

**IN THE ADMINISTRATIVE APPEALS TRIBUNAL  
NO. 1149/2010**

**No Ship Action Group Inc**  
Applicant

**Minister for Environment Protection, Heritage & the Arts, The Honourable Peter  
Garrett MP**  
1<sup>st</sup> Respondent

**State of New South Wales**  
2<sup>nd</sup> Respondent

**AFFIDAVIT OF DANIEL JAMES SLEE**

On 19 May 2010 I, Daniel James Slee, of the National Measurement Institute, 1 Suakin Street, Pymble in the State of New South Wales, affirm:

- 1 I am a Chemist employed as Section Manager of the Organics Section of the National Measurement Institute ("NMI"), Pymble NSW.
- 2 I have a Bachelor of Science degree with Honours from the University of Queensland and over 20 years experience in the field of Analytical chemistry. Exhibited to me at the time of affirming this Affidavit is a copy of my Curriculum Vitae (DJS1 tab 1).
- 3 NMI is a division within the Commonwealth Department of Innovation, Industry, Science and Research and provides, amongst other things, a wide range of analytical testing services.

**Expert briefing**

- 4 Exhibited to me at the time of affirming this Affidavit is an email sent to Brian Woodward of NMI by Kirralee Sanders of the Crown Solicitor's Office on 12 April 2010 requesting NMI to provide analytical testing services (DJS1 tab 2).
- 5 Exhibited to me at the time of affirming this Affidavit is an email sent to Kirralee Sanders by Brian Woodward on 13 April 2010 providing a quote for the scope of work detailed (DJS1 tab 3).
- 6 Exhibited to me at the time of affirming this Affidavit is an email sent to Brian Woodward of NMI by Kirralee Sanders of the Crown Solicitor's Office on 14 April 2010 accepting the quote provided by NMI (DJS1 tab 4).



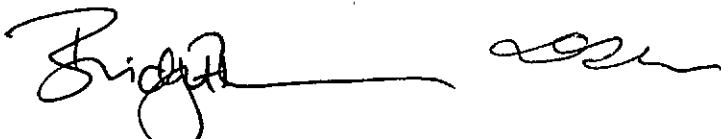
- 7 Exhibited to me at the time of affirming this Affidavit is a letter sent to Brian Woodward of NMI by Kirralee Sanders of the Crown Solicitor's Office requesting NMI to provide further ("second") analytical testing services (DJS1 tab 5).
- 8 Exhibited to me at the time of affirming this Affidavit is a letter sent to Brian Woodward of NMI by Kirralee Sanders of the Crown Solicitor's Office requesting NMI to provide further ("third") analytical testing services (DJS1 tab 6).
- 9 Exhibited to me at the time of affirming this Affidavit is a copy of the Federal Court of Australia's Expert Guidelines, which were attached to the email referred to in paragraph 6. I have read and agree to be bound by the Expert Guidelines (DJS1 tab 7).

#### **Conduct of first analytical testing**

- 10 On 14 April 2010, Getex Pty Ltd delivered a number of samples of cabling and insulation to NMI. Exhibited to me at the time of affirming this Affidavit is a copy of the chain of custody form documenting the delivery to NMI of the samples by Getex (DJS1 tab 8).
- 11 Exhibited to me at the time of affirming this Affidavit is a copy of the NMI sample continuity form (DJS1 tab 9).
- 12 Exhibited to me at the time of affirming this Affidavit is the report prepared by me following the conclusion of the testing that NMI was engaged to conduct (DJS1 tab 10).
- 13 Having concluded the testing, I organised for six (6) sub-samples to be delivered to Envirolab Services Pty Ltd for further testing. The sub-samples for the external laboratory were taken in the same way as for the original tests. Sub-samples were weighed and stored in glass jars with teflon lined lids. The external laboratory was required to test the entire sub-sample. Exhibited to me at the time of affirming this Affidavit is the NMI NSW subcontract analysis chain of custody forms (DJS1 tab 11).

#### **Conduct of second analytical testing**

- 14 On 12 May 2010, Envirolab Services Pty Ltd delivered a number of samples of cabling and insulation to NMI. Exhibited to me at the time of affirming this Affidavit is a copy of the chain of custody form documenting the delivery to NMI of the samples by Envirolab (DJS1 tab 12).
- 15 Exhibited to me at the time of affirming this Affidavit is a copy of the NMI sample continuity form pertaining to these samples (DJS1 tab 13).



16 Exhibited to me at the time of affirming this Affidavit is the report prepared by me following the conclusion of the second analytical testing that NMI was engaged to conduct (DJS1 tab 14).

**Conduct of third analytical testing**

17 On 17 May 2010, Envirolab Services Pty Ltd delivered six (6) further samples of cabling and insulation and one (1) extract to NMI. Exhibited to me at the time of affirming this Affidavit are copies of the chain of custody forms documenting the delivery to NMI of the samples by Envirolab (DJS1 tab 15).

18 Exhibited to me at the time of affirming this Affidavit are copies of the NMI sample continuity forms pertaining to these samples (DJS1 tab 16).

19 Exhibited to me at the time of affirming this Affidavit is the report prepared by me following the conclusion of the further testing that NMI was engaged to conduct (DJS1 tab 17).

**NATA accreditation**

20 NMI has National Association of Testing Authorities ("NATA") accreditation for PCB Aroclors in insulating oils, waters, soils & sediments.

21 The method used for Aroclor determination in soil/solid has been modified for use on solid cable/insulation material. The method is based on method US EPA 8082, which is a suitable procedure for analysis of PCB Aroclors in solid samples.

AFFIRMED at *Pymble, Sydney*

On *19 May 2010*

Signature of deponent

*[Handwritten signature]*

Signature of witness

*[Handwritten signature]*

Name of witness

*Bridget Elizabeth Thomson*

Address of witness

*60-70 Elizabeth Street Sydney*

Capacity of witness

*Solicitor.*

# DJS1

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**IN THE ADMINISTRATIVE  
APPEALS TRIBUNAL**

No. 1149/2010

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**EXHIBIT NOTE**

Exhibit "DJS1" to the affidavit of  
DANIEL JAMES SLEE

Date: 19 May 2010

This is the exhibit marked "DJS1" referred to in the  
affidavit of DANIEL JAMES SLEE affirmed on 19  
May 2010 at 1 Suakin Street Pymble, before me.

Filed for  
THE STATE OF NEW SOUTH  
WALES

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*Bridget Elizabeth Thomas*

*Bridget*

~~Solicitor/Justice of the Peace~~

**NO SHIP ACTION GROUP INC.**  
Applicant

**MINISTER FOR ENVIRONMENT  
PROTECTION, HERITAGE & THE  
ARTS, THE HONOURABLE  
PETER GARRETT MP**

1<sup>ST</sup> Respondent

**STATE OF NEW SOUTH WALES**  
2<sup>nd</sup> Respondent

*I V Knight, Crown Solicitor  
Level 5, 60-70 Elizabeth Street  
SYDNEY NSW 2000  
DX 19 SYDNEY  
Tel: (02) 9224-505346  
Fax: (02) 9224-5144  
Ref: 201001253  
T02 Adam Gerard*

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## **CURRICULUM VITAE**

### **Name**

**Mr Daniel James Slee**

### **Title**

Section Manager, NMI Organics Pymble

### **Qualifications**

1988 – Bachelor of Science (Honours, Organics), University of Queensland  
2004 – Certificate 4 in computer programming (TAFE NSW)

### **Affiliations & Accreditations**

Member of ELIG (Environmental Laboratory Industry Group)  
NATA Assessor in the field of Chemical Testing  
Approved Drinking Water Analyst for the Department of Human Services, Victoria.  
Approved Analyst – Department of Environment and Climate Change, NSW.

### **Experience Overview**

7 years - Section Manager, Organics Laboratory (NMI Pymble, formerly AGAL)  
6 years - Manager Environmental Organics (AGAL)  
2 years - Senior Chemist (Australian Laboratory Services Sydney)  
3 years - Senior Chemist (Australian Laboratory Services Brisbane)  
2 years – Waters Chemist (SGS, Brisbane)  
2 years – Analytical Chemist (ARI, Brisbane)

### **Current Responsibilities**

- Section Manager, Organics NMI.
- Technical management of the Organics Section at NMI. The Section is involved with analysis of environmental samples for organic pollutants and food samples for trace organic residues.
- Supervising staff in the Organics section which consists of two Senior Chemists (responsible for the Food and Environment subsections) and 20 Professional and Technical officers.

- Coordinator of analytical results and responsible for signing and issuing final reports.
- NATA signatory status for the analysis of environmental samples for PCBs, PAHs, trace level pesticides, semivolatile industrial chemicals (based on USEPA 8270), Volatile organics (based on USEPA 8260), Phenols, petroleum hydrocarbons, chlorination byproducts and organotins. NATA signatory status for the analysis of animal tissues for veterinary chemicals & antibiotics and analysis of foods for aflatoxins and chloropropanols.

### **Professional Experience**

- 18 years experience as senior analyst responsible for supervision and training of staff.
- Greater than 20 years experience in the analysis of organic residues in water, soils, sediments, oils and sludges using techniques that include GC with FID/ECD/FPD/MSD and Purge&Trap GC/MS. Experienced with LC & LC/MS analysis techniques.
- Analysis of Aroclor PCB in waste oil, capacitors, electrical equipment, transformer oil samples, soils, sediments & waters for environmental consultants.
- Experience with the maintenance, calibration of Gas Chromatograph (GC), Gas Chromatograph Mass Spectrometry (GC/MS) and Purge&Trap GC/MS instrumentation.
- Experience with Organotin methodology since 1998. Gained NATA signatory status for this test.
- Analysis of drinking water and waste samples for Melbourne Water, Sydney Water and a large number of environmental consultants and water utilities.
- Participated in a number of NATA, Shell Interlaboratory, APG and NARL proficiency studies involving PCB, PAH, phenols, trihalomethanes, chlorinated hydrocarbons, phenoxyacid herbicides, pesticides and petroleum hydrocarbons in soil and water.
- Implemented and documented a number of new analytical methods for the NMI Organics section and gained NATA Accreditation.
- Writing and implementing quality assurance documents for laboratory operations complying with ISO guide 17025.
- Trained Public Utilities Board (PUB) technicians, Singapore – analysis of water samples for chlorination by-products by Purge & Trap GC/MS, Agilent/PUB sponsored project.
- APVMA reviewer – reviewed applications for registration of pesticides in Australia for the APVMA.
- Organizing committee member for the 22<sup>nd</sup> Conference of Residue Chemists, Sydney Nov 2009. Reviewer of technical program.

### ***Publications & Presentations***

- Speaker at the Australian New Zealand Mass Spectrometry conference, Sydney, January 2009 and the Government Food Analysts Conference, Melbourne, February 2009 – *Analysis and Confirmation of Melamine in Foods*.
- Poster presentation, co-author - Government Food Analysts Conference, Melbourne, 2007, *National Residue Program - Analysis of Cyromazine*.
- Speaker at the 21<sup>st</sup> Conference of Residue Chemists 2007, *Analysis of Cyromazine residues in Animal Tissues*.
- Poster Presentation - 19th Conference for Residue Chemists 2003, *Determination of Estrogens in Effluent by GC/MS SIM*.
- Scientific paper - Howard C. Bailey, James R. Elphick, Rick Krassoi, Ann-Marie Mulhall, Adam J. Lovell, and Daniel J. Slee, *Environmental Toxicology and Chemistry* 2005, **24**, 7, 1773–1778 *Identification of Chlorfenvinphos Toxicity in a Municipal Effluent in Sydney, NSW, Australia*.
- Scientific paper - McCready S., Slee D. J., Birch G.F., *Marine Pollution Bulletin*, 2000, **vol. 40**, no11, pp. 999-1006 (31 ref.) *The distribution of polycyclic aromatic hydrocarbons in surficial sediments of Sydney Harbour, Australia*.
- Technical paper – for the Department of Human Services, Victoria. *Preservation of water samples for Trihalomethane analysis*.
- NMI Technical Report – *AQA-09-08 Pesticides in Water* – contributing author and analyst.
- CRCCare workshop attendee, 2010 – TPH methods for environmental samples.

### **Contact Details**

Danny Slee  
National Measurement Institute  
1 Suakin St  
Pymble NSW 2073  
**Email: [danny.slee@measurement.gov.au](mailto:danny.slee@measurement.gov.au)**  
Phone: 02 9449 0169

E-mail Message

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**From:** Kirralee Sanders [NOTES:CN=Kirralee Sanders/OU=CSO/O=NSW\_AG]

**To:** brian.woodward  
[SMTP:brian.woodward@measurement.gov.au]

**Cc:** Adam Gerard [SMTP:CN=Adam Gerard/OU=CSO/O=NSW\_AG@NSW\_AG],  
Craig.Abbs [SMTP:Craig.Abbs@lpma.nsw.gov.au],  
richard.arthur  
[SMTP:richard.arthur@cbdesign.com.au],  
Natalie.Heise [SMTP:Natalie.Heise@lpma.nsw.gov.au],  
Sarah Johnson [SMTP:CN=Sarah Johnson/OU=CSO/O=NSW\_AG@NSW\_AG]

**Sent:** 12/04/2010 at 8:13 PM

**Received:**

**Subject:** No Ship Action Group Inc -v- Minister for Environment, Water, Heritage and the Arts and the State of NSW: AAT No. 2010/1149 - National Measurement Institute - 12 April 2010

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Brian,

I act for the State of New South Wales in respect to an application for review of a Commonwealth's delegate's decision to grant a permit to the New South Wales Property Management Authority for an artificial reef placement of the vessel 'Ex-HMAS Adelaide' off Avoca Beach, New South Wales.

I understand that you have had discussions with Mr Richard Arthur, CB Design today in relation to the potential engagement by my Office as an expert in the above mentioned proceedings. To assist in determining whether to proceed with your engagement, I am instructed to request a quote in relation to the testing of samples (number unknown at this stage) of solid materials including electrical cable, paint and insulation. Each sample is required to be tested for the following seven aroclors (1016, 1221, 1232, 1242, 2148, 1254, 1260) and

your organisation will be required to prepare a formal report/statement for the court.

I'd be grateful if you could set out your organisation's fees and expenses on a per sample basis for consideration. Subject to a review of the quotation and any supporting terms and conditions, I propose to then formally retain your organisation on behalf of my client to provide me with expert assistance in these proceedings.

Please contact Kirralee Sanders on (02) 8224-5357, should you have any questions.

I look forward to receiving your quotation.

regards

Kirralee

Kirralee Sanders  
Assistant Crown Solicitor  
for Crown Solicitor

NSW Crown Solicitor's Office | Level 5, 60-70 Elizabeth Street, Sydney NSW 2000  
GPO Box 25 SYDNEY 2001 | DX 19 SYDNEY |  
[www.cso.nsw.gov.au](http://www.cso.nsw.gov.au)  
Email: [kirralee\\_sanders@agd.nsw.gov.au](mailto:kirralee_sanders@agd.nsw.gov.au) | Tel: (02) 8224 5357 | Fax: (02) 9224 5144

**E-mail Message**

**From:** [Brian.Woodward \[NOTES:Brian.Woodward@measurement.gov.au\]](mailto:Brian.Woodward@measurement.gov.au)  
**To:** [Kirralee\\_Sanders \[SMTP:Kirralee\\_Sanders@agd.nsw.gov.au\]](mailto:Kirralee_Sanders@agd.nsw.gov.au)  
**Cc:** [Richard.Coghlan \[SMTP:Richard.Coghlan@measurement.gov.au\]](mailto:Richard.Coghlan@measurement.gov.au),  
[James.Roberts \[SMTP:James.Roberts@measurement.gov.au\]](mailto:James.Roberts@measurement.gov.au),  
[Peter.Lowther \[SMTP:Peter.Lowther@measurement.gov.au\]](mailto:Peter.Lowther@measurement.gov.au), [Daniel.Slee \[SMTP:Daniel.Slee@measurement.gov.au\]](mailto:Daniel.Slee@measurement.gov.au)  
**Sent:** 13/04/2010 at 2:49 PM  
**Received:** 13/04/2010 at 3:06 PM  
**Subject:** NMI QUOTATION BW10/0413A\_CROW07\_SOLIDS\_PCB [SEC=IN-CONFIDENCE]

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**Attachments:** BW0413A\_CROW07\_SOLIDS\_PCB.pdf

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Hello Kirralee

Please see the attached quotation as requested.  
Please ensure the quotation number is quoted in all correspondence in relation to this matter.  
If you have any questions or need anything further, please contact me.  
If I am unavailable, please contact our Laboratory Services Manager, Mr Richard Coghlan.

Regards  
Brian  
Brian Woodward  
Customer Service Manager  
Analytical Services NSW  
National Measurement Institute  
Department of Innovation, Industry, Science and Research

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Delivery address: 1 Suakin Street, Pymble, NSW 2073  
Postal address: PO Box 385, Pymble, NSW 2073  
Phone: 02 9449 0111 Fax: 02 9449 1653  
Email: [brian.woodward@measurement.gov.au](mailto:brian.woodward@measurement.gov.au)  
Internet: [www.measurement.gov.au](http://www.measurement.gov.au)

From: [Kirralee\\_Sanders@agd.nsw.gov.au](mailto:Kirralee_Sanders@agd.nsw.gov.au)  
[mailto:[Kirralee\\_Sanders@agd.nsw.gov.au](mailto:Kirralee_Sanders@agd.nsw.gov.au)]  
Sent: Tuesday, 13 April 2010 12:45 PM  
To: Woodward, Brian  
Cc: [Craig.Abbs@lpma.nsw.gov.au](mailto:Craig.Abbs@lpma.nsw.gov.au); [Natalie.Heise@lpma.nsw.gov.au](mailto:Natalie.Heise@lpma.nsw.gov.au);  
[richard.arthur@cbdesign.com.au](mailto:richard.arthur@cbdesign.com.au)  
Subject: No Ship Action Group Inc -v- Minister for Environment, Water, Heritage and the Arts and the State of NSW: AAT No. 2010/1149 - National Measurement Institute - 13 April 2010



Australian Government  
National Measurement Institute



## NMI QUOTATION - BW10/0413A\_CROW07

Date of quote: **13 April 2010**  
 Quote valid to: **31 June 2010**  
 Contact: **Kirralee Sanders**  
 Organisation: **NSW Crown Solicitor's Office**  
 Address: **Level 5, 60-70 Elizabeth St, Sydney NSW 2000**  
**[GPO Box 25 SYDNEY 2001]**  
 Telephone: **(02) 8224 5357**  
 Fax: **(02) 9224 5144**  
 e-mail address: **kirralee\_sanders@agd.nsw.gov.au**

1 Suakin Street  
 PO Box 385  
 Pymble NSW 2073  
 Phone: +61 2 9449 0111  
 Fax: +61 2 9449 1653  
 www.measurement.gov.au  
 ABN: 74 599 608 295

Your Reference: **AAT No. 2010/1149**

Dear Kirralee

Thank you for the opportunity to quote for the analysis of solid materials including electrical cable, paint and insulation from Ex HMAS Adelaide. Each sample is required to be tested for the following seven PCB Arochlors - 1016, 1221, 1232, 1242, 1248, 1254, 1260.

1. NMI will test such samples for PCB oil contamination (in the form of the seven Arochlors above) on the surfaces of the materials.
  2. Samples would be sonicated, extracted with hexane, cleaned up with sulphuric acid to remove interferences and analysed by GC-ECD.
  3. Results would be expressed as milligrams of Arochlor per kg of sample on an 'as received' basis.
  4. We would provide results of analysis in the form of a Certificate of Analysis signed by the Section Manager who will supervise the whole procedure.
  5. The analysis is not NATA accredited (NMI holds NATA accreditation for PCB analysis in soil, water and liquid oil only).
- We will need to receive the samples before midday on 14 April 2010 to meet your required deadline of reporting by midday on 20 April 2010.
  - The maximum number of samples we can handle in this timeframe is 10.
  - The materials submitted must be able to be cut up with shears to allow for laboratory subsampling, preparation and processing.

Please see the details and notes below and on the following page.

No. of samples	Test	Limit of Reporting	Price per Sample EXCL GST \$
Maximum of 10	PCB (Arochlors 1016, 1221, 1232, 1242, 1248, 1254, 1260)	1mg / Arochlor/ kg	190.00

Where NMI, its proprietor, its officers, employees or agents agree or are required to provide information or appear as expert witnesses as an outcome of testing undertaken at NMI, an hourly fee of \$175 per person per hour, (including travel time and costs, examination of reports or other evidence, legal briefing, court appearances and other time associated with the matter) will be charged.

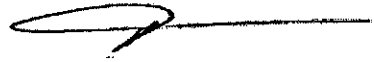
<b>Goods and Services Tax</b>	The prices in this Quotation are EXCLUSIVE of Goods and Services Tax (GST). The current GST rate is 10%. At the completion of the job NMI will issue valid tax invoices and if required, adjustment notes, as per the requirements of the GST legislation.
<b>Limits of Reporting</b>	LORs are targets only and may be revised if your samples are found to contain substances which cause interferences, or if matrix effects become apparent, during analysis. While every effort will be made to minimise such effects, NMI has no control over the sample constituents, and hence cannot guarantee to reach the LORs quoted when persistent interferences occur.
<b>Minimum invoice amount</b>	NMI has a minimum invoice amount of \$275 including handling fee & GST
<b>Legal proceedings samples</b>	If results of the requested analyses may be used in legal proceedings please advise NMI as procedures and pricing may vary
<b>Hazardous Material Advice</b>	See 'Treatment of Samples' section of our Service Terms and Conditions.
<b>Handling and Storage Requirements:</b>	Samples to be kept cold during storage and transit to the Laboratory. Samples may be delivered to the laboratory between 0830 hrs and 1730hrs Monday to Friday.
<b>Agreed Turnaround Time:</b>	As above
<b>Handling Fee:</b>	A standard Handling Fee of \$33.00 inclusive of GST component \$3.00, applies per invoice.
<b>Moisture Content</b>	Not applicable

Please ensure the above NMI Quotation Number BW10/0413A appears on all correspondence, and sample submission or chain of custody forms. This quotation and your acceptance thereof is subject to the Terms and Conditions on the following page.

I trust this quotation is suitable to your requirements. If you have any questions or require any further information, please call me on 02 9449 0111, fax 02 9449 1653, or email to <brian.woodward@measurement.gov.au>

QUOTED BY:

**CUSTOMER SERVICE MANAGER Brian Woodward**



**13 April 2010**

Signature

Date

Delivery address for samples: NMI, Attn: Sample Receipt, 1 Suakin Street, Pymble, NSW 2073

The lodgement of an order or receipt of samples for NMI services constitutes an acceptance of the following terms and conditions.

Unless otherwise agreed in writing, the following terms and conditions apply to services conducted by NMI, resulting from engagement of NMI either by accepting a quotation and/or submission of samples to NMI. The client agrees to be bound by and comply with these terms and conditions. Any terms and conditions you notify to NMI, will apply only if and to the extent that NMI agrees to them in writing.

**SERVICES**

NMI reserves the right to review prices at any time if: (a) significant changes to our costs are incurred beyond our control ie. changes to legislative requirements or variations in tax or excise rates; or (b) any of the assumptions set out in the quotation prove to be incorrect.

Alterations to the scope of the quoted services (including changes to timeframe of services, sample numbers, limits of reporting, agreed analyte suite etc), prior to commencement of the services, may require a review of the quotation.

Alterations to client requirements requested after commencement of the testing process will incur an administration fee of \$22 inclusive of GST plus charges for extra service delivery costs incurred by NMI, if any.

Records will be kept for the required minimum period unless otherwise requested and agreed to by NMI (eg NATA technical accreditation requires records are kept for a minimum of three years).

**BUSINESS HOURS**

Services will be provided by NMI during normal business hours Monday to Friday (excluding public holidays), unless otherwise agreed.

Any services conducted outside NMI premises will be performed Monday to Friday (excluding public holidays) between 9am and 5pm, unless otherwise agreed.

**TURNAROUND TIMES**

Any samples received after 1630 hrs Monday to Friday or on Public Holidays are deemed to have been received the following working day.

It is the client's responsibility to ensure that NMI has access to all information and premises necessary to commence the services as agreed.

The due date of the services may be delayed where such information or access is not provided, or is judged by NMI to be inadequate for the services to commence.

**ACCOUNTS & PAYMENT**

GST at the applicable rate (currently 10%) will be charged in addition to the quoted prices. NMI will issue valid tax invoices and adjustment notes as per requirements of GST legislation.

A minimum invoice fee inclusive of GST applies (this includes a handling fee per invoice).

The establishment of a trading account is subject to the completion of an account application form.

NMI reserves the right to undertake credit verification of all established accounts or to request up-front payment of services before services can commence.

Terms of payment are strictly 30 days from date of invoice. A late fee of up to \$11.00 inclusive of GST may apply if the client does not pay in full by the due date.

**TREATMENT OF SAMPLES**

Unless NMI has otherwise agreed in writing, the client is responsible for collecting samples and for delivering samples for testing to the address nominated in the quotation.

When providing samples to NMI, the client must give written notice of all known safety or health hazards and special procedures relevant to the handling, testing, storage, transport and disposal of samples. NMI reserves the right to refuse to conduct any test where NMI in its absolute discretion determines such testing may pose a safety or health hazard.

Where a formal request is made, NMI will return samples to the client, at the client's expense.

The client acknowledges that during conduct of the services the samples or parts of samples may be altered, damaged, lost or destroyed. NMI shall not be liable to the client or any third party for any samples that are altered, damaged, lost or destroyed during conduct of the services.

The client is responsible for ensuring that samples supplied for testing are representative of the product or material to be analysed and for retaining any duplicate or control samples.

Unless NMI has otherwise agreed in writing, NMI shall not be obliged to return samples to the client and may in its discretion store, experiment on, destroy or dispose of samples.

NMI reserves the right for samples deemed hazardous by NMI to be returned to the client, at the client's expense.

Where possible a representative sample will be kept for a period of one (1) month from the date of final report. NMI will charge for costs incurred for longer term storage, or for disposal of noxious samples.

**OWNERSHIP**

NMI will own the final report until such time as full payment for the services is received, beyond which time the client will own the final report.

All intellectual property rights associated with sample analysis methods, processes and reports are vested, and shall remain vested, in NMI. No other party may replicate or appropriate the method or any part thereof for any use, be it commercial or otherwise, without the express written consent of NMI's General Manager or approved delegate.

**LEGAL OBLIGATIONS**

NMI, its proprietor, its officers, employees and agents are under no legal obligation to provide information or expert witnesses as an outcome of any testing undertaken at NMI.

Any requests for NMI, its proprietor, its officers, employees and agents to provide information or expert witnesses will not be granted without the express written consent of NMI's General Manager or approved delegate.

In circumstances where NMI, its proprietor, its officers, employees or agents agree or are required to provide information or appear as expert witnesses as an outcome of testing undertaken at NMI an hourly fee will be charged to the client.

**FORCE MAJEUR**

NMI shall not be responsible or liable for any delay to perform any of its obligations when such delay or failure to perform any of its obligations is caused by unforeseen circumstances beyond its reasonable control and without its fault or negligence, including, without limitation, Acts of God, fire, explosion, riot, sabotage, strike or other labour dispute, shortage of materials, transportation difficulties or compliance with any order, action, governmental officer, department, agency, authority or committee thereof that renders performance impracticable or impossible for NMI.

**EXCLUSION OF WARRANTY**

To the full extent permitted by law NMI and its proprietor exclude all warranties, terms, conditions or undertakings, (terms), whether express or implied, in relation to services, the report or its contents. Where any legislation implies any terms which cannot be excluded or modified then such terms shall be deemed to be included. However, (to the full extent permitted by law) NMI's liability to the client is limited at NMI's option to the re-performance of service or the refund of service fee.

Without limiting the generality of this clause, it is agreed that, to the full extent permitted by any applicable Commonwealth, State or Territory laws having jurisdiction, NMI and its proprietor will not be liable to the client or any other person for any loss of profits or business whether directly or indirectly incurred or any special, indirect or consequential damages arising from the client's use of NMI's services or reports.

**CLIENT'S RELEASE AND INDEMNITY**

The client hereby releases and indemnifies and shall continue to release and indemnify NMI, its proprietor, its officers, employees and agents from and against all actions, claims, proceedings or demands (including any costs and expenses in defending or servicing same) which may be brought against it or them, in respect of any loss, death, injury, illness or damage to persons or property, and whether direct or indirect and in respect of any infringement of any industrial or intellectual property rights, howsoever arising out of the use of the report or the services of NMI.

**CLIENT'S ACKNOWLEDGMENT**

The client acknowledges that: The client at its own risk uses the report and its contents and any advice, opinions or information supplied by NMI, its proprietor, its officers, employees or agents concerning the service;

The service is performed on the understanding that the client will not hold NMI, its proprietor, its officers, employees or agents liable for any loss or damage resulting from the conduct of the service or the use of or reliance upon the report or its contents; and

It is the responsibility of the client to make its own assessment of the suitability for any purpose of the service, report and its contents and any information or advice generated therefrom.

**GENERAL**

The services are governed by the laws of the State in which services have been conducted, unless Commonwealth law prevails.

The client will not represent in any way that NMI supports or endorses the client's business, goods or services, without NMI's written consent. The client will not make any press release or public statement about the services or NMI without NMI's written consent.

Current from 1 July 2004

**E-mail Message**

**From:** Kirralee Sanders [NOTES:CN=Kirralee Sanders/OU=CSO/O=NSW\_AG]  
**To:** Brian Woodward [SMTP:Brian.Woodward@measurement.gov.au]  
**Cc:** Daniel Slee [SMTP:Daniel.Slee@measurement.gov.au], James.Roberts [SMTP:James.Roberts@measurement.gov.au], Peter.Lowther [SMTP:Peter.Lowther@measurement.gov.au], Richard.Coghlan [SMTP:Richard.Coghlan@measurement.gov.au], Natalie.Heise [SMTP:Natalie.Heise@pma.nsw.gov.au], Craig.Abbs [SMTP:Craig.Abbs@pma.nsw.gov.au], Adam Gerard [SMTP:CN=Adam Gerard/OU=CSO/O=NSW\_AG@NSW\_AG], janeedham [SMTP:janeedham@stajmes.net.au], kel.o'keefe [SMTP:kel.o'keefe@pma.nsw.gov.au], ross.mcfarlan [SMTP:ross.mcfarlan@aecom.com]  
**Sent:** 14/04/2010 at 5:36 PM  
**Received:**  
**Subject:** NMI QUOTATION BW10/0413A\_-Engagement of NMI as testing laboratory -14 April 2010

---

**Attachments:** Federal Court Expert Guidelines - PN CM7 - 25 September 2009.DOC  
 BW0413A\_CROW07\_SOLIDS\_PCB.pdf

Brian,

NMI QUOTATION BW10/0413A

I am very grateful for your help in preparing the quotation so quickly. This is an important project for my client and your assistance has been noted and is very much appreciated.

I confirm acceptance of the quotation including the fees and terms and conditions attached to your quotation.

A copy of the report should be drawn to the attention of the writer at the address below. I propose as discussed to prepare a covering affidavit to you later this week for your comment to go with the report so that it can be pre-approved given that the report will not be available until 21 April 2010 (the day on which my client is required to file and serve all of its evidence).

The Administrative Appeals Tribunal ('AAT') is not bound by the rules of evidence, including rules relating to opinion evidence. The AAT has however published Draft Guidelines relating to Opinion Evidence on its website, however they are not presently in force.

Considering the above view, in my view, it would be preferable that you adopt the Guidelines used by the Federal Court relating to expert witnesses, as these provide a 'best practice' approach to proceedings in the Federal jurisdiction.

Federal Court Practice Not CM7 requires all expert witnesses in proceedings in the Federal Court of Australia engaged by parties to follow the Expert Guidelines issued on 25 September 2009.

You will note that the Expert Guidelines require that at the end of your report you must include the following form of words, which must also be included in any other document you prepare:

"[The expert] has made all the inquiries that [the expert] believes are desirable and appropriate and that no matters of significance that [the expert] regards as relevant have, [to the expert's knowledge] been withheld from the Court."

A copy of those Guidelines are attached.

I await receipt of your report.

I thank you for your assistance today.

kind regards

Kirralee

Kirralee Sanders  
Assistant Crown Solicitor  
for Crown Solicitor

NSW Crown Solicitor's Office | Level 5, 60-70 Elizabeth Street, Sydney  
NSW 2000  
GPO Box 25 SYDNEY 2001 | DX 19 SYDNEY | [www.cso.nsw.gov.au](http://www.cso.nsw.gov.au)  
Email: [kirralee\\_sanders@agd.nsw.gov.au](mailto:kirralee_sanders@agd.nsw.gov.au) | Tel: (02) 8224 5357 | Fax: (02) 9224 5144  
- Federal Court Expert Guidelines - PN CM7 - 25 September 2009.DOC

"Woodward, Brian"  
13/04/2010 02:49 PM

To

cc

"Coghlan, Richard" , "Roberts, James"  
, "Lowther, Peter"  
, "Slee, Daniel"

Subject

NMI QUOTATION BW10/0413A\_CROW07\_SOLIDS\_PCB [SEC=IN-CONFIDENCE]



**Crown  
Solicitor's  
Office**

**My Ref:** 201001253  
T02 Kirralee Sanders  
**Tel:** (02) 8224-5357  
**Fax:** (02) 9224-5144  
**Email:** [crownsol@agd.nsw.gov.au](mailto:crownsol@agd.nsw.gov.au)

16 May 2010

Mr Brian Woodward  
Customer Services Officer  
National Measurement Institute  
PO Box 385  
Pymble NSW 2073

By email [brian.woodward@measurement.gov.au](mailto:brian.woodward@measurement.gov.au)

Dear Mr Woodward,

**No Ship Action Group Inc -v- Minister for Environment, Water, Heritage and the Arts and the State of NSW: AAT No. 2010/1149**

I refer to my discussions with you in relation to the carrying out of further testing on further QA samples.

As you are aware, I act for the State of New South Wales in respect to an Application for Review of a Commonwealth's delegate decision to grant a permit to the New South Wales Property Management Authority for an artificial reef placement of the vessel 'EX-HMAS Adelaide' off Avoca Beach, New South Wales.

I require you to:

1. undertake the testings of QC samples (the exact number shall be advised by a representative of the State) for the following seven (7) aricolors (1016, 1221, 1232, 1242, 1248, 1254 and 1260); and
2. prepare a formal report in relation to all of the Samples attaching a copy of this briefing letter and relevant chain of custody documents; and
3. provide an affidavit attaching the formal report which shall be used in the Proceedings.

I note that your overriding duty in undertaking the testing and providing the report is to assist the Tribunal in the proceedings and you are not being engaged as an advocate for the State.

I would ask you to work under the guidance and direction of Mr Ross McFarland, AECOM. His contact details are Tel +61 2 4911 4982 and mobile +61 413 8333 811.

## Fees

I note your fees (GST exclusive) are as set out in your prior quotation NMI Quotation – BW10/0413A\_CROW 07.

## Expert Guidelines

As the State of New South Wales has retained you as an expert in these proceedings I note that I have previously provided to you a copy of the Expert Guidelines in the Federal Court, *Practice Note CM7*.

The Administrative Appeals Tribunal ('AAT') is not bound by the rules of evidence, including the rules relating to opinion evidence. The AAT has, however, published *Draft Guidelines relating to Opinion Evidence* on its website, however they are not presently in force.

Considering the above, in my view it would be preferable that you adopt the Guidelines used by the Federal Court relating to expert witnesses, as these provide a "best practice" approach to proceedings in the Federal jurisdiction. Federal Court *Practice Note CM7* requires all expert witnesses in proceedings in the Federal Court of Australia engaged by parties to follow the Expert Guidelines issued on 25 September 2009.

You will note that the Expert Guidelines require that at the end of your report you must include the following form of words, which must also be included in any other document you prepare.

*" [The expert] has made all the inquiries that [the expert] believes are desirable and appropriate and that no matters of significance that [the expert] regards as relevant have, to [the expert's] knowledge, been withheld from the Court."*

## GST

If an amount for GST is to be included in your fee, you will need to cite your ABN and either:

- indicate that the fee is inclusive of GST; or
- separately indicate the amount of GST charged.

If your fee is more than \$50.00 and no ABN or compliant invoice is supplied, I am required to withhold 48.5% of the fee on account of GST.

## Invoices

It is essential to comply with Australian Taxation Office requirements that any invoice issued be addressed to the business name: NSW Crown Solicitor's Office.

Please send all invoices to the NSW Crown Solicitor's Office at the following address:

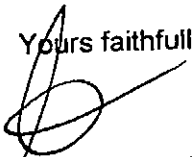
Attention: Ms Kirralee Sanders  
Crown Solicitors Office  
60-70 Elizabeth Street Sydney, New South Wales, 2000

I await receipt of the report.

I would be grateful if you would forward the report directly to the writer as soon as possible.

Please contact Kirralee Sanders on (02) 8224-5357, should you have any questions.

Yours faithfully



Kirralee Sanders  
Assistant Crown Solicitor  
for Crown Solicitor



**Crown  
Solicitor's  
Office**

**My Ref:** 201000432  
T02 Kirralee Sanders  
**Tel:** (02) 8224-5357  
**Fax:** (02) 9224-5144  
**Email:** [crownsol@agd.nsw.gov.au](mailto:crownsol@agd.nsw.gov.au)

18 May 2010

Mr Brian Woodward  
Customer Services Officer  
National Measurement Institute  
PO Box 385  
Pymble NSW 2073

By email [brian.woodward@measurement.gov.au](mailto:brian.woodward@measurement.gov.au)

Dear Mr Woodward,

**No Ship Action Group Inc -v- Minister for Environment, Water, Heritage and the Arts and the State of NSW: AAT No. 2010/1149**

I refer to your discussions with Ms Sanders, of my office, in relation to the carrying out of further testing on further QA samples.

As you are aware, I act for the State of New South Wales in an Application for Review of a Commonwealth's delegate decision to grant a permit to the New South Wales Property Management Authority for an artificial reef placement of the vessel 'EX-HMAS Adelaide' off Avoca Beach, New South Wales.

I require you to:

1. undertake the testing of a further seven (7) samples for the following seven (7) arocolors (1016, 1221, 1232, 1242, 1248, 1254 and 1260); and
2. prepare a formal report in relation to all of the Samples attaching a copy of this briefing letter and relevant chain of custody documents; and
3. provide an affidavit attaching the formal report which shall be used in the Proceedings.

I note that your overriding duty in undertaking the testing and providing the report is to assist the Tribunal in the proceedings and you are not being engaged as an advocate for the State.

I would ask you to work under the guidance and direction of Mr Ross McFarland, AECOM. His contact details are Tel +61 2 4911 4982 and mobile +61 413 8333 811.

### Fees

I note your fees (GST exclusive) are as set out in your prior quotation NMI Quotation – BW10/0413A\_CROW 07 although a 100% surcharge will apply given that I require the report to be provided by close of business tomorrow.

### Expert Guidelines

As the State of New South Wales has retained you as an expert in these proceedings I note that I have previously provided to you a copy of the Expert Guidelines in the Federal Court, *Practice Note CM7*.

The Administrative Appeals Tribunal ('AAT') is not bound by the rules of evidence, including the rules relating to opinion evidence. The AAT has, however, published *Draft Guidelines relating to Opinion Evidence* on its website, however they are not presently in force.

Considering the above, in my view it would be preferable that you adopt the Guidelines used by the Federal Court relating to expert witnesses, as these provide a "best practice" approach to proceedings in the Federal jurisdiction. Federal Court *Practice Note CM7* requires all expert witnesses in proceedings in the Federal Court of Australia engaged by parties to follow the Expert Guidelines issued on 25 September 2009.

You will note that the Expert Guidelines require that at the end of your report you must include the following form of words, which must also be included in any other document you prepare.

*" [The expert] has made all the inquiries that [the expert] believes are desirable and appropriate and that no matters of significance that [the expert] regards as relevant have, to [the expert's] knowledge, been withheld from the Court."*

### GST

If an amount for GST is to be included in your fee, you will need to cite your ABN and either:

- indicate that the fee is inclusive of GST; or
- separately indicate the amount of GST charged.

If your fee is more than \$50.00 and no ABN or compliant invoice is supplied, I am required to withhold 48.5% of the fee on account of GST.

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Please send all invoices to the NSW Crown Solicitor's Office at the following address:

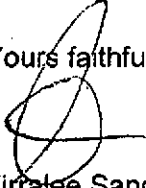
Attention: Ms Kirralee Sanders  
Crown Solicitors Office  
60-70 Elizabeth Street Sydney, New South Wales, 2000

I await receipt of the report.

I would be grateful if you would forward the report directly to Kirralee Sanders as soon as possible.

Please contact Kirralee Sanders on (02) 8224-5357, should you have any questions.

Yours faithfully

A handwritten signature in black ink, consisting of several overlapping loops and a horizontal stroke at the bottom.

**Kirralee Sanders**  
**Assistant Crown Solicitor**  
**for Crown Solicitor**

## FEDERAL COURT OF AUSTRALIA

### *Practice Note CM 7*

## EXPERT WITNESSES IN PROCEEDINGS IN THE FEDERAL COURT OF AUSTRALIA

1. Practitioners should give a copy of the following guidelines to any witness they propose to retain for the purpose of preparing a report or giving evidence in a proceeding as to an opinion held by the witness that is wholly or substantially based on the specialised knowledge of the witness (see **Part 3.3 - Opinion** of the *Evidence Act 1995* (Cth)).
2. The guidelines are not intended to address all aspects of an expert witness's duties, but are intended to facilitate the admission of opinion evidence<sup>1</sup>, and to assist experts to understand in general terms what the Court expects of them. Additionally, it is hoped that the guidelines will assist individual expert witnesses to avoid the criticism that is sometimes made (whether rightly or wrongly) that expert witnesses lack objectivity, or have coloured their evidence in favour of the party calling them.

### Guidelines

#### **1. General Duty to the Court<sup>2</sup>**

- 1.1 An expert witness has an overriding duty to assist the Court on matters relevant to the expert's area of expertise.
- 1.2 An expert witness is not an advocate for a party even when giving testimony that is necessarily evaluative rather than inferential<sup>3</sup>.
- 1.3 An expert witness's paramount duty is to the Court and not to the person retaining the expert.

#### **2. The Form of the Expert Evidence<sup>4</sup>**

- 2.1 An expert's written report must give details of the expert's qualifications and of the literature or other material used in making the report.
- 2.2 All assumptions of fact made by the expert should be clearly and fully stated.

---

<sup>1</sup> As to the distinction between expert opinion evidence and expert assistance see *Evans Deakin Pty Ltd v Sebel Furniture Ltd* [2003] FCA 171 per Allsop J at [676].

<sup>2</sup> See rule 35.3 Civil Procedure Rules (UK); see also Lord Woolf "Medics, Lawyers and the Courts" [1997] 16 CJC 302 at 313.

<sup>3</sup> See *Sampi v State of Western Australia* [2005] FCA 777 at [792]-[793], and *ACCC v Liquorland and Woolworths* [2006] FCA 826 at [836]-[842].

<sup>4</sup> See rule 35.10 Civil Procedure Rules (UK) and Practice Direction 35 – Experts and Assessors (UK); *HG v the Queen* (1999) 197 CLR 414 per Gleeson CJ at [39]-[43]; *Ocean Marine Mutual Insurance Association (Europe) OV v Jetopay Pty Ltd* [2000] FCA 1463 (FC) at [17]-[23].

- 2.3 The report should identify and state the qualifications of each person who carried out any tests or experiments upon which the expert relied in compiling the report.
- 2.4 Where several opinions are provided in the report, the expert should summarise them.
- 2.5 The expert should give the reasons for each opinion.
- 2.6 At the end of the report the expert should declare that “[the expert] has *made all the inquiries that [the expert] believes are desirable and appropriate and that no matters of significance that [the expert] regards as relevant have, to [the expert’s] knowledge, been withheld from the Court.*”
- 2.7 There should be included in or attached to the report: (i) a statement of the questions or issues that the expert was asked to address; (ii) the factual premises upon which the report proceeds; and (iii) the documents and other materials that the expert has been instructed to consider.
- 2.8 If, after exchange of reports or at any other stage, an expert witness changes a material opinion, having read another expert’s report or for any other reason, the change should be communicated in a timely manner (through legal representatives) to each party to whom the expert witness’s report has been provided and, when appropriate, to the Court<sup>5</sup>.
- 2.9 If an expert’s opinion is not fully researched because the expert considers that insufficient data are available, or for any other reason, this must be stated with an indication that the opinion is no more than a provisional one. Where an expert witness who has prepared a report believes that it may be incomplete or inaccurate without some qualification, that qualification must be stated in the report (see footnote 5).
- 2.10 The expert should make it clear when a particular question or issue falls outside the relevant field of expertise.
- 2.11 Where an expert’s report refers to photographs, plans, calculations, analyses, measurements, survey reports or other extrinsic matter, these must be provided to the opposite party at the same time as the exchange of reports<sup>6</sup>.

### 3. Experts’ Conference

- 3.1 If experts retained by the parties meet at the direction of the Court, it would be improper for an expert to be given, or to accept, instructions not to reach agreement. If, at a meeting directed by the Court, the experts cannot reach agreement about matters of expert opinion, they should specify their reasons for being unable to do so.

MEJ BLACK  
Chief Justice  
25 September 2009

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<sup>5</sup> The “*Ikarian Reefer*” [1993] 20 FSR 563 at 565

<sup>6</sup> The “*Ikarian Reefer*” [1993] 20 FSR 563 at 565-566. See also Ormrod “*Scientific Evidence in Court*” [1968] Crim LR 240

CROWN 07/100414  
CHAIN OF CUSTODY FORM

CROWN 07

Due 19/4/10  
620

From: Getex Pty Ltd  
Address: 2.02, Building 2, Waterloo Business Park  
35 Waterloo Road  
North Ryde NSW 2113  
Phone: (02) 9889 2488  
Facsimile: (02) 9889 2499  
Email: crawnsol@agd.nsw.gov.au  
Attention: Kirralie Sanders (Crown Solicitor's Office)

To: National Measurement Institute  
Address: 1 Suarokin Street  
Pymble NSW 2073  
Phone: (02) 9449 0111  
Facsimile: (02) 9449 1653

Date: 14 April 2010  
Order No.: N/A  
Project No.: 5315

TAT Required: Standard Day TAT

GETEX

Standard Water Detection Limits (ANZECC 2000 95%)  Special Water Detection Limits  
(Please advise of additional charges)

Samples received at ambient temperature

Samples received chilled

Received by (signature) *[Signature]*

Date: 14/4/2010

NMI Barcode Number	GETEX Sample Number	Container Plastic Tube - PT Bag - B Petri Dish - PD Plastic Bottle - PB Glass Jar - GJ Glass Bottle - GB Glass Vial - GV	Material							Water							Paint/Dust Filters/Wipes							
			TPH/BTEX	Metals <sup>1</sup>	PAH	PCB	VOC	Leachate Metals <sup>2</sup> (mg/L)	Leachate PAH (mg/L)	Other	TPH/BTEX	Metals <sup>1</sup>	PAH	OC/OP/PCB	VOC Scan	SVOC Scan	TSS (mg)	Ash & Comb. Matter	EC	pH	Other	Lead (mg/kg)	Lead Total (mg)	PCB
N1C/008938	5315/PCB1	GJ				X																		
N1C/008929	5315/PCB2	GJ				X																		
N1C/008930	5315/PCB3	GJ				X																		
N1C/008931	5315/PCB4	GJ				X																		
N1C/008932	5315/PCB5	GJ				X																		
N1C/008933	5315/PCB6	GJ				X																		
N1C/008934	5315/PCB7	PT																						X
N1C/008936	5315/PCB8	GJ				X																		
N1C/008935	5315/PCB9	GJ				X																		
N1C/008937	5315/PCB10	GJ				X																		
<b>Total</b>						8																		1

Notes:

I have relinquished these samples to National Measurement Institute (NMI): J. Thompson-Laing

<sup>1</sup> As, Cd, Cu, Cr, Hg, Ni, Pb, Zn

<sup>2</sup> As, Cd, Cr, Hg, Ni, Pb

**NMI Sample Continuity Form (use one form for each sample)**

Job CROW07/100419.

Sample Number: N10/008928 → N10/008937.

Client ref. CROW07 BW10/0413A

Continuity

Date	Transferred by	to	description	Original weight / volume PLUS Weight / volume used for analysis
received 11/4/10	JUSTIN THOMPSON-LAING of GETEX P/L	DANNY SLEE of NMI.	JAR WITH CABLE + INSULATION MATERIAL SWAB	250g jars + bag & tube swab.
transferred:				
14/4/10	Danny Slee of	ORG LAB 333 by Danny Slee of	"	250g jars + bag + tube swab.

History

Date	Comments
	Sample stored in lockable cabinet when not being processed.



REPORT OF ANALYSIS

<b>Client</b>	: CROWN SOLICITOR'S OFFICE 60-70 ELIZABETH STREET SYDNEY NSW 2000	<b>Job No.</b>	: CROW07/100419
<b>Attention</b>	: KIRRALEE SANDERS	<b>Quote No.</b>	: QT-01735
<b>Project Name</b>	:	<b>Order No.</b>	:
<b>Your Client Services Manager</b>	: BRIAN WOODWARD	<b>Date Sampled</b>	:
		<b>Date Received</b>	: 14-APR-2010
		<b>Sampled By</b>	:
		<b>Phone</b>	: (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/008928	5315/PCB1	SOLID MATERIAL PROJECT 5315
N10/008929	5315/PCB2	SOLID MATERIAL PROJECT 5315
N10/008930	5315/PCB3	SOLID MATERIAL PROJECT 5315
N10/008931	5315/PCB4	SOLID MATERIAL PROJECT 5315

Lab Reg No.		N10/008928	N10/008929	N10/008930	N10/008931	
Sample Reference	Units	5315/PCB1	5315/PCB2	5315/PCB3	5315/PCB4	Method
<b>PCB Aroclors</b>						
Aroclor 1016	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1221	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1232	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1242	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1248	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1254	mg/kg	<1	<1	<1	<1	NR 19
Aroclor 1260	mg/kg	<1	<1	<1	<1	NR 19
Total PCB's (as above)	mg/kg	<1	<1	<1	<1	NR 19
<b>Dates</b>						
Date extracted		15-APR-2010	15-APR-2010	15-APR-2010	15-APR-2010	
Date analysed		16-APR-2010	16-APR-2010	16-APR-2010	16-APR-2010	

N10/008928  
to N10/008933 & N10/008935 to N10/008937

Sample Preparation:

Cable samples: Cable separated into components. A portion of each component, representing a cross-section of the cable, was selected and cut into approx 5 mm pieces.

Insulation material: sample is cut into pieces using scissors.

Analysis:

Sub-sample is extracted with hexane. Extract cleaned up using acid then analysed by GC-ECD. Selected samples confirmed using GC-Tandem MS.

Results reported as mg/kg and Limit of Reporting (LOR) is 1 mg/kg per Aroclor.

Notes:

N10/008935: GC-ECD chromatogram shows a best match to Aroclor 1242.

## REPORT OF ANALYSIS

Page: 2 of 4  
Report No. RN790178

N10/008932: GC-ECD LOR raised due to high levels of matrix interference. Trace level PCBs identified by GC-Tandem-MS with LOR raised to 10 mg/kg.



Danny Slee, Section Manager  
Organics - NSW

20-APR-2010

## REPORT OF ANALYSIS

Page: 3 of 4

Report No. RN790178

<b>Client</b> : CROWN SOLICITOR'S OFFICE 60-70 ELIZABETH STREET SYDNEY NSW 2000  <b>Attention</b> : KIRRALEE SANDERS <b>Project Name</b> : <b>Your Client Services Manager</b> : BRIAN WOODWARD	<b>Job No.</b> : CROW07/100419 <b>Quote No.</b> : QT-01735 <b>Order No.</b> : <b>Date Sampled</b> : <b>Date Received</b> : 14-APR-2010 <b>Sampled By</b> :  <b>Phone</b> : (02) 94490151
---	---

Lab Reg No.	Sample Ref	Sample Description
N10/008932	5315/PCB5	SOLID MATERIAL PROJECT 5315
N10/008933	5315/PCB6	SOLID MATERIAL PROJECT 5315
N10/008935	5315/PCB8	SOLID MATERIAL PROJECT 5315
N10/008936	5315/PCB9	SOLID MATERIAL PROJECT 5315

Lab Reg No.	Sample Reference	N10/008932	N10/008933	N10/008935	N10/008936	Method
	Units	5315/PCB5	5315/PCB6	5315/PCB8	5315/PCB9	
<b>PCB Aroclors</b>						
Aroclor 1016	mg/kg	<10	<1	<1	<1	NR 19
Aroclor 1221	mg/kg	<10	<1	<1	<1	NR 19
Aroclor 1232	mg/kg	<10	<1	<1	<1	NR 19
Aroclor 1242	mg/kg	<10	<1	33	<1	NR 19
Aroclor 1248	mg/kg	<10	<1	<1	<1	NR 19
Aroclor 1254	mg/kg	<10	<1	<1	<1	NR 19
Aroclor 1260	mg/kg	<10	<1	<1	<1	NR 19
Total PCB's (as above)	mg/kg	<10	<1	33	<1	NR 19
<b>Dates</b>						
Date extracted		15-APR-2010	15-APR-2010	15-APR-2010	15-APR-2010	
Date analysed		16-APR-2010	16-APR-2010	16-APR-2010	16-APR-2010	



Danny Slee, Section Manager  
Organics - NSW

20-APR-2010

## REPORT OF ANALYSIS

Page: 4 of 4

Report No. RN790178

<b>Client</b>	: CROWN SOLICITOR'S OFFICE 60-70 ELIZABETH STREET SYDNEY NSW 2000	<b>Job No.</b>	: CROW07/100419
		<b>Quote No.</b>	: QT-01735
		<b>Order No.</b>	:
		<b>Date Sampled</b>	:
<b>Attention</b>	: KIRRALEE SANDERS	<b>Date Received</b>	: 14-APR-2010
<b>Project Name</b>	:	<b>Sampled By</b>	:
<b>Your Client Services Manager</b>	: BRIAN WOODWARD	<b>Phone</b>	: (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/008937	5315/PCB10	SOLID MATERIAL PROJECT 5315

Lab Reg No.		N10/008937				
Sample Reference	Units	5315/PCB10				Method
<b>PCB Aroclors</b>						
Aroclor 1016	mg/kg	<1				NR_19
Aroclor 1221	mg/kg	<1				NR_19
Aroclor 1232	mg/kg	<1				NR_19
Aroclor 1242	mg/kg	<1				NR_19
Aroclor 1248	mg/kg	<1				NR_19
Aroclor 1254	mg/kg	<1				NR_19
Aroclor 1260	mg/kg	<1				NR_19
Total PCB's (as above)	mg/kg	<1				NR_19
<b>Dates</b>						
Date extracted		15-APR-2010				
Date analysed		16-APR-2010				



Danny Slee, Section Manager  
Organics - NSW

20-APR-2010

Results relate only to the sample(s) tested.  
This Report supersedes reports: *RN790171*  
This Report shall not be reproduced except in full.



REPORT OF ANALYSIS

<b>Client</b>	: CROWN SOLICITOR'S OFFICE 60-70 ELIZABETH STREET SYDNEY NSW 2000	<b>Job No.</b>	: CROW07/100419
		<b>Quote No.</b>	: QT-01735
		<b>Order No.</b>	:
		<b>Date Sampled</b>	:
<b>Attention</b>	: KIRRALEE SANDERS	<b>Date Received</b>	: 14-APR-2010
<b>Project Name</b>	:	<b>Sampled By</b>	:
<b>Your Client Services Manager</b>	: BRIAN WOODWARD	<b>Phone</b>	: (02) 94490151

<b>Lab Reg No.</b>	<b>Sample Ref</b>	<b>Sample Description</b>
N10/008934	5315/PCB7	WIPE PROJECT 5315

Lab Reg No.	Sample Ref	Sample Description	Units	Method
N10/008934	5315/PCB7			
<b>PCB Aroclors</b>				
Aroclor 1016	ug	<1		NR 19
Aroclor 1221	ug	<1		NR 19
Aroclor 1232	ug	<1		NR 19
Aroclor 1242	ug	<1		NR 19
Aroclor 1248	ug	<1		NR 19
Aroclor 1254	ug	<1		NR 19
Aroclor 1260	ug	<1		NR 19
Total PCB's (as above)	ug	<1		NR 19
<b>Dates</b>				
Date extracted		15-APR-2010		
Date analysed		16-APR-2010		

N10/008934

Sample Preparation & Analysis:

Entire swab was extracted with hexane. Extract cleaned up using acid then analysed by GC-ECD.

Limit of Reporting is 1 ug per Aroclor.

Danny Slee, Section Manager  
Organics - NSW

20-APR-2010

## REPORT OF ANALYSIS

Page: 2 of 2  
Report No. RN790179

Results relate only to the sample(s) tested.  
This Report supersedes reports: *RN790172*  
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Australian Government  
National Measurement Institute

QUALITY ASSURANCE REPORT

Client: CROWN SOLICITOR'S OFFICE

NMI QA Report No: GROW07/100419

Sample Matrix: Solid

Analyte	Method	LOR	Blank	Sample Duplicates			Recoveries	
				Sample	Duplicate	Triplicate	LCS	Matrix Spike
		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	%	%
<b>Organics Section</b>				N10/008935				N10/008936
<b>PCB Compounds</b>								
PCB Arochlor 1016	NR19	1	<1	<1	<1	<1	-	-
PCB Arochlor 1221	NR19	1	<1	<1	<1	<1	-	-
PCB Arochlor 1232	NR19	1	<1	<1	<1	<1	-	-
PCB Arochlor 1242	NR19	1	<1	33	35	31	-	-
PCB Arochlor 1248	NR19	1	<1	<1	<1	<1	-	-
PCB Arochlor 1254	NR19	1	<1	<1	<1	<1	-	-
PCB Arochlor 1260	NR19	1	<1	<1	<1	<1	100	98
PCB Total	NR19	1	<1	33	35	31	-	-

Results expressed in percentage (%) of mg/kg wherever appropriate.

Acceptable Spike recovery is 50-150%

This report shall not be reproduced except in full.

LCS - Laboratory Control Spike.

LOR - Limit of Reporting.

Signed:

Date:

Danny Slee  
Organics Manager, NMI-Pymble  
20/04/2010

# NMI NSW SUB CONTRACT ANALYSIS CHAIN OF CUSTODY FORM

From: National Measurement Institute  
 1 Suakin St  
 (PO Box 385) PYMBLE NSW 2073  
 Phone: (02) 9449 0111  
 Fax: (02) 9449 1653

Relinquished by: Penny Sled  
 (Print name)

Date: 16/4/10

To: David Springer  
ENVIROLAB

After receiving the samples, please fill in the details on the bottom of this form and either scan & email to the addresses provided on the right or fax to NMI NSW on (02) 9449 1653.

**NMI NSW CONTACT FOR ENQUIRIES AND REPORTING OF RESULTS / INVOICING:**

**GEOFFREY THURTELL and SUSANNE NEUMAN**


EMAIL: geoffrey.thurtell@measurement.gov.au  
susanne.neuman@measurement.gov.au

Phone: (02) 9440 0111 Fax: (02) 9440 1653

**RESULTS REQUIRED BY:** \_\_\_\_\_

*[Signature]*  
 16/4/10

NMI NSW SAMPLE NUMBERS	CLIENT REFERENCE(S)	SAMPLE DESCRIPTION	DATE SAMPLED	TESTS REQUIRED	NOTES & COMMENTS
1 N10/008929	5315/PCB2	Insulation	14/4/10	PCB Aroclors	Weight 2.07g.
2 N10/008932	5315/PCB5	Black insulation	14/4/10	PCB Aroclors	1.01g
3 N10/008936	5315/PCB9	Cable	14/4/10	PCB Aroclors	10.64g
4 N10/008937	5315/PCB10	Cable	14/4/10	PCB Aroclors	10.18g
5 N10/008937 Dup	5315/PCB10	Cable	14/4/10	PCB Aroclors	10.35g.
6 N10/008937 Spike	5315/PCB10	Cable	14/4/10	PCB Aroclors	10.61g.
		NOTE ① LOR required is 1.0mg/kg per Aroclor.			
		② Samples are pre-weighed - analyse entire sample			

 EnviroLab Services  
 12 Ashley St  
 Cheshamwood NSW 2067  
 Ph: 9910 6200

Job No: 40020  
 Date received: 16/4/10  
 Time received: 4:30pm  
 Receive by: Z.L.  
 Temp: Cool Ambient  
 Location: EnviroLab

Report +  
 Invoicing  
 details TBA

*[Signature]*

Received by: Zhangji Date: 16/4/10  
 Print Name: Z.L. Time: 4:30pm

Sample Condition: If satisfactory tick or describe problem:

Email/Fax initial report to: Geoffrey Thurtell & Susanne Neuman (contact as above) Send final report and invoice to: Geoffrey Thurtell (contact as above)

# NMI NSW SUB CONTRACT ANALYSIS CHAIN OF CUSTODY FORM

**From:** National Measurement Institute  
 1 Suakin St  
 (PO Box 385) PYMBLE NSW 2073  
**Phone:** (02) 9449 0111  
**Fax:** (02) 9449 1653

**Relinquished by:** Danny Lee  
 (Print name) *DL*


**Date:** 19/4/10

**To:** David Springer  
ENVIROLAB

After receiving the samples, please fill in the details on the bottom of this form and either scan & email to the addresses provided on the right or fax to NMI NSW on (02) 9449 1653.

**NMI NSW CONTACT FOR ENQUIRIES AND REPORTING OF RESULTS / INVOICING:**  
**~~GEOFFREY THURTELL~~ and ~~SUSANNE NEUMAN~~**  
**EMAIL:** ~~geoffrey.thurtell@measurement.gov.au~~  
~~susanne.neuman@measurement.gov.au~~ *SN*  
**Phone:** (02) 9449 0111 **Fax:** (02) 9449 1653

**URGENT**  
 RESULTS REQUIRED BY: 1 1

NMI NSW SAMPLE NUMBERS	CLIENT REFERENCE(S)	SAMPLE DESCRIPTION	DATE SAMPLED	TESTS REQUIRED	NOTES & COMMENTS
7 N10/008935	5315/PCB8	Cable	14/4/10	PCB Aroclors	10.54g
 EnviroLab Services 12 Ashley St Chatswood NSW 2067 Ph: 9910 6200					
<b>Job No:</b>		① Extract whole sample - sample is pre-weighed			
<b>Date received:</b>		② LOR is 1.0 mg/kg			
<b>Time received:</b>		Add to 4cc20			
<b>Received by:</b>		Rec 17/4/10 <i>DL</i>			
<b>Temp: Cool/Ambient</b>					
<b>Inst/ID: ICA/ES/ENRICK</b>					
<b>Security: Intact/Broken/None</b>					

**Received by:** ..... **Date:** .....

**Print Name:** ..... **Time:** .....

**Sample Condition:** If satisfactory tick or describe problem:

**Email/Fax initial report to:** Geoffrey Thurtell & Susanne Neuman (contact as above)      **Send final report and invoice to:** Geoffrey Thurtell (contact as above)

# CHAIN OF CUSTODY - Client

date 17/05/10

CRON 7/100512 L.A.



## ENVIROLAB SERVICES

Client: <u>Office of the Crown Solicitor</u>	Client Project Name and Number: <u>ex HMAS Adelaide</u>	Envirolab Services 12 Ashley St, Chatswood, NSW, 2067 <u>Office of the Crown Solicitor</u>
Project Mgr:	PO No.:	Phone: <u>02-9958 5801</u>
Sampler:	Envirolab Services Quote No.:	Fax: <u>02-9958 5803</u>
Address:	Date results required: <u>17 May 2010</u>	E-mail: <u>tnotas@envirolabservices.com.au</u>
Email:	Or choose: standard / 1 day / 2 day / 3 day <u>1 day</u>	Contact: <u>Tania Notaras</u>
Phone:	Note: Inform lab in advance if urgent turnaround is required - surcharge applies	

Sample Information				Tests Required	Comments
Envirolab Sample ID	Client Sample ID	Date sampled	Type of sample		Provide as much information about the sample as you can
				PCB	
NIC 7011888	HMAS 11	11/5/10	Cable		Report & Invoice to Crown Solicitor  Do NOT RETURN TO ENVIROLAB
NIC 7011888	HMAS 16		Cable		
NIC 7011888	HMAS 33		Rubber Gasket		
NIC 7011888	HMAS 56		Rubber Gasket		
NIC 7011888	HMAS 13		Insulation		
NIC 7011888	HMAS 20		Insulation		

RECEIVED  
12 MAY 2010 11:20am  
BY: [Signature]

Relinquished by (company): <u>Envirolab</u>	Received by (company): <u>NMI</u>	Samples Received: Cool or Ambient (circle one)
Print Name: <u>[Signature]</u>	Print Name: <u>Danny Steer</u>	Temperature Received at: (If applicable)
Date & Time: <u>12/5/10 9am</u>	Date & Time: <u>12/5/10 11:30am</u>	Transported by: Hand delivered / courier
Signature: <u>[Signature]</u>	Signature: <u>[Signature]</u>	Page No:

**NMI Sample Continuity Form (use one form for each sample)**

Sample Number: <sup>5</sup> N10/011553 - N10/011558.

Client ref. CROWN SOLICITORS.

Continuity

Date	Transferred by	to	description	Original weight / volume PLUS Weight / volume used for analysis
received 12/5/10 11:05 AM Phil Conroy	Phil Conroy	Danny Sloc	100 gm ES147	
transferred 12/5/10 11:20 AM		Danny Sloc : 1511 section	Jars with cables & insulation material	6 x 250g jars
12/5/10 11:40 AM	Danny Sloc	Danny Sloc Organics Section (Room 333)	"	"
				NOG weights used for analysis are recorded in book 41 (copy kept record book)

History

Date	Comments
12/5/10 11:20 AM	Security seal intact. <i>DP</i>
	Samples stored in Organics Section (Room 333) in lockable cabinet when not in process <i>DP</i>
	Samples received in esky. No ice bricks. Ambient temp. <i>DP</i>



REPORT OF ANALYSIS

Client	: CROWN SOLICITOR'S OFFICE NSW LEVEL 5, 60-70 ELIZABETH ST SYDNEY NSW 2000	Job No.	: CROW07/100512
		Quote No.	: QT-01735
		Order No.	:
		Date Sampled	: 11-MAY-2010
		Date Received	: 12-MAY-2010
Attention	: K SANDERS	Sampled By	:
Project Name	: EX HMAS ADELAIDE		
Your Client Services Manager	: BRIAN WOODWARD	Phone	: (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/011553	HMAS 11	CABLE EX HMAS ADELAIDE
N10/011554	HMAS 16	CABLE EX HMAS ADELAIDE
N10/011555	HMAS 33	RUBBER GASKET EX HMAS ADELAIDE
N10/011556	HMAS 56	RUBBER GASKET EX HMAS ADELAIDE

Lab Reg No.		N10/011553	N10/011554	N10/011555	N10/011556	
Sample Reference	Units	HMAS 11	HMAS 16	HMAS 33	HMAS 56	Method
<b>PCB Aroclors</b>						
Aroclor 1016	mg/kg	<1	<1	<1	<1	NR_19
Aroclor 1221	mg/kg	<1	<1	<1	<1	NR_19
Aroclor 1232	mg/kg	<1	<1	<1	<1	NR_19
Aroclor 1242	mg/kg	<1	<1	18	<1	NR_19
Aroclor 1248	mg/kg	<1	<1	<1	<1	NR_19
Aroclor 1254	mg/kg	<1	<1	<1	<1	NR_19
Aroclor 1260	mg/kg	<1	<1	<1	<1	NR_19
Total PCB's (as above)	mg/kg	<1	<1	18	<1	NR_19
<b>Dates</b>						
Date extracted		12-MAY-2010	12-MAY-2010	12-MAY-2010	12-MAY-2010	
Date analysed		13-MAY-2010	13-MAY-2010	13-MAY-2010	13-MAY-2010	

N10/011553  
to N10/011558:

Sample Preparation:

Cable samples: Cable separated into components. A portion of each component, representing a cross-section of the cable, was selected and cut into approx 5 mm pieces.

Insulation & gasket material: sample is cut into pieces using scissors.

Analysis:

Sub-sample is extracted with hexane. Extract cleaned up using acid then analysed by GC-ECD. Selected samples confirmed using GC-Tandem MS.

Results reported as mg/kg and Limit of Reporting (LOR) is 1 mg/kg per Aroclor.

Notes:

N10/0011555: GC-ECD chromatogram shows a best match to Aroclor 1242.

## REPORT OF ANALYSIS

Page: 2 of 3  
Report No. RN794370

N10/0011558: GC-ECD chromatogram shows a best match to Aroclor 1242. Detection of PCBs confirmed by GC Tandem MS.



Danny Slee, Section Manager  
Organics - NSW

17-MAY-2010

## REPORT OF ANALYSIS

Page: 3 of 3

Report No. RN794370

Client : CROWN SOLICITOR'S OFFICE NSW LEVEL 5, 60-70 ELIZABETH ST SYDNEY NSW 2000	Job No. : CROW07/100512 Quote No. : QT-01735 Order No. : Date Sampled : 11-MAY-2010 Date Received : 12-MAY-2010 Sampled By :
Attention : K SANDERS Project Name : EX HMAS ADELAIDE Your Client Services Manager : BRIAN WOODWARD	Phone : (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/011557	HMAS 13	INSULATION EX HMAS ADELAIDE
N10/011558	HMAS 20	INSULATION EX HMAS ADELAIDE

Lab Reg No.	Units	N10/011557	N10/011558	Method
Sample Reference		HMAS 13	HMAS 20	
<b>PCB Aroclors</b>				
Aroclor 1016	mg/kg	< 1	< 1	NR_19
Aroclor 1221	mg/kg	< 1	< 1	NR_19
Aroclor 1232	mg/kg	< 1	< 1	NR_19
Aroclor 1242	mg/kg	< 1	2	NR_19
Aroclor 1248	mg/kg	< 1	< 1	NR_19
Aroclor 1254	mg/kg	< 1	< 1	NR_19
Aroclor 1260	mg/kg	< 1	< 1	NR_19
Total PCB's (as above)	mg/kg	< 1	2	NR_19
<b>Dates</b>				
Date extracted		12-MAY-2010	12-MAY-2010	
Date analysed		13-MAY-2010	13-MAY-2010	



Danny Slee, Section Manager  
Organics - NSW

17-MAY-2010

Results relate only to the sample(s) tested.  
 This Report supersedes reports: RN794321  
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**Australian Government**  
**National Measurement Institute**

**QUALITY ASSURANCE REPORT**

**Client:** CROWN SOLICITOR'S OFFICE NSW

**NMI QA Report No:** CROW07/100512

**Sample Matrix:** Solid

Analyte	Method	LOR	Blank	Sample Duplicates			Recoveries	
				Sample	Duplicate	RPD	LCS	Matrix Spike
		mg/kg	mg/kg	mg/kg	mg/kg	%	%	%
<b>Organics Section</b>				N10/011555				N10/011555
<b>PCB Compounds</b>								
PCB Arochlor 1016	NR19	1	<1	<1	<1	-	-	-
PCB Arochlor 1221	NR19	1	<1	<1	<1	-	-	-
PCB Arochlor 1232	NR19	1	<1	<1	<1	-	-	-
PCB Arochlor 1242	NR19	1	<1	18	18	0	-	-
PCB Arochlor 1248	NR19	1	<1	<1	<1	-	-	-
PCB Arochlor 1254	NR19	1	<1	<1	<1	-	-	-
PCB Arochlor 1260	NR19	1	<1	<1	<1	-	103	82
PCB Total	NR19	1	<1	18	18	0	-	-

Results expressed in percentage (%) or mg/kg wherever appropriate.

Acceptable Spike recovery is 50-150%

Acceptable RPDs on spikes and duplicates is less than 40%.

RPD= Relative Percentage Difference.

This report shall not be reproduced except in full.

LCS= Laboratory Control Spike.

LOR=Limit of Reporting.

Signed:

Danny Slee  
Organics Manager, NMI-Pymble  
14/05/2010

Date:

**CHAIN OF CUSTODY - Subcontracting**  
**ENVIROLAB SERVICES**

due 24/5/10  
~~ENVIROLAB~~ CROWD 7/1005/7 LA



Client:	ENVIROLAB SERVICES	Samples To:	
Customer Service Contact:	Aileen Hie	Subcontracting Lab:	NMI
Address:	12 Ashley St Chatswood NSW 2067	Quote No:	
Email:	ahie@envirolabservices.com.au	Results Required By:	Report to Account Crowd 7
Phone:	02 9910 6200		
Fax:	02 9910 6201	Envirolab Job Number:	CROWD 7/1009/7

Sample Type eg: (Soil, Clay, Groundwater)	Sample Details eg: (Depth, Odour, Time)	Date Samples Collected	Client Sample ID	Envirolab Services Sample ID														Comments
Natural			5315/HMAS 3 2		✓													N 10/011986
			5215/HMAS 5		✓													N 10/011986
			5215/HMAS 24		✓													N 10/011987
			5215/HMAS 12		✓													N 10/011988
			5215/HMAS 40		✓													N 10/011989
			5215/HMAS 41		✓													N 10/011990

Relinquished by:	Envirolab Services	Received by:	Kim	Samples Received:	Cool or Ambient (circle one)
Print Name:	Sandra Davis	Print Name:	Kim	Temperature Received at:	(if applicable)
Date & Time:	17/5/10	Date & Time:	17/5/2010 11:28		
Signature:	[Signature]	Signature:	[Signature]		

**RECEIVED**  
 17 MAY 2010  
 BY: K.C. 11:28 AT

# CHAIN OF CUSTODY - subcontracting



## ENVIROLAB SERVICES

<b>Client:</b> ENVIROLAB SERVICES	<b>Sampler To:</b> Att: Darryl Slee as per Ross McFarland email
<b>Customer Service Contact:</b> Aileen Hie	<b>Subcontracting Lab:</b> NMI CROWD/
<b>Address:</b> 12 Ashley St Chatswood NSW 2067	<b>Quote No:</b>
<b>Email:</b> ahie@envirolabservices.com.au	<b>Results Required By:</b> Report to AECOM
<b>Phone:</b> 02 9910 6200	Report to Crown Solicitor
<b>Fax:</b> 02 9910 6201	<b>EnviroLab Job Number:</b>

Sample Type eg: (Soil, Clay, Groundwater)	Sample Details eg: (Depth, Odour, Time)	Date Samples Collected	Client Sample ID	EnviroLab Services Sample ID	Comments
				RB	
Material			5315/HMAS 2	✓	Previously sent 17/5/10 AM
			5315/HMAS 5	✓	
			5315/HMAS 24	✓	
			5315/HMAS 12	✓	
			5315/HMAS 40	✓	
			5315/HMAS 41	✓	
Extract			5315/HMAS 15	✓	additional extract to be tested
					Weight of sample = 3.46g
					Vol of solvent (hexane) = 120mL

<b>Relinquished by:</b> EnviroLab Services	<b>Received by:</b> Darryl Slee	<b>Samples Received:</b> Cool or Ambient (circle one)
<b>Print Name:</b> Sandra Taylor	<b>Print Name:</b> Darryl Slee	<b>Temperature Received at:</b> (if applicable)
<b>Date &amp; Time:</b> 17/5/10	<b>Date &amp; Time:</b> 17/5/10 4:45pm	
<b>Signature:</b> [Signature]	<b>Signature:</b> [Signature]	<b>Page No:</b>

N10701203b

**RECEIVED**  
17 MAY 2010  
BY: [Signature]

*son of*

**NMI Sample Continuity Form (use one form for each sample)**

**Sample Number:** N10/011985 → N10/011990.

Client ref.

Continuity

Date	Transferred by	to	description	Original weight / volume PLUS Weight / volume used for analysis
received K-C 17 May 11-28	<i>[Signature]</i>	Danny Ska in LSU		ESky.
transferred	1:38 am 17/5/10	Danny Ska 17/5/10 LSU.	6x jars	6 x 250g Glass jars.
	11:54 am Danny Ska LSU	Danny Ska Organic Section, room 333.	"	"

History

Date	Comments
17/5/10.	No ice brice - received ambient. ESky was taped. No security tape. <i>[Signature]</i> 17/5/10.
	Samples stored in lockable cabinet. Room 333. <i>[Signature]</i> 17/5/10.

**NMI Sample Continuity Form (use one form for each sample)**

N10/012035

Sample Number: *N10/012035*

Client ref. *5315/HMASIS*

Continuity

Date	Transferred by	to	description	Original weight / volume PLUS Weight / volume used for analysis
received <i>K.C 17 May 3:50</i>	<i>[Signature]</i>	<i>[Signature] 17/5/10 4:00</i>		<i>ESky</i>
transferred	<i>Danny Ke 17/5/10 LSU 4:07</i>	<i>Danny Ke Organics Lab 333</i>		<i>40ml glass vial - extract</i>

History

Date	Comments
<i>17/5/10</i>	<i>Extract received. In 40ml glass vial.</i>
	<i>Extract stored in lockable storage.</i>



REPORT OF ANALYSIS

Client	: CROWN SOLICITOR'S OFFICE NSW LEVEL 5, 60-70 ELIZABETH ST SYDNEY NSW 2000	Job No.	: CROW07/100517
		Quote No.	: QT-01735
		Order No.	:
		Date Sampled	:
		Date Received	: 17-MAY-2010
Attention	: KIRRALEE SANDERS	Sampled By	: CLIENT
Project Name	:		
Your Client Services Manager	: BRIAN WOODWARD	Phone	: (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/011985	HMAS 2	MATERIAL 5315
N10/011986	HMAS 5	MATERIAL 5315
N10/011987	HMAS 24	MATERIAL 5315
N10/011988	HMAS 12	MATERIAL 5315

Lab Reg No.		N10/011985	N10/011986	N10/011987	N10/011988	
Sample Reference	Units	HMAS 2	HMAS 5	HMAS 24	HMAS 12	Method
PCB Aroclors						
Aroclor 1016	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1221	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1232	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1242	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1248	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1254	mg/kg	< 5	< 5	< 5	< 5	NR_19
Aroclor 1260	mg/kg	< 5	< 5	< 5	< 5	NR_19
Total PCB's (as above)	mg/kg	< 5	< 5	< 5	< 5	NR_19
Dates						
Date extracted		17-MAY-2010	17-MAY-2010	17-MAY-2010	17-MAY-2010	
Date analysed		18-MAY-2010	18-MAY-2010	18-MAY-2010	18-MAY-2010	

N10/011985  
to N10/011990 & N10/012035:

Sample Preparation:

Samples N10/011985 to N10/011990 consisted of insulation material.  
Samples were cut into small pieces (approx 5 mm) using clean scissors.  
Sample N10/012035 is an extract provided by Envirolab. The extract was prepared by Envirolab on the 11/5/10 (3.46 grams extracted into 120 mL hexane).

Analysis:

Sub-sample is extracted with hexane. Extract cleaned up using acid then analysed by GC-ECD. Sample N10/012035 - extract was cleaned up using acid and analysed by GC-ECD.  
All samples confirmed using GC-Tandem MS.

## REPORT OF ANALYSIS

Page: 2 of 3  
Report No. RN794949

Results reported as mg/kg and Limit of Reporting (LOR) is 1 mg/kg per Aroclor.  
For all samples, LORs raised to 5 mg/kg per Aroclor due to matrix interferences.



Danny Slee, Section Manager  
Organics - NSW

19-MAY-2010

## REPORT OF ANALYSIS

Page: 3 of 3  
Report No. RN794949

Client : CROWN SOLICITOR'S OFFICE NSW LEVEL 5, 60-70 ELIZABETH ST SYDNEY NSW 2000	Job No. : CROW07/100517 Quote No. : QT-01735 Order No. : Date Sampled : Date Received : 17-MAY-2010 Sampled By : CLIENT
Attention : KIRRALEE SANDERS Project Name : Your Client Services Manager : BRIAN WOODWARD	Phone : (02) 94490151

Lab Reg No.	Sample Ref	Sample Description
N10/011989	HMAS 40	MATERIAL 5315
N10/011990	HMAS 41	MATERIAL 5315
N10/012035	HMAS 15	EXTRACT 5315

Lab Reg No.		N10/011989	N10/011990	N10/012035	
Sample Reference	Units	HMAS 40	HMAS 41	HMAS 15	Method
<b>PCB Aroclors</b>					
Aroclor 1016	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1221	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1232	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1242	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1248	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1254	mg/kg	< 5	< 5	< 5	NR_19
Aroclor 1260	mg/kg	< 5	< 5	< 5	NR_19
Total PCB's (as above)	mg/kg	< 5	< 5	< 5	NR_19
<b>Dates</b>					
Date extracted		17-MAY-2010	17-MAY-2010	11-MAY-2010	
Date analysed		18-MAY-2010	18-MAY-2010	18-MAY-2010	



Danny Slee, Section Manager  
Organics - NSW

19-MAY-2010

Results relate only to the sample(s) tested.  
 This Report supersedes reports: RN794936  
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**Australian Government**  
**National Measurement Institute**

**QUALITY ASSURANCE REPORT**

**Client:** CROWN SOLICITOR'S OFFICE NSW

**NMI QA Report No:** CROW07/100517

**Sample Matrix:** Solid

Analyte	Method	LOR	Blank	Sample Duplicates			Recoveries	
				Sample	Duplicate	RPD	LCS	Matrix Spike
		mg/kg	mg/kg	mg/kg	mg/kg	%	%	%
<b>Organics Section</b>				N10/011986				N10/011986
<b>PCB Compounds</b>								
PCB Arochlor 1016	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1221	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1232	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1242	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1248	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1254	NR19	1	<1	<5	<5	-	-	-
PCB Arochlor 1260	NR19	1	<1	<5	<5	-	100	82
PCB Total	NR19	1	<1	<5	<5	-	-	-

. results expressed in percentage (%) or mg/kg wherever appropriate.

Acceptable Spike recovery is 50-150%

Acceptable RPDs on spikes and duplicates is less than 40%.

RPD= Relative Percentage Difference.

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LCS = Laboratory Control Spike.

LOR = Limit of Reporting.

**Signed:**

**Danny Slee**  
**Organics Manager, NMI-Pymble**  
**19/05/2010**

**Date:**