



## NORTHAMPTON LEAD TAILINGS PROJECT (NLTP)

### MINUTES OF STEERING COMMITTEE MEETING

7 MAY 2014

#### **Present:**

Mr Michael Jackson	Department of Lands (DoL) (Chair)
Mr Glen Bangay	Shire of Northampton
Mr Peter Beck	GHD
Mr Jon Cramer	Department of Lands (DoL)
Mr Noel Davies	Aurora Environmental
Mr Brad Dermody	Aurora Environmental
Mr Chuck Ellis	Department of Lands (DoL)
Mr Lindsay Gillam	Department of Health (DoH)
Mr Garry Keeffe	Shire of Northampton
Dr Sarah Kelley	Department of Health (DoH)
Mr Andrew Miller	Department of Environment Regulation (DER)
Mr Paul Morris	Department of Mines and Petroleum (DMP)
Cr Gordon Wilson	Northampton Community Representative

#### **Apologies:**

Mr Antoine Macmath	Department of Lands (DoL)
Dr Marisa Gilles	Department of Health (DoH)

#### **1. Opening of Meeting and Review of Agenda**

The Chair welcomed all participants to the fourth meeting of the Steering Committee and in particular Dr Sarah Kelley who had assisted Lindsay Gillam in conducting interviews with Northampton residents.

The meeting was convened in the Council Chambers of the Shire of Northampton.

Apologies were noted from Dr Marisa Gilles and Antoine Macmath who were not available for this meeting.

Mr Andrew Miller participated by teleconference.

#### **2. Report of the previous meeting**

Members endorsed the final Minutes of the third meeting convened on 28 November 2013 meeting and agreed that the document should be loaded onto the DoL website.

#### **3. Actions arising from the previous meeting**

##### **3.1 Communication strategies**

At the November 2013 meeting it was agreed that Chuck Ellis would provide up to date details on the NLTP for a full page article for the Northampton Community News.

Members noted that this action had been completed.

### **3.2 Proposed strategy for blood lead testing**

At the November 2013 meeting DoH undertook to further investigate information pertaining to blood lead testing through private laboratories in Geraldton. Members noted advice from DoH that these blood lead tests were not related to the NLTP.

### **3.3 Investigation Program Status**

At the November 2013 meeting the Steering Committee, in assessing the data generated in the NLTP to date, requested the Core Working Group to consider this data and to provide recommendations on establishing a practical and safe trigger level that determines whether further investigation/ or management in Northampton is required, bearing in mind such factors as:

- lead concentration in the soils,
- particle size of the soil fractions,
- current development and use of the property
- exposure pathways,
- bioaccessibility of lead,
- local geology, lead mineralisation and background concentrations of lead, and
- other precedents for assessing similar sites.

This matter is discussed under item 6.

### **3.4 Implications of the *Contaminated Sites Act 2003* on Properties in Northampton**

At the November 2013 meeting it was agreed that:

- (i) Future media statements should incorporate details of the implications of not providing consent to have properties tested.
- (ii) DER be requested to provide a paper on Implications of the *Contaminated Sites Act 2003* on Properties in Northampton to members out of session. The paper should include a question and answer sheet on this matter.

These matters are discussed under item 9.

### **3.5 Strategies for Obtaining Consent from Remaining Property Owners**

At the November 2013 meeting it was agreed that:

- (i) The draft media statement, as tabled, to be redrafted to incorporate the important and positive messages arising from the meeting.
- (ii) An advance copy of media statements concerning the NLTP should be provided to the Shire CEO and Cr Gordon Wilson (as well as DoH, DER and DMP).
- (iii) Garry Keeffe to contact and encourage consent from those Northampton property owners who have not yet given consent to participation in the NLTP. Aurora to provide details of those properties for which consent has not been given.

Members noted that these actions had been completed.

### **3.6 Options for disposal of lead tailings**

At the November 2013 meeting DER was requested to provide a paper on 'Options for Disposal of Northampton Lead Tailings' to Members, out of session. This matter is discussed under item 10.

### **4. Core Working Group – summary and classification of properties assessed.**

Members noted:

- Advice from Jon Cramer that at the time of the meeting a total of six meetings of the Core Working Group had been convened.
- The members of this Core Working Group are DoL, DoH, Aurora Environmental and the GHD auditor.
- The Core Working Group has established a mechanism for the assessment of data as it becomes available from Aurora. As properties were inspected by Aurora, the results were subsequently presented to the Core Working Group which then classified each property according to potential risk factors.
- A matrix has been developed in order to classify properties in three broad categories as follows:
  1. Category 1 - those properties where high lead concentrations have been found and the presence of tailings have been confirmed and are readily accessible and there is a perceived health risk in the context of the current residents and the current land use.
  2. Category 2 – elevated lead concentrations and/or tailings identified however there is not perceived to be an immediate health risk on that property.
  3. Category 3 - no evidence of tailings, no perceived health risk and therefore no further investigation is required
- Whilst Category 1 includes those PINs with high lead concentrations, this does not always translate that tailings have been visually observed. Studies by Aurora show lead concentrations in natural soils that exceed the trigger levels for further investigation. This is due to natural mineralisation in the area (further discussed in item 6). Some of the PINs currently included in Category 1 could have high lead concentrations due to natural mineralisation or other lead sources. This finding is consistent with the presentation by Paul Morris on the 'Geology of the Northampton Area' at the second meeting of the Steering Committee in September 2013.
- That the Outcomes/Action Matrix should be amended to incorporate this point by including the words "or elevated lead concentrations that suggest the presence of tailings or natural mineralisation at levels sufficient to be a possible health concern".
- Full details of the categories in this matrix as amended are set out in Attachment 2.
- This mechanism has enabled a decision on those Category 1 properties which warrant interim management of perceived risks through a follow-up interview with owners/occupiers by DoH officers. In these instances of properties in Category 1, DoH officers have met with property owners, disseminated the inspection findings and provided health advice as appropriate. Further details are set out in item 7.

The Steering Committee supported the categories identified by the Core Working Group.

## 5. Investigational Study Status update

### Members noted:

- A presentation by Noel Davies which provided a summary of the information gained from the investigation to this point in time.
- The field component of the study was completed on 30 April.
- Up to 2 May, 781 PINs have been identified and included in the scope of the investigation. (759 total PINs in Northampton +22 PINs from just outside of Northampton (<2km)).
- The owners of 617 PINs have given consent for participation in Phase 1 of the investigation (as at 16/4) – this represents 78% of the total number of PINS where consent was received. All of these PINs had been inspected and sampled as at 30 April 2014.
- More consent forms may be received following this last inspection program however these properties will not be able to be included in this current work and will need to be addressed a separate exercise.
- The owners from 10 PINs in town had refused consent to the NLTP.
- Since the last meeting of the Steering Committee, there had been a significant increase in the number of property owners who had given consent to participation in this project.
- An additional round of inspections was conducted on 28-30 April comprising 25 PINs where consent was received late or owners didn't respond to call back slips throughout program.
- A series of maps showing the number of PINS inspected across the Northampton townsite and in areas 1, 2, 3, and 4 and the actual locations of the samples taken on each PIN.
- As of 16 April, the investigation has involved:
  1. Total number of pXRF samples = 3,793
  2. Total number of pXRF readings = 18,965 and for every one of those readings, 20 results for analytes had been obtained.
  3. Total number of laboratory samples analysed = 375
  4. Approximately 6 samples had been taken per PIN
  5. Together with other information collected on each property.
- All samples had been retained for future reference.
- A series of maps showing those properties in Category 1, 2, and 3.
- An overlay of the PINs in Category 1 with the geological maps of the Northampton townsite.
- The assessment by the Core Working Group of analytical results for all PINs sampled to date is as follows:
  1. 63 PINs are in Category 1
  2. 107 PINs are in Category 2, and
  3. 447 PINs are in Category 3.
- Therefore 27% of all PINs require further investigation to determine if they should be progressed to Phase 2 of the project. Conversely 73% of all PINs sampled and analysed are in Category 3, have no evidence of elevated lead levels and require no further investigation.
- Aurora is preparing the first draft of the investigation report which should be finalised in early June.

- The final investigation report should be ready in mid-July with the Sampling and Analysis Plan (SAP) for Phase 2 following this due to the need to agree on a number of technical matters with the Auditor, DER and DoH.
- Provided agreement can be reached on whether adjusted HIL values can be applied for the tailings and lead mineralised soils in the Northampton area, it should be possible to communicate the results of the Phase 1 study for each PIN to the relevant landowners during July 2014.

## **6. Actions from the Core Working Group**

### **Background**

As mentioned under item 3.3, the Steering Committee at its November 2013 meeting, requested the Core Working Group to consider the data generated to date and to provide recommendations on establishing a practical and safe trigger level that determines whether further investigation/ or management in Northampton is required, bearing in mind such factors as:

- lead concentration in the soils,
- particle size of the soil fractions,
- current development and use of the property
- exposure pathways,
- bioaccessibility of lead,
- local geology, lead mineralisation and background concentrations of lead, and
- other precedents for assessing similar sites.

This evaluation should be used in order to determine which properties warrant further investigation in Phase 2 of the Project.

### **Members noted:**

- Advice from Jon Cramer that the Core Working Group had met on 19 December 2013 to discuss these matters. In addition to the members of the Core Working Group, Mr Peter McCafferty from the ChemCentre and Mr Paul Morris from DMP attended the meeting.
- There were three main issues that were addressed as follows.
  1. The first issue;
    - to ensure that the work carried out in the Northampton project is robust, defensible and can withstand external scientific scrutiny
    - outline additional quality control/ quality assurance measures that can be undertaken to strengthen the robustness of the existing program
  2. The second issue addressed was to develop the methodology for further investigation into work to better understand the range of lead concentrations in the Northampton area particularly focussing on the geological lode formations and the enrichment of soils in the proximity of those lodes.
  3. The third issue was to prepare methodology to undertake further chemical and physical testing to better understand the particle size distribution and bio-accessibility of different materials throughout the Northampton region with an ultimate goal of establishing site specific assessment criteria. It is important to demonstrate that if the background concentrations of lead in the soils of some Northampton

properties are above the existing national HILs, that these levels are safe and that they do not require further management. This is important for the objectives of the NLTP and to provide ongoing confidence to the Northampton community.

**1. Additional Quality Assurance/ Quality Control work** -additional QA/QC analyses was agreed by Core Working Group to understand pXRF data accuracy, precision and allow for a direct comparison with confirmatory laboratory data. The additional data collected will be reviewed and interpreted by Aurora and presented in their QA/QC section of their final report. Members agreed that it is important to demonstrate the accuracy and effectiveness of the pXRF instruments not only for the validity of the Phase 1 work but also for continued use of the XRF methodology throughout future Phases of the NLTP.

**2. Background lead concentrations in Northampton properties and background lead concentrations in mineralised sites:**

Advice from Aurora suggests that the background lead concentrations in those properties in Northampton where lead tailings were not found and mineralisation was not evident were in the range between 27 to 250mg/kg. In order to determine an estimate of the background lead concentrations in those properties on which no evidence of tailings was found but elevated lead levels were observed (i.e. above the HIL-A), a series of transect tests were carried out at the “Lucky Lou” site within the Northampton area. The Lucky Lou site is a piece of vacant Crown land to the north-west of the townsite where former mining has occurred and geological mapping indicates a known lead lode extending through the site. The transects were undertaken away from any mine workings. The findings from this work indicated maximum lead concentration of 6,319mg/kg, a mean lead concentration of 749mg/kg with a standard deviation of 996mg/kg (i.e. very wide spread). The median lead concentration was 382mg/kg and the 95<sup>th</sup> percentile 3,005mg/kg. From these studies Aurora had concluded that the range of background lead concentration that exists in natural soils in mineralised areas in Northampton ranges from 382 to 3,005mg/kg. Members noted that it was very difficult to differentiate between lead tailings and natural weathered mineralised soils. This is because the process by which the tailings had been accumulated was a physical rather than a chemical process. There was a good correlation between the lead concentrations from natural mineralisation as determined by Aurora and the geological maps of lodes as provided by DMP.

**3. Bioaccessibility studies** – The current Health Investigation Levels (HILs) are very conservative and are based on assumption that lead is 100% bioaccessible and 50% bioavailable. Whereas the scientific literature suggests galena from ore wastes has bioaccessibility of from less than 5% up to 80% and bioavailability less than 25%. The Core Working Group agreed to a staged approach for bioavailability and bioaccessibility trials of selected soil samples to develop Northampton-specific HILs. The timeframe for Phase 1 timeframe only allows for bioaccessibility analyses. A total of 30 samples have been submitted to the University of South Australia for bioaccessibility analyses. The results of these bioaccessibility studies are expected on 22 May 2014 and will be available for discussion at the proposed Technical Workshop. Aurora is preparing a Working Paper on this matter. This paper will be submitted to members of the Steering Committee for comment and ultimately, endorsement. It is intended that the Working Paper will be appended to the Phase 1

Aurora Report once it has been endorsed by the Steering Committee. On the basis of the bioaccessibility studies, Aurora will review all data from properties in Categories 1 and 2 and make an assessment of those properties which are recommended for further consideration in Phase 2, and those properties on which no further action is required. Members agreed that such an assessment will provide clear advice to government of those properties which require further investigation in Phase 2.

**Actions:**

- 1. Aurora to prepare a Working Paper on the bioaccessibility of Northampton lead. The paper will be referred to Steering Committee members for comment and ultimately endorsement.**
- 2. Shire and community members of the Steering Committee to be invited to the Technical Workshop**
- 3. On the basis of the bioaccessibility studies, Aurora will review all data from properties in Categories 1 and 2 and make an assessment of those properties which are recommended for further consideration in Phase 2, and those properties on which no further action is required.**

**7. Summary of DoH blood lead testing and home visits**

**Members noted:**

- Advice from Lindsay Gillam and Dr Sarah Kelley on the work of DoH in visiting the residents of those premises which had been classified by Aurora into Category 1. The purpose of these 'home visits' was to enable DoH officers to assess the properties, advise the residents that elevated lead concentrations had been determined, and if required recommend that preventative public health measures should be employed and residents should have blood lead testing.
- At the time of the meeting there were 63 properties in Category 1, and DoH officers had visited 45 of these properties. These properties included individual residences and some non-residential premises such as the hardware and gift stores, the dog pound and the local church. Requests to meet with some residents had proved difficult in some instances where residents had not returned telephone calls etc. In other instances officers had been advised that the residences were vacant holiday homes.
- Of those residents interviewed, almost all had agreed to have blood lead testing, and although these tests are provided at no cost to the residents, few residents had presented for blood lead testing. This free blood lead testing could be accessed through the local GP clinic in Northampton, at the Northampton hospital or at the Geraldton hospital (by special arrangement).
- Of the 14 residents who had presented for blood testing, including several children, none had blood lead levels greater than 3µg/dL (micrograms per decilitre). [The National Health and Medical Research Council (NH&MRC) recommends that "all Australians should have a blood lead level below 10µg/dL". In order to meet the second NHMRC recommendation, DoH adopted a policy for children under five years of age who have a blood lead level of 5µg/dL or above, as the threshold level which warrants further environmental investigation with the view to identifying and preventing exposure to the source of lead.]
- DoH advised that blood lead levels of up to 3µg/dL were within the normal range and not indicative of lead exposure from any source.

- It is not possible to differentiate different sources of lead in Northampton using isotopic analysis as had been the case of lead contamination in Esperance. In the Esperance situation the isotopic 'fingerprint' of Magellan lead was distinctly different from other lead sources such as lead from lead flashing on roofs, and lead sinkers.
- DoH officers advised that some residents were keen for the lead tailings to be removed from their property and had indicated that they were in a position to remove the tailings themselves, and asked if this was possible. This was of concern because it was unlikely the material would be effectively and safely removed and disposed of correctly. Residents were informed further information on this matter would be provided when possible. The main issue to be determined was where this product would be located once removed.
- DoH officers have further properties to visit in the next few days following the Steering Committee meeting.
- DoH will prepare a report on this item. The report will be distributed to Steering Committee members out of session.
- Several Members suggested there was merit in conducting a random survey of blood lead testing of Northampton residents especially for those residents who have lived in the town for an extensive period i.e. many years. If such a survey could be conducted, it would provide a vital piece of information to suggest what the long-term exposure risk within Northampton is. Members of the Northampton community could be encouraged to participate in such a survey by officers of the Northampton Shire. Shire and DoH officers undertook to evaluate the need for this survey, noting that no BLL testing to date had determined other than a normal range of results.
- **Actions:**
  1. DoH to prepare a report on the interviews with residents with properties in Category 1 and the results of subsequent blood lead testing of residents.
  2. DoH and Shire officers to examine the value (or otherwise) and efficacy of conducting a blood lead survey of Northampton residents.

## **8. Reporting of Phase 1 of the NLTP to Northampton Residents**

### **Members noted:**

- That in view of the fact that DoL is the lead agency responsible for the NLTP, it was intended to provide the results of the Phase 1 investigation to each Northampton resident who had participated in the project as a letter from the Director General of Lands. It was proposed that this letter would provide a brief description of the project and the specific results of the testing of the resident's property/ies. It was also proposed to enclose with each letter a question and answer sheet.
- Aurora will provide all details of sample analyses to DoL.
- Aurora is able to provide details of each of the sample points for each property and the results of analysis for each sample point. This could be provided as an aerial photograph of each property.
- DoL will provide advice to residents on behalf of the NLTP Steering Committee.
- Advice from Shire and community members that the information provided to residents should be as simple and clear as possible i.e. whether the Phase 1



investigations have shown that either no further action is required, or whether further investigation is required in Phase 2. This information should be provided as a letter sent by registered mail. For those residents who seek further specific information regarding testing of their property, they should be directed to a contact officer within DoL. Members accepted this advice.

- That DoL would prepare a draft letter as intended for residents and circulate this to Steering Committee members for comment.

**Actions:**

- 1. DoL to prepare a draft letter as intended for residents and circulate this to Steering Committee members for comment.**
- 2. DoL to provide advice to residents on the results of Phase 1 together with a cover letter and Q and A sheet. The advice to be whether any further action is or is not required. DoL to provide details of a contact officer if residents require further information. This advice to be conveyed by registered mail.**

**9. Implications of the *Contaminated Sites Act 2003* on Properties in Northampton**  
**Members noted:**

- A Draft paper on the 'Proposed Site Classification Process for Northampton Properties' prepared by Andrew Miller. The points in the paper reiterated the verbal report made at the November 2013 meeting.
- Sites will not be classified under the Contaminated Sites Act 2003 (CS Act) by DER until Phase 1 (preliminary investigation), Phase 2 (further site investigation) and Phase 3 (remediation and management), are completed.
- The investigations that are currently being undertaken are what would be expected to address a *possibly contaminated – investigation required* classification.
- All classifications are risk based. The information that is obtained from the bioavailability and bioaccessibility studies will be taken into consideration in the classification process.
- The classification of a site in accordance with the CS Act will form part of the on-going management of sites where there is residual tailings material remaining on-site after Phase 3 (remediation and management). The expected classification would be *remediated for restricted use*. The reasons for classification would document the presence, nature and location of any contaminated material so that it can be considered in any future development.
- The presence of residual contamination can be compatible with sensitive land uses such as residential and educational. If residual contamination is present, it is likely that a management plan will be required to address any potential future excavations or intrusive works on that property. This may be a generic management plan that is developed by the project team following the completion of Phase 3 and lodged with the Shire of Northampton. The management plan may also be made available to download from the DER website.
- Properties that are not inspected will not automatically be classified as *possibly contaminated- investigation required* unless there is sufficient historical and anecdotal evidence that indicates there is a high likelihood of tailings being on that property (i.e. sufficient evidence as per any other site).

The fact that the property is within the Northampton townsite does not represent sufficient evidence for classification.

- An automatic classification of a property within the town-site that is not inspected is not deemed justified or consistent given that other properties immediately outside of the investigation areas (immediate town-site boundary) may have a comparable risk of containing lead tailings from the battery site.
  - DoL have indicated that a generic management plan will be developed for the Shire of Northampton at the completion of the project that will present requirements/conditions for identifying and managing lead tailings if there is any change in landuse/development on a property. Properties that have been inspected as part of this project will be able to provide sufficient documentation to demonstrate that the site has been investigated and contamination issues associated with the lead tailings addressed. Whereas properties that were not inspected are unlikely to have sufficient evidence either way and will require further work to be completed – at their cost (or not redeveloped at all).
  - DER would have no objections to the release of information from the NLTP being made available to the Shire for future use.
  - DER will review the situation with regard to those sites with elevated lead levels due to natural mineralogy. Mr Miller reiterated to the Steering committee members in a situation where elevated lead concentrations exist as a result of natural mineralogy, these properties would not trigger any action under the CS Act. The definition of contamination under the Act suggests that the needs to be a chemical/ substance above background concentrations and from an anthropogenic source. This matter will be further discussed at the Technical Workshop.
- The Chair thanked Mr Miller for this paper.

#### **10. Options for disposal of lead tailings Members noted:**

- Advice from Andrew Miller on the options for disposal of lead tailings identified in the NLTP.
- Mr Miller had consulted with the Licensing Branch of DER and the Regional DER office on this matter.
- From the current information available on the lead tailings, they would require disposal at either a Class IV or Class V landfill facility.
- However using the data obtained from the bioaccessibility and bioavailability testing and a significantly larger data set, it is likely that the class of landfill facility required will be lower e.g. Class II.
- It would be desirable if a suitable landfill facility for the tailings could be established in the Northampton area.
- The leachability of the lead tailings is the most critical factor in determining the disposal options for the tailings and the class of landfill facility that is required.
- The leachate applicable to the Northampton lead tailings should be of neutral pH (rather than a lower pH).
- DER considered that it would be valuable if Aurora selected representative samples of tailings material from Northampton and submitted these to the ChemCentre for leachability testing studies.
- Therefore it is still too early for DER to determine the class of landfill required for the Northampton lead tailings.

- Advice from Mr Miller, that the local abandoned mine site inspected following the last meeting was not considered suitable for the disposal of the lead tailings identified in the NLTP.
- As an interim step it would be pragmatic to establish a suitable bin or bunded holding area with a concrete base at the current Northampton landfill site for the temporary holding of lead tailings. This could be used pending the determination of the studies mentioned above and the ultimate establishment of an appropriate long term landfill facility for the tailings.

**Actions:**

- 1. Aurora to provide selected representative samples of Northampton tailings material to the ChemCentre for leachability testing studies.**
- 2. Northampton Shire to establish a suitable bin or bunded holding area at the current Northampton landfill site for the temporary holding of lead tailings.**

**11. Next Steps in Phase 1 and preparation for Phase 2 of the NLTP Members noted:**

- Advice from Jon Cramer on the next steps proposed for the completion of Phase 1 of the NLTP and the preparation for Phase 2.
- With the completion of the property inspection stage of the Project by Aurora the next steps are seen as follows:
- Completion of side studies into:
  1. background concentrations of lead in natural uncontaminated soils and the impact of mineralisation in the Northampton region; and
  2. the bio accessibility of lead in natural existing weathered soils and processed tailings. These studies will be carried out by Aurora Environmental.
- Preparation of a report that uses the findings from the above side studies as justification for derivation of a Northampton site-specific criteria for lead in natural soils. This will be done by Aurora Environmental.
- Convening of the Technical Workshop of Steering Committee members seeking discussion and endorsement Northampton site specific criteria and a discussion on Phase 2 scope of works.
- Compilation and interpretation of the data and preparation of the Phase 1 report. This will be done by Aurora Environmental.
- Review and endorsement of the Phase 1 report by the auditor and the Steering Committee.
- Preparation of the letters to individual property owners and occupiers and delivery to residents. This will be undertaken by DoL. The Minister for Lands, Health and Environment will be briefed of the findings and any commitments put forward prior to them being released to the residents. DoL is aiming to release these letters in July 2014.
- Preparation of the Sampling and Analysis Plan for the properties that require further investigation as part of Phase 2 of the project. This will be done by Aurora Environmental and reviewed/approved by Dr Peter Beck. This series of actions will conclude Phase 1 of the NLTP. This action will conclude the current contract with Aurora Environmental.

- DoL will then prepare submission to Government seeking funding for Phase 2 (using the Sampling and Analysis Plan design to cost the next phase of work). The Core Working Group will be integral in the development of this submission.
- Preparation of tender documents for works associated with Phase 2. Appointment of Phase 2 consultants. DoL will undertake this.
- Implementation of Phase 2 will subsequently follow.
- It is not possible to provide timelines for these steps at this stage.

## **12. Close of meeting**

In closing the meeting the Chair acknowledged and thanked all members of the Steering Committee for their valued participation and contribution to the NLTP and recognised that significant progress had been made since the first meeting of the Committee. Members would be advised of the date and location (in Perth) for the proposed Technical Workshop.

The Chair added that at this stage it was not clear whether the Steering Committee would continue in the current form in Phase 2 of the Project.

The meeting closed at 4.50pm.

## NORTHAMPTON LEAD TAILINGS PROJECT

### STEERING COMMITTEE MEETING

7 May 2014

#### SUMMARY OF ACTIONS

##### **1. Actions from the Core Working Group**

Actions:

1. Aurora to prepare a Working Paper on the bioaccessibility of Northampton lead. The paper will be referred to Steering Committee members for comment and ultimately endorsement.
2. Shire and community members of the Steering Committee to be invited to the Technical Workshop
3. On the basis of the bioaccessibility studies, Aurora will review all data from properties in Categories 1 and 2 and make an assessment of those properties which are recommended for further consideration in Phase 2, and those properties on which no further action is required.

##### **2. Summary of DoH blood lead testing and home visits**

Actions:

1. DoH to prepare a report on the interviews with residents with properties in Category 1 and the results of subsequent blood lead testing of residents.
2. DoH and Shire officers to examine the value (or otherwise) and efficacy of conducting a blood lead survey of Northampton residents.

##### **3. Reporting of Phase 1 of the NLTP to Northampton Residents**

Actions:

1. DoL to prepare a draft letter as intended for residents and circulate this to Steering Committee members for comment.
2. DoL to provide advice to residents on the results of Phase1 together with a cover letter and Q and A sheet. The advice to be whether any further action is or is not required. DoL to provide details of a contact officer if residents require further information. This advice to be conveyed by registered mail.

##### **4. Options for disposal of lead tailings**

Actions:

1. Aurora to provide selected representative samples of Northampton tailings material to the ChemCentre for leachability testing studies.
2. Northampton Shire to establish a suitable bin or banded holding area at the current Northampton landfill site for the temporary holding of lead tailings.

## PHASE 1 OUTCOMES/ACTIONS MATRIX V2

CATEGORY <sup>1</sup>	FACTORS FOR CONSIDERATION <sup>2</sup>	ACTIONS <sup>3</sup>	INTERIM MANAGEMENT RESPONSES
1	<ul style="list-style-type: none"> <li>-Elevated lead concentrations confirmed indicating either:               <ol style="list-style-type: none"> <li>1.the presence of tailings at surface and/or in readily accessible areas, or</li> <li>2. natural mineralisation at levels sufficient to be a possible health concern</li> </ol> </li> <li>-Children younger than 8 years are present (or may visit)</li> <li>- Pregnant women present</li> <li>-Vegetables gardens present</li> <li>-Poultry present</li> <li>-Tailings present on surrounding properties/areas that may be trafficked or accessible to residents</li> </ul>	<ul style="list-style-type: none"> <li>-Implement immediate responses</li> <li>-Further detailed investigation (Phase 2)</li> <li>-Long term management or remediation almost certainly required</li> </ul>	<p><b>Tier 1:</b>DoH to contact property occupiers and provide interim health and hygiene advice on lead and how to minimise any exposure to the tailings. This advice will include recommending blood lead level testing</p> <p><b>Tier 2:</b> If blood testing results are above NHMRC thresholds then DoH/DoL to investigate and undertake further actions</p>
2	<ul style="list-style-type: none"> <li>-Tailings present but not readily accessible to occupiers</li> <li>-Unclear whether tailings are absent (low range lead levels but tailings material not observed)</li> <li>-No children or pregnant women present</li> <li>-No vegetable gardens present</li> <li>-No poultry present</li> </ul>	<ul style="list-style-type: none"> <li>-Further detailed investigation required (Phase 2)</li> <li>-Long term management or remediation may be required</li> </ul>	-None
3	<ul style="list-style-type: none"> <li>-No tailings present, and</li> <li>-No average metal concentrations above HIL for current landuse</li> </ul>	-No further investigation	-None

Notes:

1. The characterisation of sites will be undertaken by a team involving health and environmental professionals and will involve an element of professional judgement to allocate to PINs to categories. Judgements to be made collectively by Technical Sub-committee comprising DoL, DoH, and Aurora representatives and will consider the matters described in the 'Factors for Consideration' column.
2. The list of factors within each category will be considered when arriving at a final characterisation conclusion. Not all of those parameters need to exist for a site to be put into a particular category. An element of professional judgement is required on an individual case-by-case basis.
3. Owners and/or occupiers of all properties where tailings are discovered in Phase 1 of the investigation will be provided with Frequently Asked Questions handout and information on how to minimise their exposure risk to tailings through changing behaviours and extra cleaning etc, until Phase 2 and Phase 3 works are complete.