DMP.

Guidelines on data submission

The Australian Government and the DAs have developed guidelines for the submission of data. These are available from Geoscience Australia's website at: www.ga.gov.au/oceans/projects/psla_guidelines.jsp. These guidelines are designed to assist companies by providing information on what the DAs regard as acceptable data, media, formats and submission periods for the main data types produced from exploration and production activities.

Companies may carry out other activities not covered in detail in the Guidelines and therefore the DMP the company provides for that activity must specifically detail information on that activity.

The Guidelines provide companies with the necessary templates for data to modify and include in their DMPs.

Example of DMP (attached)

In order to assist companies in preparing DMPs, an example of a DMP for a single activity is attached.

As stated previously, it is not necessary to use this template as long as the requirements of the Regulations are met.
Example DMP for a single activity

Data Management Plan for Explorer-1 in WA-5000-P

Holder: Company Pty Ltd (all JV partners should be listed; the company given responsibility for data management should be identified).

Title: WA-5000-P

Activity (Schedule 1, 101):

<table>
<thead>
<tr>
<th>Name</th>
<th>Explorer-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>New-field wildcat</td>
</tr>
<tr>
<td>Rig/vessel</td>
<td>Well Rig</td>
</tr>
<tr>
<td>Origin of coordinate</td>
<td>GDA 94</td>
</tr>
<tr>
<td>Latitude</td>
<td>12° 34’ 56.78”S</td>
</tr>
<tr>
<td>Longitude</td>
<td>123° 45’ 67.89”E</td>
</tr>
<tr>
<td>Start date</td>
<td>21 June 04</td>
</tr>
<tr>
<td>Duration</td>
<td>15 days</td>
</tr>
<tr>
<td>Well depth m</td>
<td>2134 m</td>
</tr>
<tr>
<td>Sea depth m</td>
<td>500-1000m</td>
</tr>
</tbody>
</table>

Reports and information (Schedule 1, 102, 103):
Table A lists the information that will be made/collected during the drilling program. In addition, daily reports and a well completion report will be produced. All information and reports will be submitted to the Designated Authority.

Media and formats (Schedule 1, 104, 105):
The information and reports will be submitted in the format and on the media outlined in Table A.

Data media and formats described in Table A comply with the “Guidelines for reporting and submission of petroleum data required under State/Territory and Commonwealth Petroleum (Submerged Lands) Act legislation”

Timetable for submission (Schedule 1, 108):
Timetable for information and reports as per Table A.

Storage of information (Schedule 1, 107, 111):
Documentary information:
- Information and reports will be stored at (nominate company) in a secure data storage room prior to submission to the Designated Authority as per timetable.
- The company managing the storage of data currently meets ISO 9001.2000 and uses archive practices recommended by the Australian Archives for digital and hardcopy data.

Petroleum Mining Samples:
- Cores, cuttings and sidewall material collected from wells drilled under this DMP will be stored at (nominated company) using industry best practice prior to submission to the Designated Authority as per timetable.
- Details of the precise nature of the collection of samples will be detailed in the Well Programme attached as part of the Application to Drill for each well.
Access to information (Schedule 1, 106)
Company Pty Ltd acknowledges that, upon notification by the DA, it will allow reasonable access to any publicly available information or samples under its control. To access publicly available information, contact Company’s Data Manager, Mr X on (01) 2345 9876 or by email, mrx@company.com.au. A timeframe for access to data is dependent on the amount and type of data requested.

Data Management Performance Objectives (Schedule 1, 109, 110):
Company Pty Ltd regards the following as performance measures for this DMP:
- Data and reports will be submitted on or prior to the time nominated.
- Environment and media conditions will be monitored to ensure that there is no deterioration of data and reports.
- Quality control measures are in place to ensure data submitted are complete and verified for what was acquired.

Acknowledgement of responsibility by holder (Schedule 1, 112):
Company Pty Ltd acknowledges it is responsible for collection, storage, and submission of information and samples until submitted to Designated Authority.

Company Pty Ltd also acknowledges that, upon notification by the DA, it will allow reasonable access to any publicly available information or samples under its control.
**Table A: Information and Reports for the New Field Wildcat well Explorer 1 in WA-5000-P**

<table>
<thead>
<tr>
<th>Data to be submitted</th>
<th>Copies required by</th>
<th>Format</th>
<th>Scales required</th>
<th>Data due date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Data to be submitted</strong></td>
<td><strong>Copies required by</strong></td>
<td><strong>Format</strong></td>
<td><strong>Scales required</strong></td>
<td><strong>Data due date</strong></td>
<td><strong>Remarks</strong></td>
</tr>
<tr>
<td>Daily report</td>
<td>Email</td>
<td>Email</td>
<td></td>
<td>Midday on the day after the day the reports relates.</td>
<td></td>
</tr>
<tr>
<td>Edited field and processed data for all wireline logs</td>
<td>DVD</td>
<td>DA to forward to relevant archive</td>
<td>LIS</td>
<td>6 months after completion of the well.</td>
<td>With a verification listing of the data supplied. The data shall include full header information.</td>
</tr>
<tr>
<td>Edited field and processed data (including borehole deviation surveys) for all MWD or LWD tools</td>
<td>DVD</td>
<td>DA to forward to relevant archive</td>
<td>LIS</td>
<td>6 months after completion of the well</td>
<td>With a verification listing of the data supplied. The data shall include full header information.</td>
</tr>
<tr>
<td>Mudlogging data</td>
<td>CD ROM</td>
<td>DA to forward to relevant archive</td>
<td>ASCII</td>
<td>6 months after completion of the well.</td>
<td>With a header giving filed names and units of measure</td>
</tr>
<tr>
<td>Processed data for velocity surveys</td>
<td>DVD</td>
<td>DA to forward to relevant archive</td>
<td>SEGY</td>
<td>6 months after completion of the well.</td>
<td>With a verification header file</td>
</tr>
<tr>
<td>Wireline log displays</td>
<td>DVD</td>
<td>PDF</td>
<td>200/500</td>
<td>6 months after completion of the well.</td>
<td>A minimum of 200g dry weight and thoroughly cleaned, dried and packaged with indelible printing of Well name, depth ranges.</td>
</tr>
<tr>
<td>MWD or LWD log displays</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>PDF</td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
<tr>
<td>Mudlog</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>TIF</td>
<td>500</td>
<td>6 months after completion of the well.</td>
</tr>
<tr>
<td>Ditch cuttings</td>
<td>One set</td>
<td>One set</td>
<td></td>
<td>6 months after completion of the well.</td>
<td>Slabbed vertically of which at least 1/3 each to be submitted.</td>
</tr>
<tr>
<td>Full hole cores, if cut</td>
<td>1/3 slab</td>
<td>1/3 slab</td>
<td></td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
<tr>
<td>Well completion report Basic data</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>PDF</td>
<td>6 months after completion of the well.</td>
<td>Image files included in report PDF will also be submitted as separate TIFF files.</td>
</tr>
<tr>
<td>Well index sheet</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>PDF</td>
<td>6 months after completion of the well.</td>
<td>As per attached example (Appendix 2) and included in the derived data volume of the well completion report</td>
</tr>
<tr>
<td>Digital petrophysical, geochemical or other analyses</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>ASCII</td>
<td>6 months after completion of the well.</td>
<td>As a tab delimited ASCII file with metadata included. Attached to well completion report.</td>
</tr>
<tr>
<td>Velocity log displays</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>PDF</td>
<td>200</td>
<td>6 months after completion of the well.</td>
</tr>
<tr>
<td>Core, SWC photography</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>TIF</td>
<td>6 months after completion of the well.</td>
<td>If required.</td>
</tr>
<tr>
<td>Well completion report Derived (interpretive) data</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>PDF</td>
<td>6 months after completion of the well.</td>
<td>Image files included in report PDF will also be submitted as separate TIFF files.</td>
</tr>
<tr>
<td>Composited well log</td>
<td>CD ROM</td>
<td>CD ROM</td>
<td>TIF</td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
<tr>
<td>Gaseous hydrocarbon samples (in an API approved safety container)</td>
<td>No</td>
<td>Yes</td>
<td></td>
<td>6 months after completion of the well.</td>
<td>If collected. Negotiation with GA will be done</td>
</tr>
<tr>
<td>Fluid hydrocarbon samples (in an API approved safety container)</td>
<td>No</td>
<td>Yes</td>
<td>1 litre</td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
<tr>
<td>Sidewall core material, if recovered</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
<tr>
<td>Palynological slides and residues palaeontological material Petrological slides</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>6 months after completion of the well.</td>
<td></td>
</tr>
</tbody>
</table>