

ESPERANCE CLEANUP AND RECOVERY PROJECT

MINUTES OF STEERING COMMITTEE MEETING

25 JUNE 2009, ESPERANCE

Present:

Mr Michael Jackson	Co-ordinator, Esperance Community Consultations (Chair)
Ms Jenny Brodie-Hall	Community Representative
Mr Paul Clifton	Shire of Esperance
Ms Michelle Crisp	Locals for Esperance Development (LED)
Mr John Fischer	Department of Transport (DOT)
Mr Peter McCafferty	Chemistry Centre
Mr Jim Malcolm	Consultant on Remobilisation of Lead and Nickel
Ms Pam Norris	Locals for Esperance Development (LED)
Ms Samantha Parkyn	Esperance Cleanup and Recovery Program (ECRP)
Ms Christine Smith	Community Representative
Mr Peter Skitmore	Department Environment and Conservation (DEC)
Mr Kieron Smith	Esperance Cleanup and Recovery Project (ECRP)
Mr Marcus Tromp	Esperance Chamber of Commerce and Industry (ECCI)
Mr Wayne Winchester	Esperance Cleanup and Recovery Project (ECRP)

Apologies:

Dr Charles Douglas	Department of Health (DOH)
Mr Lindsay Gillam	Department of Health (DOH)
Mr Richard Grant	Esperance Port Authority (EPA)
Mr Martin Matisons	Department of Health (DOH)
Mr Adam Rayner	Department Environment and Conservation (DEC)

1. Opening of Meeting and Review of Agenda

The Chair welcomed Members and noted the apologies from the officers from the Department of Health and from the Esperance Port Authority. Mr Jim Malcolm (presenter) and Mr Kieron Smith (observer) were welcomed to the meeting.

2. Minutes of Previous Meeting and Table of Actions

The Minutes from the previous meeting were accepted as a true record, with one amendment concerning the spelling of the Department of Environment and Conservation.

Action: That the minutes of the meeting held 12 May 2009, with the above amendment, were accepted as a true record of the meeting. The amended Minutes are to be loaded onto the ECRP OnCue web page.

It was noted that all actions from the meeting had been completed except as follows:

- i. Cleanup standards for roof spaces, ceiling voids and roof surfaces. Action had been taken in planning a survey to determine lead and nickel levels for these areas. This is discussed further under item 6.
- ii. Vegetation monitoring for lead and nickel. At the previous meeting Peter Skitmore had agreed to provide data on lead and nickel residues in Esperance vegetation to members of the Working Group on Remobilisation. The data was tabled to members at the meeting including a map showing the location of the vegetation sampling sites as requested at the previous meeting. This matter is discussed further under item 13.

3. Project Update by ECRP Project Director

Members noted:

- Two ECRP Project Updates dated 11 and 25 June prepared by the Project Director setting out a short summary of the progress on issues within the ECRP.
- Further Project Updates would be prepared and distributed every three weeks. They will be sent initially to the Steering Committee members seeking comment within 24 hours. The Project Updates would then be distributed to identified stakeholder groups and placed on the OnCue website.
- That Mr Kieron Smith had been appointed to a one month contract in order to conduct the survey of roof spaces, ceiling voids and roof surfaces in Esperance and benchmark homes in Albany. This contract would also enable an assessment of the Niton instrument and development of the fields for the data management project.
- Mr Matthew Devenish would take up the position of ECRP Project Manager on 13 July 2009.
- That the Project Director had given a presentation about the ECRP at the Esperance Primary School on 22 June 2009. This had been well received by those in attendance.

4. Confidentiality Statement

Members noted:

- That following the discussions at the last meeting, a revised confidentiality statement had been prepared and distributed to members for comment. Comments had been incorporated into a further document, which was tabled for consideration at the meeting.
- That the document was acceptable to members. Members signed the document and agreed that the signed documents should be filed accordingly.

- In the case of those persons attending the meetings or provided with confidential information, the first clause of the document should be amended by the addition of the words “or involved in the ECRP project”.

5. Report of Working Group on Remobilisation

Members noted:

- That the Working Group on Remobilisation had been established to assess whether remobilisation of lead and nickel is occurring in the Esperance environment.
- The Working Group consisted of the following members Mr. Wayne Winchester, Mr. Paul Clifton, Ms. Michelle Crisp, Mr. Anthony Stuart and Mr. Jim Malcolm, an Environmental Consultant appointed to this project. The Working Group had met twice in Esperance, to discuss this issue.
- A report tabled by Jim Malcolm on his review of all available data. [A copy of this report will be placed on the OnCue website.]
- A presentation by Jim Malcolm summarising his report and findings. [This presentation will be placed on the OnCue website.]
- The levels of lead recorded at HiVol Site 2, have been extremely low. The limit of reporting for lead is $0.003\mu\text{g}/\text{m}^3$.
- Advice from Peter McCafferty that determination of the lead concentration at these very low levels can be influenced by the residual levels of lead in the filter paper and in the laboratory equipment.
- The data on lead and nickel concentrations in rain water tanks is not conclusive with many confusing factors. The data does not appear to be related to rainfall or lead concentrations in air.
- That the report on lead and nickel in Esperance vegetation had not been released at the time of the meeting. Additional data from those studies, especially data on lead and nickel residues in deciduous leaves would be included into Jim Malcolm’s report when the vegetation report is released.

Members agreed with the conclusions of the Report as follows:

- i. The air monitoring data provide clear evidence that lead dust is not recirculating widely in the Esperance townsite.
- ii. The same monitoring data show that nickel is being detected, albeit at levels below the 24-hour target, in atmospheric dust in the Esperance townsite. Whether this is recirculated nickel from previous dust events or new nickel from ongoing port activities is not clear.
- iii. Sampling of rainwater tanks shows some ongoing levels of both lead and nickel, though the source of the elements is not clear, given the low ambient air levels. Some lead may be from roofing and guttering materials and some from inadequately cleaned roofs.

- iv. Sampling of some houses close to the port shows some surfaces potentially accessible to children that exceed the standard for lead. This may be due to local micro-remobilisation (from uncleaned areas) or it may be due to sampling targeting surfaces overlooked in cleaning.
- v. Sampling of flowers shows that levels of both lead and nickel were still elevated in samples within a kilometre of the port, when compared with those 7km from the port. Given the low ambient air levels of lead, it is likely that this lead has been transferred to sampled flowers from older accumulations on adjacent leaves.
- vi. Sampling of bird feathers in 2007 detected high levels of lead and nickel at impact sites in the town compared with remote reference sites. By 2008 the level of lead in feathers had greatly declined. Data for nickel were not available. It appears that the source of lead that contaminated feathers in 2007 has now declined to such an extent as to be scarcely measurable, confirming the absence of ambient air lead and suggesting that birds are not encountering significant lead stocks when foraging.

Members supported the following recommendations contained in the Report

- i. The proposed cleanup of lead contamination in targeted houses can proceed with confidence that there will be no significant recontamination from ambient air remobilization of lead residues in the township.
- ii. Nevertheless, evidence of contamination of surfaces in houses, especially near the port, emphasises that the cleaning protocol for the targeted houses must be thorough, including all dust accumulations that could be remobilized in the future (e.g. ceiling voids).
- iii. A closer study of wind directions and port activities (receivals and ship-loading) at the time of ambient nickel readings may give a clearer answer to the question of ambient air recirculation of nickel in the townsite.
- iv. It is essential that EsPA adheres to best practice dust controls and avoidance of nickel handling in onshore winds if the threat of recontamination with nickel is to be avoided.
- v. To confirm the absence of remobilization there should be ongoing assessment of EsPA's air quality monitoring results, including new monitoring sites that are established in the future.
- vi. The cleanup must be followed by exhaustive validation sampling to ensure no dust accumulations have been overlooked.
- vii. There should be periodic sampling to confirm that no recontamination has occurred. This should include isotopic analysis to establish the origin of any lead or nickel found.

- viii. Further research is warranted into the fate of lead in the environment and the possibility of bio-accumulation of lead in predators.

6. Development of Cleanup Standards for Esperance Roof Cavities, Ceiling Voids and Roof Surfaces.

Members noted:

- That a meeting to plan a specific survey of roof cavities, ceiling voids and roof surfaces had been convened on 10 June 2009. It was proposed to re-sample those homes in Esperance that were sampled as part of the '21 Homes Survey'.
- Samples would be taken from roof spaces, ceiling voids, roof surfaces and gutters to be taken from the 21 homes in Esperance, and about 20 homes in Albany including previous 'benchmark' homes.
- The purpose of sampling the homes in Albany would assist in determining a reasonable acceptable background level for lead.
- Samples from roof spaces and ceiling voids would be taken on a weight by weight basis to enable comparison with levels published in the literature.
- Samples of roof surfaces would be as surface swabs.
- The survey would enable testing of the Niton. Samples would also be taken at the same time for comparative analysis by the ChemCentre. The survey is scheduled to start in early July.
- A correction to the background paper for this item concerning similar survey work undertaken in homes in non-industrial areas in Sydney by Dr. Brian Gulson. Reference to this work had reported lead levels ranging from about 100 to 1,150mg/kg in roof cavities of homes in non-industrial areas in Sydney with an average of around 600mg/kg. Details of this work should be obtained from Brian Gulson for presentation to the Steering Committee.
- Advice from Peter McCafferty that previous work by the ChemCentre had shown a good correlation between the Niton to samples taken and subjected to chemical analysis. This applied where concentrations of lead were above 10mg/kg.
- A request for DOH to provide the location of the 6 homes from which DOH had taken samples from ceiling voids in an earlier survey.
- That when samples are taken, the owners consent should also be sought to provide the results of the testing to the ECRP Steering Committee.
- Michelle Crisp had requested additional literature references concerning the setting of cleanup standards for Esperance. Ms Crisp advised that she wished to reconsider these cleanup standards, at the next meeting when DOH officers were in attendance, particularly in view of more recent articles reported in the literature. In the meantime, Ms Crisp requested that the DOH

provide the rationale for the cleanup standards which had been recommended.

Action: DOH to be requested to provide the location of the 6 homes from which samples from ceiling voids were previously taken.

Action: The consent form to be amended to request the home owner's consent to the release of sample results to the ECRP Steering Committee.

Action: DOH be requested to provide the rationale for the recommended cleanup standards for Esperance.

Action: Obtain details of Brian Gulson's studies of lead levels in Sydney homes for presentation to the Committee.

7. Development of ECRP Sampling Protocols

Members noted:

- The development of the Project Brief for the Development of Sampling Protocols since the previous meeting.
- The Project Brief had been referred for tender to the ChemCentre and Golder Associates.
- The tenders had been assessed by Esperance based members of the Working Group on Sampling and a recommendation made.
- The successful tenderer will be announced once the administrative paperwork has been completed.

8. ECRP Data Management System

Members noted:

- A progress report on the development of the data base management system to be used for the ECRP.
- DPI had progressed with the development of the ECRP Data Management System in collaboration with the DOH. A small working group comprising representatives from DPI, DOH and a specialist IT Consultant had been established.
- DOH has appointed a system architect to provide the hardware specifications for the server purchased.
- ESRI Australia (IT Consultants), who have a comprehensive understanding of the GIS environment within DOH and who were involved in the planning and development of the existing DOH intranet web based system, has developed a proposal and provided a quotation for consideration for the ECRP DataBase Platform installation. This project will see the installation, data migration, system configuration and deployment of a mapping website on the DOH's internet web server.
- The DOH will appoint a part time data operator for a period of 12 months, 2 days per week.

- ECRP will fund all costs associated with the server hardware and software purchase and installation and the data operator for an initial period of 12 months.
- Preliminary estimates of the costs currently are around \$150 000 - \$175 000.
- Implementation will be a staged approach but it is anticipated that the database will be fully functional by early September 2009.

9. Isotope testing of samples from both the Esperance 21 homes and Albany samples

Members noted:

- A report by the ChemCentre on isotope testing of samples taken from the 21 Esperance homes and from the Albany benchmark homes.
- Advice from Peter McCafferty that lead has four stable isotopes ^{204}Pb , ^{206}Pb , ^{207}Pb , and ^{208}Pb . The ChemCentre can measure all of the isotopes except ^{204}Pb . The CSIRO laboratories have the capacity to measure the ^{204}Pb isotope.
- Samples have been compared to several reference sources i.e Magellan lead, Broken Hill lead and other reference standards.
- Most lead fittings such as flashings, lead paints etc in Esperance and elsewhere in Australia are derived from Broken Hill lead and the 'isotopic fingerprint' for Broken Hill lead is evident in the Esperance and Albany samples.
- The samples taken from Esperance homes, particularly those in Bostock Close and Phillips Street, showed the presence of the Magellan array of isotopes or 'isotopic fingerprint'.
- Peter McCafferty offered to prepare a short summary report explaining the results of the analyses undertaken.
- Further isotopic work may be required to determine the source/origin of lead residues in Castletown.
- A clear purpose should be identified and outlined for any further samples taken for isotopic analysis.

Action: ChemCentre to prepare a short summary report setting out the reason for the survey, what was found and explaining the results of the isotopic analyses undertaken.

10. Development of ECRP Cleaning Procedures

Members noted:

- That work had begun in developing ECRP Cleaning Procedures. Two drafts had been prepared and these had been based upon documents prepared as follows:
 - i. By the DOH on cleaning homes
 - ii. By the ChemCentre for cleaning roof surfaces.
 - iii. By the EsPA for the cleaning of rainwater tanks and gutter systems.

- Important issues had emerged which need to be resolved, such as the disposal of waste containing residues of lead and nickel, and, cleaning of roof spaces within asbestos cement rooves.
- That these cleaning procedures would be further developed out of session by a Working Group of members of the Steering Committee, the Project Director, DOH, DEC and an Esperance community member [Pam Norris]. Once drafted to the satisfaction of these members, the document would be tabled at the next meeting of the Steering Committee.
- Michelle Crisp questioned the scope of the ECRP and in particular in the scenario if lead levels met the cleanup standards and nickel levels in homes were elevated, would the homes be cleaned?
- Advice that in the current draft of the cleaning procedures the following wording was used “ECRP is designed to remove the lead carbonate [and as a consequence any nickel sulphide concentrate] from homes and other premises.”
- It was agreed that this matter would be discussed at the next meeting when the DOH members were present and the results of the roof spaces, ceiling voids and roof surfaces survey were available.

Action: ECRP Cleaning Procedures to be further developed out of session by a Working Group of members of the Steering Committee {Project Director, DOH, DEC and an Esperance community member [Pam Norris]}. Once drafted, to the satisfaction of these members, the document to be tabled at the next meeting of Steering Committee.

11. Assessment of the cleaning requirements of the 21 homes, trial and validation of cleaning procedures.

Members noted:

- Advice from the ECRP Project Director that the Project Manager, Matthew Devenish would take up the position on 13 July and his first task would be to assess the cleaning requirements of the 21 homes previously sampled, to employ cleaning contractors, to arrange cleaning of those homes and validation testing to determine if the cleaning has been effective. This process will enable trialling of the cleaning procedures and where necessary, refinement of them.
- A report on this project will be provided at the next meeting of the Steering Committee.

12. ECRP Draft Communications Plan

Members noted:

- A draft OnCue [Cleaning Up Esperance] Communications Plan prepared and tabled by the Project Director.

- That the list of ECRP stakeholders did not include Ms Jenny Brodie-Hall as a Community Representative.
- That the document covered the release of information from the ECRP but should also include the ability to capture information, or feedback, from the community.
- Many members of the general community do not access the OnCue website and would prefer a more interactive, but informal opportunity to learn about the ECRP.
- A recommendation from the community members, that there should be a ECRP booth at the Esperance Agricultural Show to provide interaction between the ECRP and the general community.
- That Community Open Days had proved to be effective in the past in providing the opportunity for interaction with members of the general community. However, it was appreciated that the timing in holding a further open day would be more appropriate when cleaning of homes is actually about to begin or underway.
- A specific communications strategy of engaging the community will be used when 'blocks' of homes are about to be cleaned.
- That Golder Associates had planned a Community Forum for the release of their report but this had been postponed.
- The OnCue Website still included fact sheets on nickel and this should be removed.

Action: Project Director to arrange removal of the fact sheets on nickel from the OnCue website.

Action: Project Director to revise the Communications Plan taking into consideration the comments made at the meeting, and explore the opportunity of a ECRP booth at the Esperance Agricultural Show.

13. Update on Esperance Port Authority Environmental Emission Data

Members noted:

- A presentation by Peter Skitmore on the Air Quality Monitoring by the Esperance Port Authority up to June 2009. [A copy of this presentation will be placed on the OnCue website.]
- Details of the DEC Vegetation Monitoring Study results for 2008 and 2009. [A copy of this information will also be placed on the OnCue website when it is available]
- Nickel emissions for May 2009, from the Esperance port, as measured in the HiVols were slightly higher than those recorded for March and April 2009. Loading conditions recorded during the May loadings were described as 'flukey'.
- That the actual YTD tonnage of nickel sulphide exported through the port of Esperance for 2009 was comparable to the YTD tonnage exported in 2008 for the same period.

- A request by Pam Norris that the results of the vegetation monitoring study be overlaid with the data from the survey of 21 homes.

Action: DEC [Peter Skitmore] to provide the DEC Vegetation Monitoring Study results for 2008 and 2009 [when available] for the OnCue website and overlay these results with the data from the survey of 21 homes.

14. Other issues

i. Sampling of children's playgrounds for lead

Members noted:

- That the monitoring for lead in Esperance children's playgrounds, which had previously been carried out by the Shire of Esperance, would now be taken over as part of the ECRP.
- The most recent isotope testing for lead in Esperance playgrounds had shown that the lead was not of Magellan origin.
- In view of this it may be possible that the low levels being recorded are from the plasticisers used in the play equipment.
- Advice from Peter McCafferty that if further isotope testing of playground materials is required, it would be preferable to use the CSIRO laboratories as these have greater capacity than the ChemCentre laboratories for these analyses.
- It was necessary to resolve the concerns with regard to lead levels in playgrounds. This was of particular concern to the PEACH group.

Action: Further investigative work to be conducted on the origin of lead levels in Esperance playgrounds. [Kieron Smith and Paul Clifton].

ii. Upgrade of the nickel infrastructure at the Esperance Port and compliance with licence on this issue.

Members noted:

- Concerns expressed by Michelle Crisp that there had been three breaches of the Port Licence [including inability to meet the scheduled date for completion of repairs to the ship loader by 31 March 2009] and requested an explanation of the DEC response.
- DEC had issued letters to the EsPA seeking an explanation of the issues. DEC recognised that Government had only recently allocated funding for the upgrades and a new completion date had been assigned for the repairs to the ship loader of 31 August 2009.

iii. Current status of the EsPA loading protocol for nickel shipments and any planned changes to this.

Members noted:

- Concerns expressed by Michelle Crisp that a recent reference in Hansard had stated that changes to the EsPA loading protocol were planned.
- Members were not aware of any proposed changes to the loading protocol.

Action: Michelle Crisp to provide the reference to Hansard to which she refers.

Action: Michael Jackson to contact the EsPA to determine if any changes to the ship loading protocol are planned.

iv. Prescribed method for the determination of the annualised guideline for nickel emissions

Members noted:

- Advice from Peter McCafferty that the ChemCentre has developed a more effective method for the determination of the annualised guideline for nickel.
- A formal response to this request is likely within two weeks of the meeting date [i.e. Mid July]
- A request from Michelle Crisp for the documentation used by the DOH in determining the annualised guideline and the impact of particle sizes of nickel sulphide concentrate into the lungs.

Action: DOH to be requested to provide the documentation used in determining the annualised guideline for nickel emissions and the impact of particle sizes of nickel sulphide concentrate into the lungs.

v. Video Conference Link for Steering Committee meetings

Members noted:

- That as part of the government austerity measures, strategies to minimise costs should be explored.
- It would be possible to hold a video conference link for the Steering Committee with Perth and Esperance based members.
- The importance of keeping the momentum going between meetings.
- That there were several important issues to resolve at the next meeting and a face to face meeting is desirable to resolve those issues.
- The option of convening Steering Committee meetings by video conference link should be explored.

Action: Explore the option of convening future meetings by video conferencing, after the next Steering Committee meeting.

15. Next meeting-13 August 2009