

Notes of the Meeting held at the Marston Hotel, Sutton Coldfield on 14th/15th January 2004.

Present:

R. Ellis, Manager, Engineering Pipelines Group, Shell UK Ltd. (Chairman)
M. Harrison, Storage & Distribution Operations Manager, Huntsman Petrochemicals (UK) Ltd.
P. Brown, Transmission Policy Manager, National Grid Transco. (14th).
L. Boswell, Pipeline Availability Team Leader, bp FPSI.
N. Jackson, Transmission Policy Adviser, National Grid Transco.
D. Willett, Transmission Policy, Transco (15th).
K. Curtis, Pipeline Engineer, Powergen Gas Ltd.
P. Davis, Director and General Manager, BPA.
M. Price, Operations Manager, BPA.
T. Taylor, Pipeline Plant Manager, Esso Petroleum Co. Ltd.
R. White, General Manager, Total (UK) Ltd.
D Cullen, Senior Pipeline Supervisor, Shell Expro.
P. Docherty, Mechanical Engineering Manager, Semcorp Utilities.
S. Gleason, Semcorp Utilities.
S. Kennedy, Design Manager, Network Policy, National Grid Transco.
R. Hobby, Consultant, Unipen Ltd.
P. Mitchell, Contract Manager, Unipen Ltd
I. Johnston, Shell Expro.
S.Chatfield, Health and Safety Executive. (15th).
R. Glenister Pipelines Industries Guild. (15th).
R.McConnell, Consultant, ABB.
J. Haswell, Consultant Pipeline Integrity Engineers Ltd
W. P. Jones, Pipeline Integrity Engineers Ltd. (Secretary).

1 WELCOME AND INTRODUCTIONS

1.1 Welcome and Introductions.

The Chairman welcomed all to the first meeting of 2004, and thanked BPA and OPA for hosting the meeting, and in particular, Peter Davis and his team who had made the arrangements.

He extended a special welcome to:

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- i. Martin Price who will be the BPA representative at future meetings, and Paul Mitchell who will be the Unipen Representative at future meetings.
- ii. Ian Johnston of Shell Expro attending with Donal Cullen.
- iii. Cees Voermans of Shell Global Solutions who was attending to a give presentation on Pipeline Risk Based Assessment Management Systems.

He also advised Members that Richard Glenister will be attending on the 15th to give a short presentation under agenda item 11 relating to changes which have taken place in PIG.

2. **APOLOGIES.**

The Secretary reported that apologies had been received from:

- D. Bruce, Unipen Ltd (Ron Hobby and Paul Mitchell deputising).
- E. Findlay - bp Chemicals.
- K.Thomas – Huntsman Petrochemicals Ltd.
- P. Williams, National Grid Transco.
- R. Gray – Esso Petroleum Ltd.
- R. Michie – BG Group
- J. Varden – OPA.

3. **Presentation by Cees Voermans of Shell Global Solutions – “Pipeline Risk Based Assessment Management Systems”.**

Roger Ellis welcomed Cees once again and invited him to give his presentation.

The presentation was introduced as – Pipeline Integrity Management with specific reference to third party interference – and the overheads used by Cees during the talk have been circulated reference UKOPA/04/0016.

The basic elements of a Pipeline Integrity Management were outlined, and the failure mechanisms for gas and liquid pipelines were defined in line with the relevant codes, namely API 1160 for liquids and B31.8S for gas. As stated above however, the presentation concentrated on the management of third party interference.

Cees explained the process of planning, scheduling and execution, degradation, fitness for purpose and confirmation of integrity status, and how results from the latter were fed into a traffic light system. The results are used to determine whether no action, corrective action or immediate action is required on the pipeline based on an assessment of remaining life of the pipeline versus the required operational life. The results are also used to assess the effectiveness of the overall integrity management system and the likelihood and criticality of third party interference, and

corrective action taken as necessary.

The Chairman thanked Cees for an informative and topical presentation and for the time he had spared to do so.

4. **Presentation by Paul Docherty – Semcorp Utilities – “Semcorp GIS Systems”.**

Paul gave a comprehensive presentation covering the suite of GIS systems which have been developed to cover all aspects of pipeline and installation asset management, and the portable hand held computer instrument (details?) which provides a detailed, real time link to the systems which provides engineers working in the field with immediate access to the asset data.

The database holds and links layers of information relating to asset geometry, layout, properties and operating conditions, and the integrated software systems allow direct application of engineering code approaches for e.g. defect assessment and fatigue life calculations followed by determination of safe operating pressure, fatigue life calculation modeling. The portable computer tool allows engineers to carry out immediate, on-site assessments, and to provide data updates for downloading into the main system. Paul gave examples of how the system can be used for fast accurate assessments of routes, environmental impact assessments, defect assessment and management of emergency response.

Two questions were put to Paul:

Q1 How long had the development taken and what were the set up costs?

Answer: The development as presented had taken around 10 years. Regarding set up costs, this depended upon the availability, format and quality of information and data for input. Where good quality records were not readily available, costs can be high.

Q2 Can such systems can be used for existing assets where design and as-built details were not available?

Answer: Laser imaging technique is now a recognized and accurate means of generating good quality 3D information, and the system can be developed from these records.

Note: The presentation material used by Paul is not available for circulation, but a paper titled “GIS Revolutionising Working Practice” will be circulated in due course as UKOPA/04/0018.

Roger thanked Paul for an informative presentation and for stepping in to make the presentation when the original presenter had to withdraw due to other business commitments.

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5. NOTES OF PREVIOUS MEETING (24th/25th September 2003 - UKOPA/03/0080)

The notes of the previous meeting were accepted as a fair record of discussions and were signed by the Chairman.

6. ACTIONS ARISING (not covered on the agenda - note of previous meeting in brackets)

6.1 UKOPA Work in Progress Report – Update for Website. (6.1)

Phill Jones to amend the document to include a section on future plans etc and that an approved version will be posted on the open access section of the website.

Roger Ellis reported that an updated Work in Progress report covering the period up to the end of 2004 had been prepared by Jane Haswell and circulated in advance of the meeting – reference UKOPA/04/0004 – and this includes a section on future plans. He noted that the report clearly reflects the high volume of work that is being progressed by the Association and thanked all for their contributions.

Jane then introduced the document by advising Members that it is intended to place a copy of the report on the open section of the website and it is therefore important to ensure that the details listed in the report are correct and as up to date as possible. In this connection she requested all Members to review the contents and to send comments direct to her by the end of February 2004. In particular she requested specific input from Members as follows:

- i. ACDS/Working Group on Pipelines – all WGP participating Members.
- ii. Risk Based Planning – Rod McConnell/Working Group.
- iii. Fault database – Roger Ellis/Working Group.
- iv. Third Party Infringements and one call system – Mark Harrison.
- v. 2005 Pipeline Rating Revaluation – Peter Davis.
- vi. Future Initiatives – Gasoline issues - Peter Davis.

Action: As listed above.

In discussion it was agreed that Jane will amend the report to refer to Stuart Kennedy's involvement with the revision of the Safe Isolation of Plant and Equipment document, and also to the initiative relating to emergency equipment and materials.

Action: Jane Haswell.

In addition Phill Jones was actioned to update the website relating to current members of Working Groups.

Action: Phill Jones.

6.2 Pressure Equipment Directive (6.2)

Jane Haswell to update briefing note – UKOPA/03/0048 to identify areas where a consistent operator view would be of value to UKOPA Members.

Jane Haswell reported that following the discussion at the last meeting, she had reviewed information provided by Paul Docherty and sought further advice regarding user duties from DTI and HSE. She presented a summary of the advice (UKOPA/04/00?) as follows:

- The supply of the majority of pressure containing equipment is covered by the Directive and the supporting UK Regulations (including pig traps).
- PED is a Trade Directive, so majority of duties apply to manufacturers and suppliers who place equipment on market. The main duty is to supply safe equipment, so duty passes to users who put purchased equipment into use.
- The recommendation to users is to ensure to general compliance with PER (ie requirement for demonstration of conformance) at purchase, by specifying CE marked equipment. However, the value of conforming equipment should not be considered equivalent to that of non-conforming equipment.
- Equipment assembled on site is not directly covered, as user duties for safety of equipment are covered by 'in-use' regulations (PSR, PSSR). This infers that the user should ensure a formal design approval and quality control procedure has been applied to the assembled equipment.

Jane stated that comprehensive guidance was in the process of development, and could be obtained from the PED Working Group website - ped.eurodyn.com. In addition, information can be obtained from the DTI Website - dti.gov.uk/strd. The current DTI guidance document obtained from this site has been circulated as UKOPA/04/0005. She also suggested that DTI and HSE contacts be invited to attend the next UKOPA meeting to address queries in detail. It was agreed that the information presented addressed requirements at this stage.

6.3 Development of Standards (26)

Jane Haswell to propose to BSI that UKOPA provide coordinated and authoritative consultation and comment on draft standards relating to pipelines.

Jane Haswell reported that she had written to both Dave Willis, Chairman of the PSE/17/2 (PD8010) and Keith Seyde, Secretary, offering UKOPA coordinated technical input/consultation on pipeline related standards and requested that they put in place UKOPA access to electronic documents for this purpose. A reply had been received confirming acceptance of the offer but seeking assurance that UKOPA would attend every meeting. Jane cannot however guarantee to

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be able to attend every meeting and, in discussion, it was agreed that she should contact John Varden to enquire whether he would be prepared to attend on those occasions that she is unable to do so.

Action: Jane Haswell.

It had also been confirmed that UKOPA would be given access to electronic documents for comment and input prior to the issue of final drafts, as BSI policy to charge for all final draft documents.

BSI has also advised that it wants UKOPA to have active participation in the formal voting procedures on ISO-CEN-BSI, and in particular whether to retain the National standard.

Action: Jane Haswell to monitor developments and keep Members informed.

6.4 UKOPA Prize 2003 – Pipeline Engineering MSc Course, Newcastle University (28)

R Ellis to award prize to Victoria Jackson, P Jones to post details on Website

Roger Ellis reported that the annual UKOPA prize for 2003, for the top student on the MSc Pipeline Engineering Course at Newcastle University was presented by himself to Victoria Jackson on the 3rd December. The presentation was held at the University and was also attended by Rod McConnell and Jane Haswell whom are both lecturers on the course and who were attending a Risk Assessment Working Group meeting on the day. He also advised that a note and photograph of the presentation had been/are to be placed on the website.

He also advised that it had been agreed at the management Council meeting that Phill Jones would forward details with photograph to Phil Brown who will arrange for a similar notice to be published in the IGE magazine and, also, that Phill Jones would contact the editor of Pipes and Pipelines International for the same purpose.

Action: Phill Jones and Phil Brown.

All other items covered on the agenda.

7. CORRESPONDENCE

7.1 Actions Arising

- (i) Jane Haswell to investigate the possibility of converting the files and associated costs using Adobe 6.(7.1(i))

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J Haswell reported that the existing TIF files could be reconstructed into PDF documents using ADOBE 6 at a cost of approximately £20 per document. However she recommended that as all 1997 – 2000 correspondence was available in TIF format and therefore electronically retrievable, and that P Jones had reported that very few requests for copies of specific documents had been received, global conversion of all TIF files into PDF format was not justified. She recommended that document reconstruction into PDF format was carried out on an adhoc basis as required, and any such reconstructed included on the website.

The recommendation was supported.

Action closed.

- (ii) The Association should establish formal contact with DVGW through the website to advise of the existence of UKOPA and to provide details of UKOPA's website (7.1 (ii)).

Phill Jones reported that he had experienced difficulty in finding details of the DVGW Website and Roger Ellis agreed that he would forward the details so that the item could be progressed.

Action: Roger Ellis.

- (iii) OECD Guiding Principles for Chemical Accident Prevention, Preparedness Response – Second Edition (7.2).

Jane Haswell reported that the action for this to be reviewed by the EPWG in connection with the development of the ACoP had not been progressed; a more detailed response will be given under item 15.

7.2 Recent Correspondence.

Phill Jones drew Members' attention to the following correspondence that had been circulated in advance of the meeting and which were not specifically included on the agenda:

- (i) UKOPA/04/0006 – Use of Mechanically Propelled Vehicles on Rights of Way.
- (ii) UKOPA/04/0008 – Responsibilities of Corporations and Directors.

7.3 Updated Correspondence List.

A final 2003 correspondence index was circulated in advance of meeting, reference UKOPA/03/0090.

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8. MEMBERSHIP AND ADMINISTRATIVE ISSUES

8.1 Progress on Memorandum and Articles of Association

8.1.1 Actions Arising.

Roger Ellis to provide a further update at the next meeting (8.1.1).

Roger Ellis advised Members that both Shell and Huntsman Legal Advisers have confirmed that it would be acceptable for the companies to be registered as Directors of UKOPA and that he and Mark had been nominated as representatives to act on their behalf. The matter was still being progressed within both Transco and bp, but the same conclusions are expected.

It had been agreed at the Management Council that no action would be taken until all nominations had been confirmed. In due course however it will be necessary to register the Companies as Directors and amend the Articles as necessary to reflect the agreed position.

8.1.2 Membership Contact List

Phill Jones to issue an updated version following the meeting (8.1.2)

Action completed and closed. It was however noted that the list will have to be reissued to reflect changes relating to deputising attendees.

Action: Phill Jones.

9. FINANCE REPORT / ISSUES

9.1 Finance Report

9.1.1 Actions Arising

No actions arising.

9.1.2 Bank Balance.

Phill Jones reported that the bank balance as of 7th January 2004 was £ 112,266. This did not however take account of committed expenditure, and actual monies available were estimated at £82,121.

9.1.3 VAT Returns.

Phill Jones also reported that the VAT returns for the quarters ending September and

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December had been completed and submitted on time. The returns for the quarters were:

- (i) July to September – (£863.41) – reclaim received and banked.
- (ii) October to December – (£1173.15) – reclaim submitted.

9.2 Expenditure Forecast 2003/2004.

The Chairman reminded Members that considerable discussion had taken place at the last meeting under items 9 and 14 of the agenda relating to the expenditure forecast, Membership Fees and, in particular, the proposed Risk Assessment Working Group work programme. The main action arising out of these discussions had been for the Management Council to review the expenditure forecast again, taking into account the proposed phasing of the proposed additional expenditure, to provide a more accurate prediction and timing of possible shortfall in funds. As part of the review, the Chairman and Management Council Members were to consider possible ways of addressing the potential shortfall, including rephrasing of lower priority elements.

He now reported that this action had been addressed and that, allowing for the agreed increase in Membership Fees for 2004 and rephrasing of certain work elements, in particular the predictive model software software had been removed from the forecast at least for the time being, a revised forecast had been approved by the Management Council. This forecast will fund all the required work and all other known commitments, and predicts a surplus of £33k at the end of 2004.

He concluded the report by stating that the forecast had also been extended to include 2005 and 2006 and, again based on current known commitments, a surplus in excess of £20k is predicted for each year based on the same level of membership fees.

9.3 Membership Fees 2004.

The Chairman confirmed that that it had been agreed at the last meeting that the Membership fees for 2004 would be increased to £11,000 for Full Members and £4,500 for Associate Members, and invoices for the fees would be issued during the next two weeks. The viability of the expenditure forecast is dependant on payment of the fees within the first quarter of the year and he requested Members' assistance as appropriate to ensure that the fees were paid within this period.

10. H,S&E ISSUES

10.1 Actions Arising

No actions arising.

10.2 Reports on Incidents

- 10.2.1 Lindsay Boswell reported that bp had recently had to repair a pinhole leak in a 12inch diameter multiproduct pipeline using an epoxy sleeve. The leak was in close proximity to a stream and had been spotted by a linewalker who noticed an oily sheen on the water in the stream. The problem had not been identified by MFL pig inspection.
- 10.2.2 Stuart Kennedy referred to a recent Transco incident on an underground pressure reduction station which occurred because a technician had operated a valve at the wrong time. The HSE had been notified and had criticised the fact that not all equipment was labeled clearly. As a result Transco have been issued with an improvement notice requiring clear labeling of all equipment, including vent and bleed lines. The notice applies to all Transco installations.
- 10.2.3 Roger Ellis referred to the photographs of the TransCanada incident which had been circulated and enquired if anyone had any more information to report. In response one of the Members advised that he had recently heard that the incident had occurred due to seam weld failure rather than corrosion as previously thought. He had not however seen any confirmation of this.

11. ITEMS OF INTEREST FROM PIG

11.1 Actions Arising

No actions arising.

11.2 Presentation by Richard Glenister.

Roger Ellis welcomed Richard Glenister, Director General of the Pipelines Industries Guild to the meeting and invited him to make his presentation on the changes which have taken place in the Guild.

The presentation covered the following:

- What is the Pipeline Industries Guild?
- The structure and strengths of the Guild.
- The objectives of the Guild.
- PIG / UKOPA.

and a copy of the overheads use by Richard in his presentation has been circulated – reference UKOPA/04/00014 and 0015.

Richard reported on the relevance of the Guild to UKOPA under the following headings:

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- Communication and Networking;
- Exchange of knowledge;
- Understand requirements of the industry;
- Technology transfer;
- Collaborate in training.

The following points were noted in the discussions that followed:

- PIG is to hold a technical forum on Third Party Interference and Pipeline Security at Birmingham Airport on the 17th February and all UKOPA members are welcome to attend.
- The Traffic Management Bill is likely to give power to the Highways Authority to bring in legislation for a one-call system that would cover all pipelines.
- The PIG magazine, Pipeline World is to merge with Pipes and Pipelines International.
- In response to a question from Roger Ellis, Richard agreed to arrange for UKOPA to be included on the official circulation list of the PIG Technical Committee.

Roger Ellis thanked Richard for the presentation and the time he had spared from a busy schedule to do so.

11.3 Reports from PIG

In the absence of Dick Gray and John Varden there were no reports, but the Chairman did note that a copy of the notes of the PIG Onshore Technical Panel meeting held on 16th December had been circulated - reference UKOPA/04/0007.

12. PD 8010.

12.1 Actions Arising.

- UKOPA technical input to ISO/FDIS 15589-1, ISO/TC67/SC/2 N and ISO/FDIS 155590-2 (12.2).

Paul Docherty reported that the documents referred to were now approved through the CEN review process. He reported that the new European pipeline standard BS EN 14161 had now been issued, and therefore BS 8010 was formally withdrawn. Jane Haswell noted that this was the prime reason for the major update of the current content of BS 8010 and its publication as a British Standards Published Document, PD 8010. The need for urgent publication of PD 8010 was supported.

Following discussion, it was agreed that the ISO, CEN and BS standards development process and programme was not clear to those not directly involved. It was agreed that as the

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UKOPA representative, J Haswell should prepare a summary briefing note for UKOPA, including notice of which standards UKOPA should influence.

Action: Jane Haswell.

- (ii) Pipeline Fatigue Design – Paul Docherty to draft a paper on Code approaches to pipeline fatigue design, and Jane to review on behalf of UKOPA. (12.2).

Jane Haswell drew Members attention to the fact that the section on fatigue in PD8010 had expanded considerably since the original draft had been commented on, and now covered both above ground and below ground pipelines. It has been agreed that different approaches are needed and that it would be a big task to cover both in PD 8010. It has therefore been suggested that the most appropriate way forward is to cover both, but refer to existing documents on the subject. This will allow the standard to be progressed quickly and avoid any conflict in approaches. Jane will circulate the amended section to Members as soon as it becomes available.

Action: Jane Haswell.

12.2 Update.

Nothing further to report.

13. ACDS MHSC WORKING GROUP ON PIPELINES AND RAWG UPDATE

13.1 Actions Arising

- (i) Management Council report on status of funding for specific research/investigation work (13.2.2).

Covered under the report on the expenditure forecast.

Action closed.

- (ii) Requirement for supplementary funding (13.2.2).

Roger Ellis stated that this action had also been covered under discussions on the expenditure forecast, and that you can confirmed that, based on current known commitments and expenditure phasing, no supplementary funding will be required.

Action closed.

13.2 Update

13.2.1 WGP Update.

Jane Haswell presented an update report - ref UKOPA/04/0012 - summarizing progress since the last UKOPA meeting:

At the September meeting it had been reported that i) HSE MSDU (Methods and Standards Development Unit, responsible for technical models and methodologies used by HSE) had withdrawn from the WGP and no longer contributed to the technical agenda, and ii) the only technical interface between WGP and HSE at the working level was via Rod McConnell's involvement in the HSE Fundamental Review (of Land Use Planning) Project, Products 5 and 6. It had been agreed that a UKOPA proposal to progress and resource the agreed technical work programme be offered to the WGP, to be delivered through the WGP for confirmation of governance, approval and consultation with other stakeholders.

J Haswell reported that the UKOPA proposal had been prepared based on the technical programme agreed for the RAWG at the UKOPA meeting in September comprising the following:

Technical Work Programme

- Identification of areas affected by land movement (Transco BGS) and incorporation into LUP advice.
- Improved Limit State Function – mechanical damage.
- Assessment of mitigation factors (slabbing and marker tapes).
- LUP zones for ethylene pipelines (using HSE methodology).
- Risk assessment methodology for gasoline pipelines.

Execution

- Development of detailed work specifications and delivery programmes for approval by WGP.
- Delivery of programmed work in accordance with a transparent governance and approval process (independent check/audit by HSE or independent expert appraisal, publication, response to peer group scrutiny).
- Coordinated and recorded consultation with other stakeholders.
- Documented WGP/MHSC approval.

Resourcing

- Execution and delivery of the technical work to be provided/sourced and funded by UKOPA.
- Checking and/or audit (as deemed appropriate) to be provided/sourced and funded by HSE.

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- Independent appraisal to be provided by UKOPA.
- Consultation with other stakeholders to be organized and delivered by the WGP.

The above proposal had been discussed and approved by WGP on the 7th October, together with a revised remit for the Working Party (Risk Assessment) which reduced the HSE MSDU role in the Working Party from technical delivery to advice and approval only. The proposal and the revised remit had been sent by the Chairman to Steve Coldrick, Head of HSE MSDU. No response had been received as yet.

The WGP remit, terms of reference and membership had been reviewed at the meeting on the 7th October. It had been agreed that the remit and terms of reference remain valid, and, in view of the significance of LUP developments, it was appropriate to consider extension of the membership to include representation from Local Authority Planning.

Other business dealt with at the meeting related to the format and agenda for the Technical Meeting on Risk Assessment of Gasoline Pipelines which was held on the 25th November.

Rod McConnell then presented a summary of the review of risk assessment of gasoline pipelines discussed at the WGP Technical Meeting on the 25th November. The WGP Technical meeting was attended by Gasoline / Oil Pipeline Operators (BPA, OPA, ESSO, TOTAL, BP), UKOPA (R Ellis), WGP Members and HSE (P Sargent and M Goose). R McConnell reported the following key points discussed at the meeting:

- (i) The review had covered in detail the three key references relating to the risks associated with gasoline pipelines:

The research report prepared by W S Atkins (July 1998) for HSE, which presented a comprehensive review of incident history and modeling, and confirmed that operational experience shows there is a very low fatality rate associated with gasoline pipelines, i.e. 1 fatality every 77 years. The analysis undertaken was comprehensive and concluded that the risk of ignition is very low, and that the risk posed do not even warrant outer zones.

A research report prepared by A D Little for HSE (1996), which revisited in greater detail the QRA work actioned by HSE prior to the confirmation of the classification of substances in PSR 1996, and which presented risk transects indicating outer zones of up to 100m.

An HSE paper entitled Gasoline Pipelines Risk Assessment (1999) which presented the HSE methodology, which is very similar to the A D Little approach.

- (ii) Rod had constructed models based on the methodologies described in the papers, validated predictions and then investigated the sensitivity of predictions obtained.

The main conclusion of his detailed review (completed for UKOPA and circulated as UKOPA/03/00?), is that gasoline pipelines do not require land use planning zones. Rod had discussed technical points raised at the WGP Technical Meeting at a follow-up meeting with HSE on 10th December.

- (iii) HSE had confirmed that their current preferred approach to the modeling of the development and consequences associated with pool fires was as described in their 1999 paper. This had been had been challenged and is being reviewed by HSE.

The factors influencing the risk modeling of gasoline pipelines were then discussed in some detail, including HSE's assumptions relating to leak size, time for leak and pool size, together with assumptions on escape rates and shelter. P Davis noted that the practical impact of leak detection methods used by Operators on the probable size of undetected pools should be taken into account. He noted that while practical leak detection was a key issue in limiting the time over which the leak could occur and therefore the pool size which could accumulate, leak detection systems were not mandatory and their consideration in the methodology was therefore not straightforward. It was agreed that the HSE assumption that a leak occurring undetected over a 24 hour period which resulted in an unreported pool of 100m diameter which then ignited was not credible, and that a more realistic scenario should be used. P Davis reported that UKPIA are prepared to work with gasoline operators and UKOPA on a more formal level to influence the land use planning issues that could arise from the reclassification of gasoline. He noted that UKPIA had the opportunity for informal meetings with K Allars and C Wilby of HSE. He agreed to keep UKOPA informed.

13.2.2 RAWG Update.

R McConnell updated the meeting of progress on the RAWG technical programme agreed at the September UKOPA meeting as follows:

- (i) Predictive modeling techniques

As discussed at the September meeting, the Advantica proposal for the development of an updated limit state model for mechanical damage has been approved. It now includes the development of practical look-up tables giving failure frequencies for typical pipeline geometries due to mechanical damage for use by operational engineers. The planned delivery is for May/June 2004, the detailed programme is yet to be agreed. HSE are being kept fully informed, as the intention is that the model will be become the accepted and preferred approach.

- (ii) Transco / British Geographical Survey

Work programme to identify specific areas at risk of landslip is being progressed. Neil Jackson reported that the work had shown that only 1% of the total area associated with

the Transco system has been identified as at risk of landslip. The next step in this work is to develop the probability of landslip into a likelihood of pipeline failure. Transco is therefore sponsoring additional work with Advantica and is liaising with HSE (M Goose) to negotiate removal of the blanket failure rate currently applied to all Transco pipelines. Neil Jackson stated that Transco will investigate whether information on the 1% of locations affected can be shared with UKOPA members. There is currently a confidentiality agreement associated with the BGS work.

Action: Neil Jackson.

(iii) Pipeline Marking and Protection

A paper and recommended fault tree were scheduled for completion and discussion at the RAWG meeting scheduled for 10th February.

(iv) LUP Zones for Ethylene Pipelines

Rod reported that the work is in progress. He has access to the HSE modeling approach and will use the UKOPA failure rate data to predict the zones. He plans to produce a paper within the next 2 months and expects to report significant reductions.

(v) LUP Zones for Spiked Crude Pipelines

Lyndsay Boswell reported that this work is being progressed by W S Atkins on behalf of bp, and that there was no specific update at this stage.

(vi) Risk Assessment of Gasoline Pipelines

The RAWG work programme had involved preparation of the review presented to the technical meeting on the 25th November, as previously discussed, and discussion of technical queries with HSE at a meeting on the 10th December. As reported, based on the discussions with HSE on this meeting, some changes to the HSE methodology were expected and that an internal paper recommending revisions to HSE's methodology being prepared by M Goose for HSE Panel review should become available via WGP in due course.

14. REPORT FROM THE FAULT DATA MANAGEMENT GROUP

14.1 Actions Arising

(i) FMDG to progress licence in UKOPA's name (14.1(ii))

Roger Ellis reported that a meeting was held with Advantica on 3 November 2003, and at

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the end of November Advantica submitted a proposal for the periods 2004 to 2006 for fault database support that includes both services and software licenses. This is currently with the FDMG members for comment.

Significant changes are: Improved data entry, security and confidentiality and access to the data by UKOPA Members or their consultants to enable damage or other models to be developed. In parallel the FDMG is also looking at other options using other service providers.

- (ii) Peter Davis to investigate and advise whether it might be possible to extract the information required for including oil pipelines on the UKOPA leak database from the CONCAWE database as this may be sufficient for the immediate needs.(14.1(iii))

Peter Davis reported that he will be attending a CONCAWE meeting in February and this query will be raised. His view is that there should be no problem in extracting the data, but it is not clear whether the information will satisfy UKOPA requirements.

Action: Peter Davis to report back on outcome of discussions.

14.2 Pipeline Damage Database - Update

Roger Ellis presented the update report as follows;

- i) Failure data Report issued to the end of 2002

The failure data was published on the website in October 2003 (UKOPA/03/0084). The overall failure rate has reduced to 0.27 from 0.289, and the 5 year average has reduced to 0.083 from 0.0893 (incidents per 1000 kilometer years). The next update will be published at the end of 2004.

Roger noted that the data contained 1 new leak. Ground movement had caused leak from an old stress corrosion crack on a natural gas pipeline which previously carried wet town gas.

- ii) Applicability to all UK MAHPs

Roger noted that the report prepared by Jane Haswell which recommended the data was applicable to all UK pipelines, had been approved but that Peter Buckley of HSE had commented that additional statistical significance tests should be incorporated. Jane and Rod had been actioned to complete any additional work required. Jane reported that Peter Buckley had indicated HSE would provide more detailed comments based on advice from statistical experts, but this had not been received to date. Rod had considered the issues further, and had advised that statistical analysis of sparse data would require careful consideration. Any further recommendations will be progressed via the FDMG.

United Kingdom Onshore Pipeline Operators' Associationiii) Development of a new Predictive Model

The proposal initiated through FDMG was being progressed by the RAWG, and had been reported by Rod in section 13.2.2(i).

iv) Ethylene Pipeline Failure Modelling

Roger reported that the work undertaken to model the failure of ethylene pipelines had been published in a paper prepared by Barker / Richardson Saville, Imperial College in the I Chem E Journal and that Rod was now looking at the consequences of rupture at lower pressures based on the published work.

Action: Rod McConnell.

v) Risk Screening Tool

Roger reported that the risk screening tool proposed in UKOPA/03/0049 was being developed by Rod McConnell and Jane Haswell. Jane Haswell stated that the pipeline failure frequency tables to be developed by Advantica would be incorporated into this tool.

vi) Extension of the Database to other UK Pipelines

Roger reported that P Davis is looking into obtaining an extract of the CONCAWE data for gasoline pipelines for incorporation into the UKOPA database.

vii) Improvements to the Fault Database

Roger noted that as previously reported, improvements to the way data is collected, the format of presentation and use of web-based reports is being considered. He emphasized that the sustainability of the process is the main priority of any developments.

15. REPORT FROM THE EMERGENCY PLANNING WORKING GROUP**15.1 Actions Arising**(i) PERO Issues – Training, Competence and Future Plans (15.2).

Covered under 15.2.

(ii) PERO Training – Member Requirements (15.2).

Covered under 15.2.

15.2 PERO Issues – Training, Competence and Future Plans.

This item is covered as part of the update given below.

15.3 Update on Emergency Planning Issues and Development of the ACoP.

Jane Haswell presented an update report as follows: it had been reported at the September UKOPA meeting that the EPWG was dealing with two main issues, i) the development of an ACoP for the testing of emergency plans and ii) the development of the PERO Update Course. She presented progress on these issues as follows:

(i) Testing of Emergency Plans – ACoP

HSE (P Sargent) had confirmed via WGP that the previous consultation on this issue and the draft ACoP will now be progressed. Local Authority emergency planning contacts had indicated that they supported the draft ACoP and that the Civil Contingencies Bill may impact on the way emergency response is provided.

Neil Jackson had prepared a briefing note with proposals for the EPWG strategy for consultation on this issue which has been supported by the EPWG and circulated to all UKOPA Members – ref UKOPA/04/0013. Neil summarised the key points relating to the Civil Contingencies Bill as follows:

- The Bill, published on 7th January 2004, was developed following fuel crisis, flooding and 11th September incident (2000/2001).
- The objective was the introduction of a new, single legislative framework for national resilience, to improve and co-ordinate of emergency planning and emergency response.
- Supporting Regulations are to be published in 2005.
- The Bill defines local Resilience Areas and Resilience Groups which will co-ordinate Category 1 and Category 2 responders with consistent responsibilities across all local areas.
 - Category 1 – Responsible for planning – LA's, emergency services, Health Authorities.
 - Category 2 – Involved in incidents in their sectors – utilities, airport authorities, transport bodies.
- Link with Pipeline Emergency Planning and Testing of Plans.
 - Regulations will not apply to major accidents, but the proposed Resilience Groups and corresponding Resilience Areas may provide an area basis for testing of pipeline emergency plans.
 - It is proposed that UKOPA propose this via the CAPEPLG Working Group.

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Following the update, the issues relating to consultation and the development of the ACoP were discussed at length. It was noted that there are no changes to the proposed amendments or the approach to their implementation, and that the threats to pipeline operators relating to numbers of tests and the charges which could be levied, are still significant. It was agreed there is a need to ensure that the work undertaken relating to the ACoP, together with principles highlighted in previous consultation pilot test exercise etc. are not lost in the revisit to this issue. Finally it was noted that depending on progress made, UKOPA should be prepared to raise concerns at senior levels in HSE and ACDS.

Action: Jane Haswell/EPWG**(ii) Pipeline Emergency Response Course**

Jane Haswell reported that proposals for the PERO Course, developed by Ken Thomas, were being progressed. Sembcorp Utilities have confirmed their interest in providing a course based on a programme defined by UKOPA. The majority of reading material for the original PERO Course had been prepared by Jim Watson of Huntsman and this material will be incorporated into core material for the revised course. Any additional material required will be developed by Sembcorp Utilities, who have been asked to confirm dates and prices for 2 one day courses scheduled for June and October 2004, to be held at Wilton, Teesside based on the following draft programme:

- Introduction, Aims and Objectives.
- Overview of Emergency Planning (e.g. Legislation, plans, procedures, communication systems, personnel, scenarios, equipment, categorization of incidents).
- PERO (cross-industry definition, role, checklist, information, media, safety).
- Discussion.
- Analysis of Real Pipeline Incidents (External Lecture – Advantica/Transco) – causes, failure modes and consequences, effect of environment, prevention.
- Definitions and Terminology
- Role of Emergency Services.
- Desk-top exercise.
- Discussion, questions, feedback.

Jane stated that EPWG supported the above programme in principle, but had noted that it may be difficult to cover the volume of material in the allotted time. Roger asked when the costs and dates for the course would be available. Jane stated that Sembcorp Utilities are currently reviewing the UKOPA PERO material supplied and an indicative cost would be provided shortly. The costs would be circulated to members when received with a request for nominations from Members for 2 people per course. The courses would be based on attendance of 12 people.

Action: Jane Haswell.

15.4 Chemical and Pipelines Emergency Planning Liaison Group (CAPEPLG)

Neil Jackson reported there had been no further meetings of CAPEPLG, and no progress in establishing the Work Group actioned to progress consultation on the amendments to PSR.

16. THIRD PARTY INFRINGEMENTS

16.1 Actions Arising

Members contributions to database (16.2).

Covered in item 16.2.

16.2 Update on Collation of Information

Mark Harrison provided an update on the information to date. There were now 285 records on the database and members were asked to ensure that they have provided complete records for 2003. No information had been received from BGE Group, Powergen or Sembcorp Utilities. It was agreed that an Update Report would be submitted to the June 2004 UKOPA meeting.

Mark advised that he had presented the data to HSE at a recent Huntsman/HSE liaison meeting, and as a result HSE had contacted United Utilities regarding recorded infringements by them. United Utilities had then contacted Mark seeking more information. A meeting is to be held with Transco in February to discuss Transco's contribution with a view to a more effective tool being produced.

Roger asked if the database recorded whether operator response to sightings had stopped pipelines being damaged, Mark agreed to extend the database to provide this information. Peter Davis asked that consideration be given to how the information in the report is presented and used to best effect. Steve Chatfield advised that if HSE were provided with recorded information, then they may take action as in the contact with United Utilities. This would be further reviewed after the report had been issued.

Action: Mark Harrison

17. LEGISLATION UPDATE

17.1 Amendments to PSR 1996

17.1.1 Actions Arising

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- (i) Clarification of definition of Operator – Alan Thayne to investigate the current position(17.1.1).

Steve Chatfield confirmed that the “Additional Guidance on Operator – a discussion document” drafted by the HSE in 2000, and circulated as UKOPA/00/0083, was currently being updated and should be available around the end of February 2004. It is not clear at this stage whether this will result in amendments to PSR or to the guidance. The updated document will be circulated for comment.

- (i) Jane Haswell to request details of HSE programme for completion of amendments to PSR 96 from P Sargent.

Steve Chatfield advised the meeting that the timetable for completion of the proposed amendments relating to testing and charging for emergency plans cannot be confirmed at this stage, and is subject to discussions at CAPEPLG, although they may be in a position to do so by the end of 2004.

Regarding the reclassification of gasoline pipelines, Steve reported that a paper had been prepared by Martin Goose, which, if accepted by MSDU, would be progressed to ACDS. depending on progress, a Consultation Document may be available by the end of the year.

17.1.2 Update

Steve Chatfield stated that depending upon progress made with emergency planning and gasoline amendments, it may be possible to progress both issues in parallel and complete consultation by the end of the year, followed by enactment of legislation. He confirmed that at this stage, HSE did not intend to carry out a comprehensive review of the guidance to PSR.

UKOPA members expressed dissatisfaction at the time and effort already expended in consultation on both issues to date, and the lack of progress achieved. It was agreed Phill Jones would forward a copy of the letter originally sent to Neville Briscoe on 4th September 2001 (reference UKOPA/01/0059) to Peter Sargent and express UKOPA's concern and frustration at the delay when so much had appeared to have been agreed relating to the ACoP.

Action: Phill Jones

17.2 Pipelines Safety Instrument.**17.2.1 Actions Arising.**

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- (i) Neil Jackson to write to Jurgen Wettig (DG Environment) to advise him of the existence of UKOPA, to request confirmation of the latest programme for the development of the PSI and to request details on the route by which the Association can formally submit operator comments at the appropriate time.(17.2.2)

Neil Jackson has drafted a letter to Jurgen Wettig from the Chairman (combine with above).

Action: Roger Ellis.

- (ii) Peter Davis to make contact with CONCAWE to seek an update relating to their understanding of the latest position. (17.2.2)

Peter reported that CONCAWE's understanding was the same as UKOPA's i.e. the Instrument is not being progressed at this time, but that it may be restarted later in 2004.

17.2.2 Update

Nothing further to report.

17.3 E-PIMS

Neil Jackson provided an update on this subject and it was confirmed that UKOPA would not get involved with this. Phill Jones would write to Ted Findlay advising him of the position.

Action: Phill Jones.

17.4 Marcogaz PIMS Framework

Roger referred to the Marcogaz PIMS Framework document, circulated as UKOPA/03/0089, and asked Neil Jackson to comment as Transco had some involvement in its development.

Neil Jackson confirmed that the document had been developed as a guide to assist Operators in developing a PIMS system linked to company KPIs. The document had no legal foundation, it had been published through Marcogaz in order to influence views in discussions relating to the European Pipeline Safety Instrument.

18. ONE CALL SYSTEM.

18.1 Actions Arising

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- (i) Neil Jackson to provide details of the Transco trial being carried out in the East of England (18.1 (ii)).

Further details of the trial were not available and therefore this item would be carried forward to the next meeting.

Action: Neil Jackson.

18.2 Update

PIG initiative - Richard Glenister confirmed that PIG had been prepared to close this initiative due to the lack of progress achieved, but the Government had requested that the Group be retained to review and comment on the Consultant's report when it was issued.

It was also reported that current feedback from the Linesearch (Fisher German) system indicated a significant number of enquiries had been received. The system covers only two pipelines systems.

19. COMPETENCY AND TRAINING ASSESSMENT

19.1 Actions Arising

The Chairman urged all Members to consider using the system and asked all to provide feedback (19.2).

Covered under 19.2.

19.2 Update and Feedback on Trial.

Robert White reported that Total are continuing their implementation as reported at the last meeting. Ken Curtis reported that Powergen have implemented a system based on the framework, in which technicians collected the information needed as evidence of competency as part of personal development plans. The evidence is approved and signed off at management level, and used to identify competent persons for specific tasks. Ken offered an invitation to review the system to any members interested.

Ken confirmed that there has been no formal feedback requiring changes to the Competency System, and it was agreed that this version is final and all actions on the current Competency and Training Work Group agenda are closed.

19.3 Skills Council Launch.

Roger Ellis reported that Jane Haswell will represent UKOPA at the launch of the Energy and Utilities Skills Council, which has been awarded the licence to offer the level 4 NVQ originally initiated by GWINTO. Jane has prepared a presentation on behalf of UKOPA, which has been agreed by the C&TWG. This was supported, the presentation will be posted on the website for information.

Action: Phill Jones.

20. UKOPA WEBSITE – Development and Management.

20.1 Actions arising

- (i) Removal of member email addresses.(20.2)

It was confirmed that this item had been addressed.

Action closed.

- (ii) Members to consider and advise on use of Website to Promote UKOPA (20.2).

No feedback received, and it was agreed that Members would keep this in mind and raise any suggestions as appropriate.

Action closed.

20.2 Update

Roger Ellis reported that it had been approved by the Management Council meeting for all 2000 and 2001 correspondence to be placed on the website.

Action: Phill Jones.

In discussion it was agreed to establish hyperlinks between the PIG and UKOPA websites.

Action: Phill Jones.

21. Network Rail

21.1 Actions Arising.

Members to provide company contact details to Phill Jones (21.2):

Phill Jones advised that he would be preparing a list of company contacts that he had received and would be circulate a copy to Members with a request for details of missing contacts to be completed and returned.

Action: Phill Jones.

21.2 Update.

There was no specific feedback to report on easement issues, and it was agreed that the item would be closed. The list of contacts was still considered necessary in order that Members can contact the relevant person in other companies to discuss matters of easement payments should the necessity arise.

Stuart Kennedy advised Members that Transco has received a copy of a draft document from Network Rail titled Asset Protection Handbook – Guidance Notes for the use of Outside Parties in connection with the laying of services below the railway by undertrack crossing.

22. Emergency Pipeline Repair Procedures.

22.1 Actions Arising

(i) Donal Cullen to provide further details of emergency pipeline emergency support following completion and award of contracts (22.1).

Donal reported that Shell Expro had awarded a contract to TD Williamson. Lindsay Boswell advised that bp was still progressing contract award.

(ii) UKOPA Emergency Materials and Equipment Register (22.2).

Donal Cullen confirmed that he had received some information from a number of Members, and that he will be sending a written request to those who have not provided anything to date.

Action: Donal Cullen.

23. Safe Isolation of Plant and Equipment.

23.1 Actions Arising

Circulation of Draft Guidance Document for comment (23.2).

See 23.2.

23.2 Update

Stuart Kennedy reported that a Working Group meeting had been held in November and that a draft of the document had been received by Working Group Members at the end of December. A copy of the draft, together with a note summarizing key changes will be circulated to UKOPA members for information.

Action: Stuart Kennedy.

24. Pipeline Industrial - 2005 Rating Revaluation.

24.1 Actions Arising

- (i) Members to nominate company contacts for dealing with rating revaluation issues (25.1(i)).

Phill Jones to circulate details of nominated contacts received to date with request for relevant Members to provide missing information.

Action: Phill Jones.

- (ii) Members who have current construction costs that can be used in negotiations to provide details to their nominated company contact (25.1(ii)).

Roger Ellis advised that no specific feedback had been received on this issue and asked Members who can assist to do so.

- (iii) Transco representatives to check whether Transco is prepared to authorise the valuation officer to share the Transco construction costs on which the revaluation is to be based (25.1(iii)).

It was reported that Transco is prepared to share the construction costs.

Action closed.

24.2 Update

Roger Ellis opened the debate on this important item by reminding Members that current information indicates that the revaluation could result in very high increases in rates. He referred to the note received from, P G Glenwright, Shell Real Estate Services and circulated as UKOPA/03/0086 and summarised the concluding sentences:-

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“UKOPA representatives indicated we would wish to reconsider the obsolescence scale which currently only commences allowances at 30 years of age for most lines.

There was some discussion as to the window of opportunity for review of the basis. The VO anticipates having his pipeline valuations completed by the end of January 2005. However he indicated he was open to reviewing matters after this and indicated valuations could be varied up to October 2003. Otherwise it would have to be through the appeals procedure after the Rating List becomes live on the 1st April 2005.

After the VO departed KN & PGG agreed PGG to seek Shell comment on the Transco costs and evidence of maintenance costs to test the obsolescence allowance scale. KN will make similar enquiries of BPA and BP and we would invite other UKPIA /UKOPA rating representatives to contribute.”

Roger also noted that the background to the above comments is included in the Paper by the Specialist Valuation Unit submitted to the above meeting, circulated as UKOPA/03/0087.

Peter Davis reported that he is planning to facilitate a meeting to discuss the Transco construction costs and to prepare supporting information for opening discussions with the Valuation Officer. He stressed that availability of other current construction costs was a key element of the UKOPA position and strategy, and asked Members who have and are prepared to share details of such costs to advise him direct.

Peter Davis agreed to remain the focal point for UKOPA on this issue and to provide an update at the next meeting.

Action: Peter Davis.

25. Fatigue Analysis.

25.1 Actions Arising.

Paul Docherty to prepare a note for consideration at the next meeting (27.1.1)

Covered under 12.1(ii).

26. Future Presentations

Roger Ellis reported that the following topics have been suggested as possibilities for future presentations:

- (i) PII – Presentations offered on:
 - Solutions for unpiggable pipelines.

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- Effective Management of Pipeline Data.
 - Developments in crack detection.
 - Corrosion growth and the role of inspection.
 - Material evaluation without service interruption
 - Uprating liquid pipelines – A case study.
 - An Operators Perspective of the US Regulations
- (ii) E PIMS.
- (iii) Pigging – Huntsman Petrochemicals Experiences 2003.

In addition, presentations offered by Paul Docherty on Management of Above Ground Pipelines and from Paulo Parfumi are being held in abeyance pending further information. Further, an offer of a presentation on Pipeline Integrity Systems from Salvador Vasquez of TUV NEL – the company is undertaking a review of pipeline integrity systems for the DTI.

Roger reported that following discussion at the Management Council meeting it had been agreed that PII would be invited to make presentations at the June meeting on Corrosion Growth and the Role of Inspection, and An Operators perspective of the US Regulations. In addition, TUF NEL is to be invited to give the presentation on Pipeline Integrity Systems.

Action: Roger Ellis and Phill Jones.

With the exception of EPIMS all other offers are to be left as future contenders. The following possibilities were also added to the list:

- Pipeline hydraulic modeling package by Atmos International.
- Presentation by the HSE on their 5-year strategic plan.
- Review of the effectiveness of surveillance.
- Grouted Tee Technology.
- Linesearch (Fisher German) One Call System.

27. Any Other Business

27.1 Neil Jackson reported that Transco had updated its document relating to safe working in the vicinity of high pressure pipelines, and that a copy would be circulated for the information of Members.

Action: Neil Jackson.

27.2 Mark Harrison referred to Ken Thomas' involvement with PINS which has been discussed at previous meetings, and to the effort that had been made by the industry to gain the MOD's support relating to the fitting of collision avoidance systems to pipeline surveillance helicopters. In this connection he drew Members attention to the fact that it had been noted at recent PINS

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meeting that one helicopter operator was seeking to avoid installing the avoidance system by flying above 500feet and recommended that this should be discouraged.

- 27.3 Donal Cullen referred to the previous meeting when he had advised of Shell's intention to use Long Range Ultrasonic Inspection techniques to inspect inaccessible locations, and advised that current indications are that the technique is not economically viable on pipelines in culverts etc, but appears acceptable for gantry sections up to distances of 20metres or so.
- 27.3 Roger Ellis noted for the record that this would be Ron Hobby's last meeting, and on behalf of all Members thanked him for his commitment and contribution over the period of his attendance.

28. DATE(S) OF NEXT MEETING(S)

16th/17th June 2004 – to be hosted by Shell at Lensbury London.
15th/16th September 2004 – to be hosted by BG Group – details to be confirmed
January 2005 – to be hosted by National Grid Transco – details to be confirmed.
June 2005 – to be hosted by Huntsman Petrochemicals Ltd – details to be confirmed.

Circulation – Management Council Members

Signed: (Roger Ellis) – Chairman.

Date: