

ESPERANCE CLEANUP AND RECOVERY PROJECT

MINUTES OF STEERING COMMITTEE MEETING

20 May 2010

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 Matthew Devenish	Esperance Cleanup and Recovery Project (ECRP)
Mr John Fischer	Department of Transport (DOT)
Mr. Richard Grant	Esperance Port Authority (EsPA)
Mr. Alex Leonard	Esperance Port Authority (EsPA)
Mr Martin Matisons	Department of Health (DOH)
Mr Peter McCafferty	ChemCentre
Ms Samantha Parkyn	Esperance Cleanup and Recovery Project (ECRP)
Mr Peter Skitmore	Department Environment and Conservation (DEC)
Ms Christine Smith	Community Representative
Mr Kieron Smith	Esperance Cleanup and Recovery Project (ECRP)
Mr Wayne Winchester	Esperance Cleanup and Recovery Project (ECRP)

Apologies:

Dr Charles Douglas	Department of Health (DOH)
Mr Lindsay Gillam	Department of Health (DOH)
Ms Pam Norris	Locals for Esperance Development (LED)
Mr Marcus Tromp (ECCI)	Esperance Chamber of Commerce and Industry

1. Opening of Meeting and Review of Agenda

The Chair welcomed Members and noted apologies from Charles Douglas, Lindsay Gillam, Marcus Tromp and Pam Norris.

This meeting was conducted by video conference from two locations. Those Esperance based Members participated from the Curtin University conference room in Esperance. Perth based Members participated from the DEC conference room in Perth. Jenny Brodie-Hall participated by teleconference from Karratha.

It was noted that Mr. Michal Frydych and Mr. Neil Pearson from the EsPA would join the meeting for the discussion of items of "Other Business" under item 9.

2. Minutes of Previous Meeting

The Minutes from the previous meeting, 11 March 2010, had been accepted as a true record out of session and loaded onto the OnCue Website accordingly.

3. Actions from the previous meeting - 11 March 2010

i. Community blood lead testing

At the September 2009 meeting it was agreed to offer a one off intravenous blood testing program after the cleanup of Esperance is completed, as a final validation step.

In March 2010 Dr Charles Douglas advised the Steering Committee that it was not possible to give precise costings for such a survey as this would depend on the number of participants. If the number of participants was low and the numbers presenting were at a steady rate, these could be accommodated using existing resources with minimal costs. However, if there was a high demand for blood lead testing, then additional staff would need to be employed with the associated costs.

Action: It was agreed that ECRP Project Team would investigate means of assessing the likely community participation in a 'close out' validation blood lead survey and to incorporate provision for this in the ECRP budget.

Status:

Members noted:

- Advice from the Project Director that there was no formal mechanism of assessing the likely participation in such a survey, but the indications at this stage are that it is most unlikely that there would be a 'flood' of participants. This is also demonstrated by the fact that community concern about the lead contamination and the subsequent cleanup appears to be reducing as the Project Team moves further out into the community from the port boundary. Therefore, in view of Dr Douglas' comments at the previous meeting, it is anticipated that the existing DOH resources would be able to cope with the demand for blood lead testing at the time.
- Provision has been included in the ECRP budget for the 'close out' validation blood lead survey.

ii. Soil Sampling program – Water Corporation site near Panorama Place

At the March 2010 meeting, Members noted lead and nickel levels as detailed in the DEC document "Esperance Sampling - Old Water Corporation Reservoir and Discharge Channel 3 September 2008 Report" prepared by the Pollution Response Unit. The levels were all below National Health Investigational Levels for Residential Properties and the ECRP cleanup guidelines of 300mg/kg for lead and 600mg/kg for nickel. The highest concentration of lead found was 210mg/kg. Other lead levels found ranged from 13 to 130mg/kg. The higher concentrations were found in a localised drainage 'sump' area adjacent to the railway.

Action: DEC [Peter Skitmore] to liaise initially with the Water Corporation and the Department of Transport and then with the ECRP Project Team regarding the need, or otherwise, for any remedial actions at this site.

Status:

Members noted:

- Advice from Peter Skitmore that he had assessed the levels of lead and nickel at the site. Although these levels did not warrant remediation from an environmental perspective, he recommended that the soils with higher lead and nickel levels [i.e. particularly the sump area] should be removed as part of the ECRP. This work should be carried out during the summer season when sediments are dry. Remediation of the site would enable the catchment facility to be utilised in the future, if required.
- The Project Director advised that this remediation could be carried out within the ECRP budget.

The Steering Committee supported this recommendation.

Action: DEC [Peter Skitmore] to liaise with the Water Corporation on with regard to remediation of the Panorama Place site.

The Project Director to include remediation of the Panorama Place Water Corporation site as part of the ECRP.

iii. Sampling and cleaning of first parcel of homes – disposal of waste water and other wastes

At the March 2010 meeting it was agreed that the Project Team would continue to liaise with DEC [Peter Skitmore] on the management of wastes from the ECRP, particularly with regard to the leachability testing of wastes in order to determine appropriate disposal of the wastes.

Status:

Members noted:

- That an ongoing working relationship had been established between the ECRP Project Team and DEC on this issue.
- Details of leachability testing of wastes was included in the agenda paper concerning sampling of homes and other premises and is discussed under item 5.

iv. Report on Soil Sampling program – Type “A” sampling

At the March 2010 meeting, the Steering Committee noted that ARG and Cliffs were proposing to undertake works at the Nulsen rail marshalling site. Although the lead levels in this area were within the Health Investigational Level, it was agreed that it would be advisable if dust control measures were employed during these works to ensure that lead in dusts is not redistributed.

Action: Department of Transport was requested to advise ARG and Cliffs to ensure that effective dust control strategies are employed during works at the Nulsen rail site.

Status:

Members noted:

- A copy of correspondence [dated 26 March 2010] from John Fischer to ARG. No response had been received from ARG.

Action: Department of Transport [John Fischer] to follow up a response from ARG on dust control strategies at the Nulsen site.

v. Assessment and cleaning of roof gutters and roof surfaces – cleanup guideline and decision matrix

At the March 2010 meeting the Steering Committee agreed to adopt a cleanup guideline of $1\mu\text{g}/\text{cm}^2$ for lead on roof surfaces.

Status:

Members noted that this guideline had been implemented by the Project Team.

At the March 2010 meeting the Steering Committee agreed that the decision matrix concerning the cleaning of rain water tanks, gutters and roof surfaces as set out on page 11 of the March report should be adopted by the ECRP Project Team.

Status:

Members noted that this decision matrix had been implemented by the Project Team.

vi. ECRP Policy on asbestos roofs.

At the March 2010 meeting the Steering Committee agreed that the cleaning of asbestos roofs is not a viable, practical or safe option to be carried out under the ECRP. To disturb or attempt to clean the asbestos roofs would create a greater health risk than might be posed by any lead residues that might be present.

The Steering Committee concluded that:

- a. Cleaning, coating or replacement of asbestos roofs were not viable options under the ECRP.
- b. The issue of asbestos roofs in Esperance needed to be taken up as a separate issue with the government.

Action: Department of Transport was requested to raise the issue of asbestos roofs in Esperance, with government.

Status:

Members noted that the Minister for Transport had agreed with the following recommendations from the Department of Transport.

1. That owners of homes in Esperance with asbestos roofs be offered a 'contribution' to the costs of replacement provided that:
 - a. the asbestos roof surface is found to exceed the cleanup guideline for lead, and
 - b. the roof replacement is carried out before June 2011.

2. The 'contribution' offered to home owners be determined as the equivalent cost of cleaning a roof of the same surface area.
3. Funding for such payments be made through the ECRP cost centre.

These recommendations had been subsequently adopted by the Project Team. At the time of the meeting, one asbestos roof had been found to be above guidelines and an offer had been made to the owners in line with the agreed Asbestos Roof policy. The Project Director advised that there were only a limited number of premises in the 'area of interest' with asbestos roofs.

vii. ECRP Monitoring of sentinel homes

At the March 2010 meeting the Steering Committee noted a proposal for sentinel monitoring of homes developed by the Sentinel Homes Sub-committee. Members agreed that the proposal for should be reviewed to include consideration of the following:

- i. The use of Petri Dish methodology in undisturbed areas inside and outside homes,
- ii. The integration of the sentinel monitoring program within the broader context of ongoing environmental monitoring in Esperance.

Action: The Sentinel Homes sub-committee review the proposal for the monitoring of sentinel homes in the light of the above comments by the Steering Committee.

Status:

Members noted that these matters were outstanding and would be taken into consideration by the Sub-committee. It was recognised that these matters needed to be dealt with before the spring-summer period of onshore winds. A report addressing these issues will be brought to the next meeting of the Steering Committee.

Action: Sub-committee on Sentinel Homes to address outstanding issues on the use of Petri Dish methodology and the integration of the sentinel monitoring program into the broader context of ongoing environmental monitoring programs. Report to be provided at the next meeting of the Steering Committee.

viii. Update on Esperance Port Authority Environmental Emission Data

Action: The March 2010 presentation of data on air quality monitoring by the Esperance Port Authority, and as compiled by DEC, be circulated to Members and placed on the OnCue website.

Status: Action completed.

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

Action: The 'Recommended Method for Sampling, Analysis and Calculation of the Annual Guideline for Nickel Emissions in Esperance' should be listed early in the agenda for the next meeting.

Status:

This matter was listed on the agenda under Other Business [item 9 (i)] for the following reasons:

- The first priority on the Steering Committee is to address the ECRP issues. This is the core responsibility of the ECRP Steering Committee and is at the centre of its Terms of Reference. Therefore ECRP issues needed to be discussed first.
- The items included under 'other business' are relevant to the Steering Committee but were not core issues. In the absence of an equivalent to the former Esperance Community Reference Group [ECRG] or other suitable forum, these items were included in the agenda.
- Since the implementation of the 'nickel method' document and the EsPA environmental monitoring data are core issues for the EsPA. The CEO for the EsPA Michal Frydrych was invited to be present during the discussions of these issues and would join the meeting at 3pm.

x. Golder Associates Report on Human Health and Ecological Risk Assessment for the Esperance Townsite

Action: Advice on the implementation of Recommendation 4 of the Golder Report to be included in the agenda for the next meeting. Recommendation 4 reads:

“The Western Australian Government adopt a partnership approach with Esperance Stakeholders and community representatives for the design and implementation of environmental monitoring and management in relation to Port operations”.

Status:

Members noted

- Prior to the meeting, the Chair considered that this recommendation was outside of the scope of the Terms of Reference of the ECRP Steering Committee and was more appropriately addressed by the Esperance Port Authority [EsPA]. This matter had been referred the issue to the EsPA for action.
- Comments from Community members that it would be desirable if an independent group was responsible for the environmental monitoring program, and because the Golder report was commissioned by the DEC, that agency should take some responsibility in addressing this recommendation.
- DEC advised that it was normal practice for the licensee to undertake such environmental monitoring programs.
- It was appropriate for this recommendation to be addressed by the EsPA Port Consultative Committee [PCC].

- Advice from Richard Grant that the membership of the PCC includes representatives from government agencies, including DOH and DEC.
- That the Golder recommendation required further consideration by DEC, EsPA and Transport.

Action: Recommendation 4 of the Golder report to be further reviewed by EsPA, Transport and DEC.

xi. Next meetings of the Steering Committee

Action: At the March 2010 meeting it was agreed that the meeting dates would be reviewed to select dates suitable to all Members.

Status:

The dates for next meetings of the Steering Committee in 2010 are 29 July, 9 September and 18 November.

4. Summary of the current status of the ECRP

Members noted:

- A report by the Project Director on the current status of the ECRP.
- Copies of the monthly ECRP Update of 10 May and 9 April 2010 which had been distributed to stakeholders and the local media. These Updates had been uploaded onto the OnCue website.
- The Project Team is currently heavily involved with the detailed sampling phase of the project. The broad based soil sampling has been completed and in conjunction with a variety of other datasets, the likely area of contamination had been identified. Detailed sampling at individual residential and commercial premises is currently underway within this area. As the sampling teams move further away from the Port, the levels of lead and nickel exceeding the cleanup guidelines are reducing rapidly. In general, homes further away from the port are requiring less cleaning.
- Currently about 1,400 to 1,600 samples are being submitted to the ChemCentre per week under this sampling program. This sampling rate has been reduced to meet the capacity of the ChemCentre for analysis.
- The presence of the ECRP teams working in the community is providing visual evidence that the cleanup is now actually taking place.
- The time frame between the taking of samples from premises and providing results back to home owners is about 6 to 8 weeks.
- Advice from Community Members of the Steering Committee that feedback from the general community has been positive.
- At this stage, the Project Team does not propose to extend the areas of detailed sampling beyond Stage 9. As requests for consent for sampling are sought from home owners further away from the port, there has been less interest by home owners. Statistics on the number of premise owners who have refused to participate in the ECRP were requested to be provided at the next meeting.
- A number of samples have been sent for isotopic analysis where unexpected high results have been found in areas of generally low contamination, but the results of analysis were not available at the time of the meeting.

- The results of the detailed sampling are being analysed against the established ECRP guidelines to develop an evaluation report (for the owners and occupiers of the premises) and an individual cleaning work sheet (for the cleaning contractors). The cleaning requirements of about 260 premises have been determined. These premises are ready for the commencement of the Major Cleaning Project in late June/early July 2010.
- The ECRP are currently undertaking 2 audits. The first is an audit of record keeping under the Records Keeping Act and the Department of Transport's Record Keeping Plan. This is being conducted by the Department's Information Management Branch. The second audit is a process and methodology audit of the entire ECRP and is being conducted by GHD Pty Ltd.
- A new ECRP Workflow Application has been installed on a server in the Esperance offices and is being rigorously tested before being finalised over the coming weeks. The establishment of the ECRP database structure and workflow application has been a significant body of work and will benefit the project, the project team and customers.
- In recent months, the project has moved from the investigation and planning phases into the operational phases. Monthly reporting is being made against each of these operational phases. Key targets (based on the anticipated number of premises in the "area of interest") have been developed to complete the majority of the required cleaning across the townsite before the end of December 2010.
- A report of actual monthly figures in the key operational categories of Sampling and Analysis, Cleaning and Validation, and ECRP Expenditure will continue to be made available to the Steering Committee by way of the ECRP Monthly Executive Report.

Action: Project Team to provide, at the next meeting, statistics on the number of premise owners in each zone who have refused to participate in the ECRP.

5. Progress report on sampling of homes and other premises

Members noted:

- A report on this item by Kieron Smith, ECRP Project Manager Sampling.
- Approximately 16,000 samples had been taken to date. There are 14 persons in the sampling team. About 44 homes are sampled each week resulting in between 1,400 to 1,800 samples per week.
- The sampling program has moved into the central business area of the town [Stage 4]. Sampling of commercial premises is well underway. Sampling is often carried out before trading hours to minimise impact on businesses. This flexibility in sampling times has been favourably received by business owners.
- A series of leachability tests have been carried out on roof insulation samples in order to determine appropriate disposal of these materials. About 20 roof insulation waste samples have been tested using the Australian Standard Leachability Procedure. The results of these studies show a reasonable correlation between the concentration of lead in the

insulation and the leachability. It appears that insulation with a lead content less than 100mg/kg has a leachability of less than 1mg/L which is the threshold for Class III waste. [Materials having a leachability above 1mg/L must be disposed of at a Class III site.] Those wastes with a lead content above 100mg/kg have shown a leachability above 1mg/L and would therefore be classified as Class IV wastes. This means that segregation of the wastes at source on the basis of contamination is possible and highly desirable. The Niton can be used for determining the contamination of the insulation. This work is continuing and process flow chart is being prepared. Insulation wastes are being stored in two 40ft shipping containers and another two containers have been obtained for the cleaning phase of the project.

- Sampling of public playgrounds in Esperance is also continuing. Sampling includes both surface sampling of equipment and soils [soft fall]. Elevated lead levels have been found in yellow playground equipment. These lead levels are due to lead based pigments used in the equipment manufacture and are not derived from Magellan lead. The Shire has a program of removing older playground equipment which have these lead containing pigments.
- Procedures have been introduced for those samplers who are required to enter roof spaces to take samples. In those premises which have insulation which has been blown into the roof cavity, the material covers all power cables etc and this creates an occupational health and safety issue for the samplers.
- The sampling team is adapting Australian and US EPA standard methods in sampling for lead and nickel concentrations on asbestos roofs. The standard methods are quite prescriptive. GHD has assessed the procedures which are being used by the Project Team and has advised that the adaptations used are appropriate.
- Three papers prepared by the Project Team as follows:
 - i. 'Regular and unique sources of lead (Pb) around the home'
 - ii. 'Lead stearate in Poly Vinyl Chloride (PVC) pipes and fittings' and
 - iii. "Lead dust accumulation in residential air conditioning ducts in Esperance after short lived dust emissions".

Action: Papers, as prepared Project Team, on potential sources of lead, should be published on the OnCue website to assist the community to understand other potential lead sources within the community.

6. Report on current status of awarding major cleaning contracts.

Members noted:

- A rigorous process had been undertaken to award the major cleaning contracts for the ECRP. This had been undertaken in conjunction with Corporate Procurement Branch of the Department of Transport.

- The cleaning component of the project had been separated into 3 distinct contracts, as follows:
 1. Roof surfaces (including gutters and rainwater tanks)
 2. Roof spaces (including replacement of insulation)
 3. Internal/External cleaning

- Each contract had been individually advertised and assessed.
- The successful tenderers as approved by the Department of Transport's Tenders Committee and the Director General of Transport are as follows:
 1. Roof surfaces (including gutters and rainwater tanks) - Bay of Isles Mini Excavators Pty Ltd.
 2. Roof spaces (including replacement of insulation) - PRC Building Services Pty Ltd.
 3. Internal/External cleaning - PRC Building Services Pty Ltd.

- The Bay of Isles Mini Excavators is an Esperance based company which was previously contracted to clean roof surfaces as part of a trial cleaning project. This company is in a position to commence cleaning immediately.
- PRC Building Services is a Western Australian owned company based in Perth with various contracts all around the State. It is anticipated that this company will take about one month to mobilise before cleaning commences.
- A public announcement of the successful tenders would be made in the near future.

7. Closeout Report of the Trail Cleaning Project

Members noted:

- A report on this item by Matthew Devenish, ECRP Project Manager Cleaning.
- The primary purpose of the Trial Cleaning Project was to test and fine tune the ECRP cleaning procedures to better inform the contract specification for the Major Cleaning Project. Other aims were to;
 - i. establish an efficient workflow from sampling and analysis through to cleaning and validation, and
 - ii. test the quality management procedures.
- The outcomes of the Trial Cleaning Project measured against those aims and the key lessons learned.

- **Risk Management** - Risk Cover was engaged prior to the commencement of any cleaning to conduct a comprehensive risk assessment. The attendees included the contractors, local labour hire representatives and ECRP staff. Actions were assigned and followed throughout the Trial. Some of the measures adopted included engaging a safety adviser,

contract start-up risk assessments, daily job safety analyses and on-the-job hazard identification and control. Key controls included nationally accredited training for working at heights, isolation of electricity in roof spaces and the management of client (community member) safety while the works were in progress.

- **Health and Safety Incidents** - There were no safety incidents and no significant health issues arising from the Trial. One roof space cleaner was identified as having elevated blood lead levels (but below the ECRP stated limit of 10µg/100mL and well below the WorkSafe limit of 50µg/100mL) as a direct result of working on the Trial. That person was removed from the job, counselled on personal hygiene and subsequently showed a drop in blood lead levels.
- **Stakeholder Management** - Prior to cleaning, clients are informed of the ECRP intentions and general timeframes when they first receive the letter seeking consent to sample. They are informed again of ECRP intentions and specific timeframes when they receive the results of the sampling. During the Trial, clients were contacted by phone to make a booking for an initial site visit. During that visit, the ECRP supervisor would explain the results in context to the client and answer any questions. The vendor and client would then agree on a start date for the cleaning. This method of contact was well received by the client and will be used for the Major Cleaning Project. Any contact by the ECRP after this stage is usually by letter. Members agreed that managing the expectations of the client was essential.
- **Contract management** - The Project Team initially favoured a contract for the Trial where one vendor would manage all three types of cleaning by using sub contractors. However, during the Trial the sub contractors expressed their desire to be managed directly by the ECRP as this would remove a layer of organisational complexity from their administration. The key lesson here was that the ECRP team should directly manage the work instructions, quality, safety and payments for each of the three types of cleaning. The Major Cleaning Project has been structured around this revised model.
- **Scope of work** - To ensure the scope of work was properly communicated, the Project Manager issued a formal cleaning worksheet to the contractor for each premises. A site visit was conducted by the Project Manager and contractor at each premises to further refine and agree on the scope. A key lesson learned early in the Trial was to not only list the cleaning inclusions but any areas that were to be specifically excluded. This approach was adequate and will be adopted in the Major Cleaning Project.

- **Budget** - The budget was managed closely by obtaining estimates of resources and costs from the contractor prior to the contractor commencing work at each of the premises. Actual costs were then compared to those estimates on a regular basis and used to update the project forecast.

The total cost of the Project was \$248,776 against the budget of \$250,000. The breakdown of costs against each of the three key cleaning activities was as follows:

- Roof space cleaning (including insulation replacement): 33%
- Roof surface, gutters, downpipes and rainwater tanks: 56%
- Internal and external surfaces and carpets: 11%

The cost management process was appropriate and led to an adequate outcome. The same methodology and tools will be used moving forward into the Major Cleaning Project. The main difference will be that the Trial had a set budget while the budget for the Major Cleaning Project has not yet been accurately defined (since the number of homes and the extent of cleaning required is unknown at this stage).

- **Cleaning and validation** - The cleaning was technically straight forward but had mixed success:
 - Roof spaces – cleaning was validated by visual inspection only (because after cleaning, there is not enough dust to create a sample). The cleaning and disposal techniques were adequate and no changes to the procedures are necessary.
 - Roof surfaces, gutters and rainwater tanks – The cleaning of roof surfaces was validated by swab and found to be successful when compared to the guidelines (unfortunately, of the 35 homes cleaned, there were no “before and after” comparisons because roof swabs were not part of the original sampling process). Gutters and rainwater tanks were visually validated (i.e. no sludge visible) and will need to be monitored after significant rainfall has replenished the rainwater tanks.
 - Internal and External Surfaces – The cleaning of surfaces was validated by swab sample and found to be 95% successful. The cleaning of carpets was validated by bulk dust sample and found to be only 80% successful. The technique for carpet cleaning had to be ‘fine tuned’ and the contract for the Major Cleaning Project now specifies a cross-hatch pattern of vacuuming and the maximum rate at which the carpets can be vacuumed. Beyond that, any carpets that do not meet the appropriate cleanup guideline after cleaning will be replaced. Members noted that in one particular case a carpet was cleaned ten times and still did not comply with the cleanup guideline. An offer was provided to the home owner which was accepted.

If the cleaning was deemed inadequate by the validation team, there were two possible responses (which will also be used in the Major Cleaning Project):

- If an area could be visually validated, the contractor conducted the rework at his own cost;
- If the area could only be validated by swab or bulk dust sample, the contractor conducted rework at ECRP cost. Examples of this were carpet cleaning and some of the more difficult brick work cleaning.

Members noted that the cleanup guidelines had proved effective throughout the Trial.

- **Quality management** - Cleaning was conducted as per the contract documents, which were based on cleaning procedures established by the Steering Committee. The work was monitored very closely by the Project Manager throughout the Trial. The Project Team had anticipated stepping back from close supervision as the Trial progressed but that was simply not possible due to the number and complexity of issues arising at each of the premises. The key lesson here is that the Major Cleaning Project will also require close supervision at all times. The ECRP team is currently in the process of engaging three, full time Principal's Representatives to manage the quality and safety aspects of the cleaning.
- **Overall Contractor Performance** - The contractor was easy to work with and demonstrated a high level of commitment to the quality of the cleaning. (The contractor did not tender on the Major Cleaning Project but has agreed to work on behalf of the ECRP in managing safety and quality for internal and external cleaning.) All contract disputes have been resolved, the results of the cleaning have been accepted and the final payments have been made.

Members congratulated the Project Team on the professional manner which they had conducted the sampling program and the Trial Cleaning Project.

8. ECRP Administrative issues

Members noted:

- **Independent Process and Methodology Audit of the ECRP** - The proposed ECRP Process and Methodology Audit has been initiated to provide another level of confidence to Government and the community that the ECRP methodologies adopted will deliver a successful outcome to the project, by meeting the required project objectives. The audit findings will be used to validate or modify the current methodologies and processes to ensure these required project objectives can be met.

- The audit is not intended to be purely of an administrative nature. The intention is for a technical audit of the suitability or otherwise of the established ECRP methodologies and processes to ensure a successful cleanup of the Esperance townsite. The audit must be cognisant of the need of the project to balance practicality with legal obligations in regards to delivering the required outcome for the Esperance scenario.
- Sampling and cleaning methodologies have been developed specifically for the situation in Esperance and endorsed by the ECRP Steering Committee. In many cases relevant standards, guidelines or methodologies simply did not previously exist. Where they did exist, either through International, Australian or Industry standards, the unique nature of the contamination events in Esperance required a pragmatic approach to their implementation.
- The following outcomes will be delivered through the audit, via a written report.
 - Task 1: Review existing ECRP methodologies and processes for the sampling and cleaning components of the project.
 - Task 2: Provide advice as to the suitability of these methodologies and processes to meet the objectives of the project.
 - Task 3: Provide suggested changes to the existing methodologies and processes as required.
- GHD Pty Ltd has been selected to undertake this audit and will commence work in the week beginning 17th May 2010.
- **ECRP Record Keeping Audit** - The ECRP collects and holds a vast number of records in a variety of formats. Hard copy and electronic documents, physical samples and highly confidential information is held by the ECRP. These items of information are stored on Department of Transport and DoH servers in Perth, at ECRP offices in Esperance and at off-site storage locations also in Esperance. There was an identified need to ensure that all of these records are kept and maintained under guidelines provided by the State's Record Keeping Act, and also the Department's own Record Keeping Plan. The Department of Transport's Record Keeping Plan Co-ordinator inspected the ECRP operations to gain a better understanding of the uniqueness of the Esperance project, including the type of files, records, data and items that are being stored. This inspection was conducted over 2 days on Thursday 6th and Friday 7th May 2010. The audit report will be made available to Steering Committee Members once it has been presented to the ECRP.

- **ECRP data management and workflow application** - The workflow application created for the project is currently undergoing rigorous testing by selected ECRP staff. The key functions of the application are to:
 - Store and update commonly accessed meta data for each premises (i.e. names, addresses, contact numbers, etc) to replace the four manual processes that are currently in place and prevent copy and paste errors;
 - Store and update a summary of the sampling results for each of the premises in order to automatically generate cleaning worksheets;
 - Visually indicate the processes that are complete at each of the premises and those that are yet to be completed. For example, the user can, at a glance, determine if a premises has been contacted by letter, agreed to the sampling, been sampled, cleaned or validated and what the outcomes at each stage are (the details of those processes can be found by cross-reference to the hard files).
 - Assist in the exporting of results to the Department of Health for GIS mapping. The GIS officer from the Department will visit Esperance towards the end of May to work through the process of capturing and mapping the results on the Department's database. It is anticipated that the first batch of 200 premises will be exported to Department of Health in early June. The final version of the application will be made available to the whole ECRP team at the end of May and it is expected to immediately add value to the ECRP workflow.

- **ECRP staffing matters** –Kieron Smith will be leaving the ECRP on 21st May 2010 after accepting a position in South Australia.

Members thanked Kieron for his high quality work and especially for his significant contribution to the ECRP by establishing the framework and setting the direction in relation to the sampling component of the project. Members noted that a replacement for Kieron was being sought at the time of the meeting.

9. Other Business

i. Update on Esperance Port Authority Environmental Emission Data

Members noted:

- A presentation, dated 20 May 2010, by Peter Skitmore, from the Department of Environment and Conservation, on the most recent compilation of data on lead and nickel air quality in Esperance.
- Results from community dust depositional gauges show that over the last 12 months there has been a general reduction in nickel deposition when compared to historic data. A minor but progressive increase in nickel levels at DG1 has been recorded since December 2009.

- However, most significantly DG9 which is located with in the port area, has shown an increasing trend in nickel deposition over the last 6 months with a slight decrease during April 2010. This increasing trend is of continuing concern to DEC which is in discussions with the EsPA to address this matter.
- The EsPA attributed the elevated levels at DG9 to the unloading of kibbles from trucks which was occurring in close proximity to DG9. EsPA was encouraging clients to use containers for both product entering the port and for export. EsPA advised that bulk nickel exports are likely to reduce considerably from June 2010.
- Results from the four HiVol monitors located at the port boundaries over the period November 2007 to date show that the daily target of $0.14\mu\text{g}/\text{m}^3$ (which applied from 6 October 2008) has only been exceeded on two occasions during the 48 ship loading events. DEC confirmed that a loading protocol was a requirement of the licence.
- There have been 20 bulk nickel ship loadings since the revised shiploading protocol [which capped loading rates and only allowed shiploading in offshore winds] was implemented and none of these exceeded the daily target.
- With regard to the annual guideline of $0.003\mu\text{g}/\text{m}^3$, recommended by the Department of Health, Sites 1, 3 and 4 each show numerous 24 hr results where levels less than the guideline were recorded. However, Site 2 has since October 2009 shown only 13 days where levels were below the guideline. Site 5 (at the Esperance Shire Offices) has since it was installed (July 09), showed most levels below detection with others at very low levels. Concern was raised regarding the shifting of the Site 5 monitor without changing the name/title of this site.
- HiVol results all show very low lead levels and in most cases below the level of detection.
- All community deposition gauges show very low levels of lead dust or below the limit of detection
- These data indicate recirculation of lead dust in air is not an issue

Action: The May 2010 presentation of data on air quality monitoring by the Esperance Port Authority, and as compiled by DEC, be circulated to Members and placed on the OnCue website.

ii. Recommended method for sampling, analysis and calculation of the annualised guideline for nickel emissions in Esperance.

Members noted:

- A further revision of the document titled "Sampling and Analytical Methodology for the Measurement of the Annual Guideline for Nickel, Esperance, Western Australia" prepared by the ChemCentre.
- Comments on the document submitted by Pam Norris and Michelle Crisp.

- In introducing this latest document Peter McCafferty made the following points:
 - a. Development of this method was necessary in order to measure the very low levels of nickel required to enable comparison with the annual guideline as recommended by the DOH. A 'prescribed method' was necessary because inappropriate calculations were being made using data which had a limit of detection at a similar level to the guideline.
 - b. The revised document addressed the concerns which had been raised by community members at previous meetings.
 - c. Most significantly the method requires the determination of the nickel concentrations in the PM₁₀ fraction at the new community HiVol sites and comparison with the annual guideline AND measurement of the nickel concentrations as TSP at sites 1 to 4, which are within or very close to the port boundary, and comparison of these data with the annual guideline. The use of this TSP data will provide a worst case scenario of nickel exposure and eliminate the expressed concerns by community members of a 'no mans land'.
 - d. The annual guideline for nickel in Esperance is determined on the basis that if 1,000,000 people lived on the port boundary, each and every day for 70 years then one of those people is likely to contract cancer from nickel exposure at the guideline level.
 - e. The latest document:
 - included references to internationally recognised procedures for the benefit of stakeholders and for the process of peer review and accreditation as a Standard Method
 - included some general information on methodology of options, so that stakeholders understand the logic behind the decisions. e.g Section 6 which concerns 'sampling uncertainties'.
 - does not include a detailed account of the toxicology of nickel sulphide which is not the brief of the ChemCentre or the purpose of this document.
 - f. The use of the wording of 'comparison' with the annual guideline, as recommended by DOH, rather than 'compliance' with the annual guideline had been deliberately used because the guideline is not a regulatory requirement.
 - g. Whilst it is possible to determine the PM₁₀ fraction within a TSP sample in the laboratory and to determine the type of nickel present in the PM₁₀ fraction, this is a very costly procedure and would not be practical on a routine basis.
 - h. The process used in developing this method was consistent with the normal process for the development of such 'Recommended' and 'Prescribed' methods of analysis.

- That HiVols required to be set up at two further sites in the community and the acceptability of these two locations has to be agreed by all stakeholders. One site had been selected at the corner of Taylor and Corry Street and this was acceptable to all parties. A second site had been proposed on Griffin Street. However subsequent negotiations had shown that this was not desirable because the site was in school grounds. Members noted that Alex Leonard and Kieron Smith had considered three potential sites for this third community based HiVol. The Steering Committee encouraged the EsPA to expedite final determination of this site and install these additional community based HiVols as soon as possible. Funding for these additional HiVols has been provided to the EsPA by the nickel exporting companies.
- That the EsPA would conduct the sampling, maintenance of the equipment and would calculate the annual nickel exposure level measured at each of the HiVol sites using this method. These data would be provided to the DOH for comparison with the annual guideline and DOH would provide a health assessment of these data.
- That the volume of bulk nickel sulphide exports was likely to decrease in the near future because Xstrata Nickel was currently exporting in containers, Western Areas were looking at the feasibility of exporting in containers and the BHPB stockpile had virtually been eliminated.

Action: Peter McCafferty should assess the comments received on the 'nickel method' and that a revised and final document should be prepared and distributed to stakeholders.

iii. DEC Report on Lead and Nickel Levels in Esperance Vegetation

Members noted:

- That the DEC Report on Lead and Nickel levels in Esperance Vegetation was nearing completion. A copy of the report would be provided to Steering Committee Members as soon as it was available.
- Samples had been taken for the 2010 survey and analytical results were awaited.

Action: Peter Skitmore to provide a copy of the DEC Report on the 2009 Survey of Lead and Nickel in Esperance Vegetation to Steering Committee Members, when the report is available.

10. Next meetings

Members noted that the next meeting of the Steering Committee would be convened on 29 July 2010. It was contemplated convening this meeting in Esperance. A decision on this matter would be made prior to the meeting and Members informed accordingly.

iv. Close of meeting

The meeting closed at 4.40 pm.

ESPERANCE CLEANUP AND RECOVERY PROJECT

STEERING COMMITTEE MEETING

20 May 2010

SUMMARY OF ACTIONS

1. Soil Sampling program – Water Corporation site

Action: DEC [Peter Skitmore] to liaise with the Water Corporation on with regard to remediation of the Panorama Place site.

The Project Director to include remediation of the Panorama Place Water Corporation site as part of the ECRP.

2. Report on Soil Sampling program – Type “A” sampling

Action: Department of Transport [John Fischer] to follow up a response from ARG on dust control strategies at the Nulsen site.

3. ECRP Monitoring of sentinel homes

Action: Sub-committee on Sentinel Homes to address outstanding issues on the use of Petri Dish methodology and the integration of the sentinel monitoring program into the broader context of ongoing environmental monitoring programs. Report to be provided at the next meeting of the Steering Committee.

4. Golder Associates Report on Human Health and Ecological Risk Assessment for the Esperance Townsite

Action: Recommendation 4 of the Golder report to be further reviewed by EsPA, Transport and DEC.

5. Progress report on sampling of homes and other premises

Action: Papers, as prepared Project Team, on potential sources of lead, should be published on the OnCue website to assist the community to understand other potential lead sources within the community.

6. Update on Esperance Port Authority Environmental Emission Data

Action: The May 2010 presentation of data on air quality monitoring by the Esperance Port Authority, and as compiled by DEC, be circulated to Members and placed on the OnCue website.

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

Action: Peter McCafferty should assess the comments received on the ‘nickel method’ and that a revised and final document should be prepared and distributed to stakeholders.

**8. DEC Report on Lead and Nickel Levels in Esperance
Vegetation**

Action: Peter Skitmore to provide a copy of the DEC Report on the Survey of Lead and Nickel in Esperance Vegetation to Steering Committee Members, when the report is available.