

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

*This document is for internal use to assist officers of the Department of Environment and Heritage Protection (the department) to record compliance evaluation and enforcement information when undertaking a compliance activity (inspection or desktop). Part D of this form is suitable if a Penalty Infringement Notice (PIN) or Warning is being proposed.*

Please note: Appendices containing a workplace health and safety checklist and to include photographs taken during site inspection are located at the end of this document and can be removed if not applicable. Officers may choose to remove these appendices as well as Parts B and C, prior to submission of the document to the Manager (Compliance) for approval to issue a PIN.

### Part A: Pre-Evaluation

#### 1. Client and Site details

|                                                                   |                                                                                                                                            |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Reference details<br>( <a href="#">Ecotrack Procedure Guide</a> ) | CA46594                                                                                                                                    |
| File Number/s                                                     | 101/0008166                                                                                                                                |
| Licence/Permit Number                                             | EPPR00940913                                                                                                                               |
| Legal Entity Name                                                 | Queensland Nickel Sales Pty Ltd                                                                                                            |
| Other names                                                       |                                                                                                                                            |
| ACN/ARBN ( <u>not</u> ABN)                                        | 009 872 566                                                                                                                                |
| Location                                                          | 1 Greenvale Street, Yabulu                                                                                                                 |
| Registered address                                                | Level 17,<br>240 Queen Street,<br>Brisbane, QLD 4000                                                                                       |
| Contact details                                                   | Clive Palmer – Director, QNS.<br>George Lukacs - Consultant to QNS. <a href="mailto:George.lukacs@qni.com.au">George.lukacs@qni.com.au</a> |
| Date(s) of compliance activity                                    | 18 July 2017                                                                                                                               |

#### 2. Compliance Activity Background

|                      |                           |
|----------------------|---------------------------|
| Environmental risk   | High from CPM version 4.8 |
| Last inspection date | 14 March 2017             |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

|                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General description of location and surrounding environment</b> | The refinery is located approximately 25km North of Townsville, adjacent to Halifax Bay. The site is surrounded by the residential communities of Black River, Saunders Beach and Yabulu. The site commenced operations in 1973 and has a long history of waste storage and mineral processing. The refinery ceased processing ore in March 2016 and is currently in care and maintenance.                                                                                                                                                               |
| <b>Description of permit or location activity</b>                  | 14-(2a) Electricity generation >10MW but <150MW fuel<br>15-Fuel burning >500kg hr<br>16-(2b) Extractive >100000t but <1000000t yr<br>30-(d) Metal smelting & refining >10000t yr<br>38-(1d) Surface coating >10000t yr anodising etc<br>55-(2) Regulated waste recycling or reprocessing<br>60-(1a) Waste disposal <50000t yr (1)(a)<br>63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR<br>7-(6c) Chemical manufacturing >10000t but <100000t yr<br>8-(2) Chemical storage >50t class 6<br>8-(3) Chemical storage >500m3 class C1 or C2            |
| <b>Compliance history and client/operator details</b>              | <p>Queensland Nickel Sales Pty Ltd (QNS) became the holder of the EA for the Yabulu refinery and Berth 2 loading facility at the Port of Townsville on 11 March 2016 following a transfer from the previous operator Queensland Nickel Pty Ltd (QN) (in liquidation).</p> <p>A number of compliance actions are currently being pursued or in place for both the current operator QNS and previous operator QN.</p> <div style="border: 1px solid red; padding: 10px; text-align: center; margin-top: 10px;"> s.73 - Irrelevant information - LPP </div> |
| <b>Ongoing/open/active compliance actions</b>                      | <p><b>Current EPOs:</b></p> <p>Following transfer of the EA from QN to QNS on 11 March 2016, EHP issued EPOs to QNS and the parent companies QNI Metals and QNI Resources, as well as the director of all three companies. The EPOs requires QNS and parent companies to comply with the environmental authority requirements in the EA and retain adequate staff to operate the seepage collection systems and maintain site security. The EPOs continue to be in effect.</p> <p><b>Current Ammonia water exceedance FIR:</b></p>                       |



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|                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• On 16 March 2016, EHP was notified by QNS of the results of samples taken on the 15 March 2016:               <ul style="list-style-type: none"> <li>○ Ammonia measured 17.2mg/L at Alick Creek, which exceeds the EA investigation trigger level of 12mg/L</li> <li>○ Ammonia measured 53mg/L at Blind Creek, which exceeds the EA contaminant limit of 18mg/L.</li> </ul> </li> </ul> <p>An investigation report into the exceedances was received from QNS on 15 June 2016.</p> <ul style="list-style-type: none"> <li>• On 15 July 2016, EHP was notified by QNS of the results of samples taken on the 22 June 2016:               <ul style="list-style-type: none"> <li>○ Ammonia measured 27.9mg/L at Blind Creek, which exceeds the EA investigation trigger level of 12mg/L and compliance limit of 18mg/L</li> </ul> </li> </ul> <p>An investigation report into the exceedances was received from QNS on 17 October 2016.</p> <p>EHP is currently considering the content of this report and a formal investigation into the exceedance notifications is currently occurring.</p> |
| <input checked="" type="checkbox"/> If undertaking a site inspection, I have completed the Workplace and personal health and safety considerations checklist in Appendix 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <input checked="" type="checkbox"/> If undertaking a site inspection, I have completed the Inspection Plan checklist in Appendix 2                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

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## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Part B: Compliance Evaluation

#### 3. Evaluation of Conditions/Legislation

Provide a brief description of the scope of the compliance activity (site inspection or desktop) below. This section can be completed on site.

A site inspection was conducted as part of Q1 CPM Proactive Inspection Program as it was identified as a Band 1 on v4.8 of the CPM) to assess all conditions of the EA, as well as the general water management at the site and progress on the repair works currently being undertaken on the Brine Pond liner.

Identify only issues with the conditions/sections of legislation in the table below. Issues include actual and potential non-compliance or issues with the conditions that need to be addressed. Do not include information regarding conditions/sections of legislation that were assessed as compliant/or where no issues are identified. Therefore, all matters within the scope of the compliance activity that are not referenced in the table below are considered to be in compliance/or that no issues were identified. You can delete the table below if no issues are identified.

Photo references can be added here to refer to photos included in the attachment register in Appendix 3.

*Insert additional rows where required and delete extra rows.*

| Issue identified |                                                                                                           | Relevant conditions/section of legislation                                                         | Description (Observations/Notes/Photo references)                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------|-----------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                | Brine Pond liner repairs and the previously saturated area at the toe of the Brine Pond's West embankment | General environmental duty pursuant to section 319 of the <i>Environmental Protection Act 1994</i> | <p>Departmental officers observed that transfer of the water between the Brine Pond cells had taken place in preparation for the repair of the liner in the south western corner of Cell 1 of the Brine Pond. QNS stated that this area had been assessed as the only section of the liner that required repair works.</p> <p>It is the department's expectation that these repairs to the liner will rectify the issue at the toe of the Brine Pond's western embankment.</p> |
| 2                | Odour from the transfer and permanent containment of                                                      | Condition B1-1 of the EA                                                                           | It is the department's understanding that QNS will dispose of a quantity of liquor from the ammonia thickeners into the Brine Pond following repair of the liner. QNS has stated that the ammonia thickener has the potential to                                                                                                                                                                                                                                               |

## Compliance Activity Report

### Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

|   |                                                  |                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---|--------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | ammonia thickener waste in the Brine Pond        |                          | <p>produce an odour that will need to be managed during and subsequent to the transfer of this material to the Brine Pond.</p> <p>QNS's attention is drawn to Condition B1-1 of the EA which states <i>'Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not be released to any sensitive place'</i>.</p> <p>It is recommended that QNS take all reasonable and practicable measures to manage the transfer of the liquor from the ammonia thickeners to the Brine Pond in such a way as to prevent the release of noxious or offensive odours or airborne contaminants.</p>                                                                                                                                                                                    |
| 3 | Blind Creek compliance contaminant release point | Condition C1-3 of the EA | <p>At the time of the inspection departmental officers observed changes in the morphology of the mouth of the Blind Creek estuary system. Samples were taken approximately 100m upstream of the compliance contaminant release point due to no creek flow at the sampling location specified in the EA.</p> <p>Where it is not possible to sample at the compliance contaminant release point, it is the department's expectation that QNS will obtain a sample as close as reasonably practicable to the sampling location specified in the EA.</p> <p>QNS may wish to consider amending the EA to reflect the challenges of sampling in a dynamic coastal environment. It is recommended that QNS contact the Minerals Business Centre to arrange a pre-lodgement meeting to discuss any amendment to the EA prior to lodging an application.</p> |

#### 4. Other relevant inspection observation or matters for noting

Provide additional information relating to the inspection for departmental records. This section can be completed on site.



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## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

Notes from inspection as provided via email to Chris Wake and Scott Sullivan of EHP on 19 July 2017. Laura Rehn and Jane Makowski Authorised Officer notes available on eDOCS at document reference number #5657164

- Jane Makowski and Laura Rehn met George Lukacs and Ross Hultgren for the inspection
- We took samples from Alick Creek and Blind Creek, our sample plan included taking triplicates of nutrient samples at each location. Currently drafting the sample procurement approval form.
- Interesting to see that the usual Blind Creek compliance point had not flow through it as the mouth appears to have morphed from a single tidal inlet to being spread over an area of the beach. We took a sample further upstream of the usual compliance point.
- The toe drain was the lowest level I've ever observed (ie. Not hitting the level marker meaning less than 3.2m depth, see photos at filepath below).
- Similar the TSF is also approx. 1m below the MRL marker in Cell 3
- We looked at the quarry, mostly because I had not been to this location before.
- Works have begun on the Brine Pond to repair the liner on the Southern most (non-terminal) cell.
  - Inspection by the Australian Lining Company (ALC) found that the South West corner of the cell was pitted below the previous water level, stated to have been caused by the liner being pushed against the embankment by wave action and being pitted by the rocks making up the embankment.
  - The ALC stated that this is the only section of the whole Brine pond that has been affect in this way, the rest of the liner is intact.
  - Works will commence next month to install the new liner over top of the old one in this corner only. The installation is likely to take around 2 weeks.
  - QNS stated that even with all the water in the Brine pond in the terminal cell, they are under MRL at the time of the inspection
  - We looked at the saturated zone at the back of the Brine Pond. While the surface was dry compared to previous inspection, there was some liquid in the trench and sump. QNS advised that the pump had been removed 2 weeks ago from this location and any liquid will have been generated in that timeframe.
- QNS stated that once the Brine Pond liner has been repaired, they will be modelling the disposal (in terms of quantity and timeframes) of the ammonia thickener into the ponds. The modelling is to look at whether the placement of the thickener into the cells will cause an odour nuisance to the surrounding residents. EHP suggested proactive community engagement may be beneficial to inform residents (who may be sensitive to odours) that maintenance was occurring onsite, rather than a failure at the plant. QNS said they will consider this.
- QNS stated that the quantity of thickeners is between 1-2ML, based on the total capacity of the thickeners, but it may be less than that if the thickeners are not full or if they have more sludge than liquid in the containers.
- QNS are in continuing discussions with WPHS as to the level of chemical inventory they are required to reduce on site.
- No actions are planned to remove chemicals from the sphere. The current arrangements include regular checks and QNS have just updated their emergency management plan for the sphere.
- QNS stated they are having internal discussions about the internal review of the recently approved EA amendment. EHP reiterated the enforcement guidelines in terms of any further non-compliances with sediment levels. QNS raised the issue of Blind Creek monitoring location and the dynamic nature of the coastal environment meaning that sometimes its not possible to sample at the EA listed GPS location for Blind Creek.
- EHP advised the next inspection will be the pre-wet to be undertaken in October at a date TBC.

## **Compliance Activity Report**

### **Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response**

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Sample results from Blind and Alick Creek received from ALS on 25 July 2017 and the results do not indicate any non-compliances with the receiving surface water compliance limits specified in the EA.

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# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Part C: Post Evaluation

#### 5. Outcome and follow-up of non-compliances and matters of concern

Delete Part C if no matters/non-compliances were identified as part of the compliance activity.

Following consideration of the issues identified in Part B- Compliance Evaluation, list any conditions/sections of legislation in the table below which require further action, and assign an outcome and follow-up action.

**Outcomes:** A matter of concern may be identified that could become a potential non-compliance or increase risk to environmental values if not addressed by the operator. A condition may be inadequate in addressing the risk posed by an activity or may be out of date. A non-compliance with a condition may be identified.

**Follow – up actions:** Where a matter of concern has been identified that does not amount to a non-compliance, the issue should be included in a follow up letter to the client. Referral means referral to a Business Centre for amendments to conditions or for the need to commence an application for an environmental authority etc. An enforcement tool includes any type of enforcement from a warning to a prosecution e.g. PIN, EPO etc.

| Issue                                                                                                          | Condition/section of legislation                                                                   | Outcome                                                                                                                                                          | Follow-up                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1<br>Brine Pond liner repairs and the previously saturated area at the toe of the Brine Pond's West embankment | General environmental duty pursuant to section 319 of the <i>Environmental Protection Act 1994</i> | <input checked="" type="checkbox"/> Matter of concern<br><input type="checkbox"/> Non-compliance<br><input type="checkbox"/> Condition inadequate or out of date | <input type="checkbox"/> Enforcement tool to be considered (complete Part D)<br><input checked="" type="checkbox"/> Include issue in letter to client/operator*<br><input type="checkbox"/> Referral*<br><br>Departmental officers observed that transfer of the water between the Brine Pond cells had taken place in preparation for repair of the liner in the south western corner of Cell 1 of the Brine Pond. QNS stated that the Brine Pond liner had been assessed and the only area identified for repair work was the south western corner of Cell 1.<br><br>It is the department's understanding that repairs to the liner will permanently rectify the issue of the area at the toe of the Brine Pond's West embankment becoming saturated. |
| 2<br>Odour from the transfer and permanent containment                                                         | Condition B1-1 of the EA                                                                           | <input checked="" type="checkbox"/> Matter of concern<br><input type="checkbox"/> Non-compliance<br><input type="checkbox"/> Condition inadequate or out of date | <input type="checkbox"/> Enforcement tool to be considered (complete Part D)<br><input checked="" type="checkbox"/> Include issue in letter to client/operator*<br><input type="checkbox"/> Referral*<br>It is the department's understanding that QNS will                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

|                                                       |                          |                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| of ammonia thickener waste in the Brine Pond          |                          |                                                                                                                                                                  | <p>dispose of a quantity of ammonia thickener into the Brine Ponds following repair of the liner. QNS has stated that the ammonia thickener has the potential to produce an odour that will need to be managed during the transfer of this material to the Brine Pond.</p> <p>QNS's attention is drawn to Condition B1-1 of the EA which states<br/> <i>'Odours or airborne contaminants which are noxious or offensive or otherwise unreasonably disruptive to public amenity or safety must not be released to any sensitive place'.</i></p> <p>It is recommended that QNS take all reasonable and practicable measures to manage the transfer of the ammonia thickener to the Brine Pond in such a way as to prevent the release of noxious or offensive odours or airborne contaminants.</p> |
| 3<br>Blind Creek compliance contaminant release point | Condition C1+3 of the EA | <input checked="" type="checkbox"/> Matter of concern<br><input type="checkbox"/> Non-compliance<br><input type="checkbox"/> Condition inadequate or out of date | <input type="checkbox"/> Enforcement tool to be considered (complete Part D)<br><input checked="" type="checkbox"/> Include issue in letter to client/operator*<br><input type="checkbox"/> Referral* <p>At the time of the inspection departmental officers observed changes in the morphology of the mouth of the Blind Creek estuary system. Samples were taken approximately 100m upstream of the compliance contaminant release point due to no creek flow at the licensed sampling location.</p> <p>Where it is impractical to sample at the compliance contaminant release point, it is the department's expectation that QNS will obtain a sample as close as reasonably practicable to the licensed sampling location.</p>                                                              |



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|  |  |  |                                                                                                                                                                                                                                                                                         |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | QNS may wish to consider amending the EA to reflect the challenges of sampling in a dynamic coastal environment. It is recommended that QNS contact the Minerals Business Centre to arrange a pre-lodgement meeting to discuss any amendment to the EA prior to lodging an application. |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Part E: Sign-off

Do not delete Part E. This section must be completed as part of all compliance activities even if the recommendation is for no further action.

#### 6. Recommendation

The officer must make a recommendation in relation to the proposed compliance or enforcement response.

|                                                                                                    |                               |
|----------------------------------------------------------------------------------------------------|-------------------------------|
| It is recommended that a post inspection letter is issued to Queensland Nickel Sales               |                               |
| <b>Recommending Officer</b>                                                                        |                               |
| <b>Signature:</b> <span style="border: 1px solid red; padding: 2px;">p4( 6) Personal Inform</span> | <b>Print Name:</b> Laura Rehn |
| <b>Position:</b> Senior Environmental Officer                                                      | <b>Date:</b> 8/8/2017         |

#### 7. Supervisory Review

To be completed by Team Leader or CDM as appropriate.

|                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I have reviewed the compliance evaluation and agree with the officers' recommendation to issue a post inspection letter to QNS outlining the matters of concern that have been identified. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

☐ I confirm I have completed the Quality Assurance checklist for submission with this document. A copy of the Quality Assurance checklist can be obtained from [Compliance.Support@ehp.qld.gov.au](mailto:Compliance.Support@ehp.qld.gov.au)

|                                                                                                    |                                  |
|----------------------------------------------------------------------------------------------------|----------------------------------|
| <b>Reviewing Officer</b>                                                                           |                                  |
| <b>Signature:</b> <span style="border: 1px solid red; padding: 2px;">p4( 6) Personal Inform</span> | <b>Print Name:</b> Jane Makowski |
| <b>Position:</b> Team Leader                                                                       | <b>Date:</b> 8/8/2017            |

#### 8. Decision

The Manager (Compliance) or CDM must either support or not support the recommendation and sign and date below.

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|                                       |                                 |                              |
|---------------------------------------|---------------------------------|------------------------------|
| Decision for recommendation           |                                 | SUPPORTED                    |
| Reason for decision                   |                                 |                              |
| Signature:                            | sch4p4( 6) Personal Information | Print Name: Christopher Wake |
| Position: Compliance Delivery Manager | Date:                           | 08.08.17                     |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Appendix 1: Workplace and personal health and safety considerations prior to going on site.

| Industry specific hazards – consider personal safety |     |
|------------------------------------------------------|-----|
| Engineering                                          | No  |
| Light manufacturing                                  | No  |
| Food processing                                      | No  |
| Waste                                                | Yes |
| Chemical production                                  | Yes |
| Health/medical                                       | No  |
| Other                                                | No  |
| Farming                                              | No  |
| Mining                                               | Yes |
| Quarrying                                            | Yes |

| Personal protective equipment (PPE) – consider whether any PPE is required                  |                                                                                                               |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Safety helmet                                                                               | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Hearing protection                                                                          | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Eye protection                                                                              | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Protective clothing                                                                         | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Protective footwear                                                                         | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Respiratory protection                                                                      | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Other                                                                                       | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, <INSERT a description of the PPE> |
| Arrange safety induction training with occupier of site before the inspection is undertaken | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, <INSERT date of training>         |

### Appendix 2: Inspection Plan considerations prior to going on site.

| Topic                                                   | Details                                                                    |
|---------------------------------------------------------|----------------------------------------------------------------------------|
| Inspection level and timeframe                          | Level B proactive inspection, allow 4 hours                                |
| Audit team - roles and responsibilities of team members | Laura Rehn: Lead, notes and sampling<br>Jane Makowski: Photos, GPS and YSI |
| Methods and procedures to be used                       | Visual inspection, document request and onsite discussions                 |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

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|                                                                                        |                                                                                                                                                          |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Onsite staff accompanying audit/inspection team (names, positions and contact details) | Ross Hultgren (previously Environmental Technician, now consulting to QNS) and George Lukacs (previously Director – Environment, now consulting to QNS). |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

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# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Appendix 3: Attachment Register

Insert photos, maps, satellite images, QA checklist, response to pre-enforcement letter etc. to support CAR and include reference details. You can delete this appendix if not applicable.

Photos taken by Jane Makowski and located on eDOCS at ref #5657164



DSCN6662. Alick Creek YSI reading



DSCN6663. Water level in Cell 2 of TSF



DSCN6666. MRL marker in Cell 3 of TSF



DSCN6667. Blind Creek compliance sampling point showing no flow in creek.



DSCN6673. Sampling location in Blind Creek 100m upstream of compliance point.



DSCN6672. Blind Creek upstream YSI readings

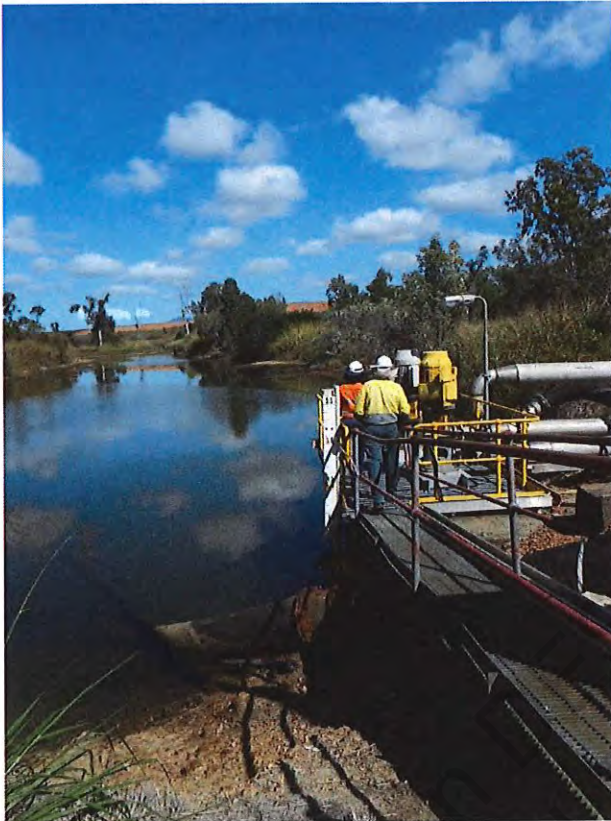


# Compliance Activity Report

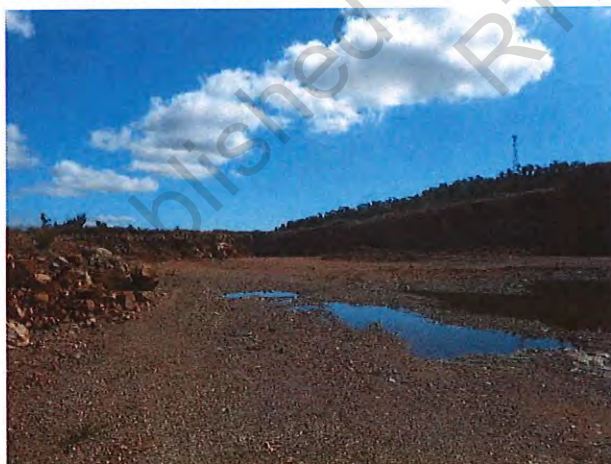
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DSCN6675. Toe Drain



DSCN6677. Quarry site looking west



DSCN6679. Quarry site looking south



DSCN6681. Brine Pond Dam looking South West



DSCN6685. Brine Pond Dam looking North East to spillway



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Insert photos, maps, satellite images, QA checklist, response to pre-enforcement letter etc. to support CAR and include reference details. You can delete this appendix if not applicable.



DSCN6687. Interception trench adjacent to West embankment of Brine Pond, looking north



DSCN6690. Interception trench adjacent to West embankment of Brine Pond, looking south



DSCN6694. Location where HIVOL used to be at boundary of site

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### Part A: Pre-Evaluation

#### 1. Client and Site details

|                                                                          |                                                                                              |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| <b>Reference details</b><br>( <a href="#">Ecotrack Procedure Guide</a> ) | CA48017                                                                                      |
| <b>File Number/s</b>                                                     | 101/0008166                                                                                  |
| <b>Licence/Permit Number</b>                                             | EPPR00940913                                                                                 |
| <b>Legal Entity Name</b>                                                 | Queensland Nickel Sales Pty Ltd                                                              |
| <b>Other names</b>                                                       |                                                                                              |
| <b>ACN/ARBN (not ABN)</b>                                                | 009 872 566                                                                                  |
| <b>Location</b>                                                          | 1 Greenvale Street, Yabulu                                                                   |
| <b>Registered address</b>                                                | Level 17,<br>240 Queen Street,<br>Brisbane, QLD 4000                                         |
| <b>Contact details</b>                                                   | Clive Palmer – Director, QNS.<br>George Lukacs - Consultant to QNS. George.lukacs@qni.com.au |
| <b>Date(s) of compliance activity</b>                                    | 31 October 2017                                                                              |

#### 2. Compliance Activity Background

|                             |                           |
|-----------------------------|---------------------------|
| <b>Environmental risk</b>   | High from CPM version 4.9 |
| <b>Last inspection date</b> | 18 July 2017              |



# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

|                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>General description of location and surrounding environment</b>                                                                                                         | The refinery is located approximately 25km North of Townsville, adjacent to Halifax Bay. The site is surrounded by the residential communities of Black River, Saunders Beach and Yabulu. The site commenced operations in 1973 and has a long history of waste storage and mineral processing. The refinery ceased processing ore in March 2016 and is currently in care and maintenance.                                                                                                                                                    |
| <b>Description of permit or location activity</b>                                                                                                                          | 14-(2a) Electricity generation >10MW but <150MW fuel<br>15-Fuel burning >500kg hr<br>16-(2b) Extractive >100000t but <1000000t yr<br>30-(d) Metal smelting & refining >10000t yr<br>38-(1d) Surface coating >10000t yr anodising etc<br>55-(2) Regulated waste recycling or reprocessing<br>60-(1a) Waste disposal <50000t yr (1)(a)<br>63-(1b)(i) Sewage treatment >100 to 1500EP - IT or IR<br>7-(6c) Chemical manufacturing >10000t but <100000t yr<br>8-(2) Chemical storage >50t class 6<br>8-(3) Chemical storage >500m3 class C1 or C2 |
| <b>Compliance history and client/operator details</b>                                                                                                                      | <p>Queensland Nickel Sales Pty Ltd (QNS) became the holder of the EA for the Yabulu refinery and Berth 2 loading facility at the Port of Townsville on 11 March 2016 following a transfer from the previous operator Queensland Nickel Pty Ltd (QN) (in liquidation).</p> <div style="border: 1px solid red; padding: 10px; text-align: center;"> <p>s.73 - Irrelevant information - LPP</p> </div>                                                                                                                                           |
| <b>Ongoing/open/active compliance actions</b>                                                                                                                              | <p><b>Current EPOs:</b></p> <p>Following transfer of the EA from QN to QNS on 11 March 2016, EHP issued EPOs to QNS and the parent companies QNI Metals and QNI Resources, as well as the director of all three companies. The EPOs requires QNS and parent companies to comply with the environmental authority requirements in the EA and retain adequate staff to operate the seepage collection systems and maintain site security. The EPOs continue to be in effect.</p>                                                                |
| <input checked="" type="checkbox"/> If undertaking a site inspection, I have completed the Workplace and personal health and safety considerations checklist in Appendix 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <input checked="" type="checkbox"/> If undertaking a site inspection, I have completed the Inspection Plan checklist in Appendix 2                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |



# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Part B: Compliance Evaluation

#### 3. Evaluation of Conditions/Legislation

Provide a brief description of the scope of the compliance activity (site inspection or desktop) below. This section can be completed on site.

A site inspection was (conducted as part of Q2 CPM Proactive Inspection Program as the site was identified as a Band 1 on v4.9 of the CPM) to assess all conditions of the EA, EPOs that were issued in March 2016, as well as the general water management at the site and progress on the repair works currently being undertaken on the Brine Pond liner.

Identify only issues with the conditions/sections of legislation in the table below. Issues include actual and potential non-compliance or issues with the conditions that need to be addressed. Do not include information regarding conditions/sections of legislation that were assessed as compliant/or where no issues are identified. Therefore, all matters within the scope of the compliance activity that are not referenced in the table below are considered to be in compliance/or that no issues were identified. You can delete the table below if no issues are identified.

Photo references can be added here to refer to photos included in the attachment register in Appendix 3.

| Issue identified |                                                                             | Relevant conditions/section of legislation                                                         | Description ( <i>Observations/Notes/Photo references</i> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1                | Liquid observed in collection trench and sump to the west of the Brine Pond | General environmental duty pursuant to section 319 of the <i>Environmental Protection Act 1994</i> | <p>Departmental officers observed that repair of the Brine Pond liner had occurred and transfer of the water between the Brine Pond cells was taking place.</p> <p>Officers also observed that liquid was present in the collection trench and sump at the base of the western embankment of the Brine Pond. It is the department's understanding that repair of the liner would prevent the occurrence of liquid in the interception trench. QNS advised that the water observed in the trench was rainwater and had not originated from the Brine Pond.</p> <p>It is the department's expectation that QNS will continue to monitor the trench to determine the origin of any water collected within it.</p> |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### 4. Other relevant inspection observation or matters for noting

Provide additional information relating to the inspection for departmental records. This section can be completed on site.

Notes from inspection as provided via email to Nina Groves on 2 November 2017.

- Jane Makowski and Laura Rehn met George Lukacs and Ross Hultgren for the inspection
- Samples were taken from Alick Creek and Blind Creek as well as the TSF and Toe Dam.
- Blind Creek compliance point again had changed from the morphology previously observed and appeared to be more of a single outlet again.
- The toe drain was again at a low level of less than 3.2m depth
- TSF level was approximately 1.5 – 2m below bottom of MRL marker in Cell 3
- Works have been completed on the Brine Pond to repair the liner on the Southern most (non-terminal) cell.
  - QNS stated that most of the thickener had been transferred to the Brine Pond
  - Siphoning of the water between the cells was occurring and would be completed prior to 1 November
  - Brine Pond was under MRL and met DSA at the time of the inspection
  - The saturated zone behind the Brine pond was inspected. At the time of the inspection there was liquid in the trench and sump, QNS stated it was rainwater that had collected from a heavy downpour in recent weeks. EHP advised that a sample would be collected at a later date following a period of low rainfall.
- QNS stated that to prepare for the wet season the incident management team would be formed in the first week of November and start regularly meeting to discuss emergency response procedures and contingency planning.
- QNS advised that pumps were available at all critical water transfer and recovery points and that critical spares were available if required.
- Both the Tailings Storage Facility (TSF) and Brine Pond was observed to be well below the mandatory reporting levels (MRL). QNS staff advised that ample design storage allowance (DSA) is available for the coming wet season.
- Modelling provided by QNS indicates that the TSF and Brine pond holding capacity is in excess of 2000mm rainfall (refer to detailed observations in table below).
- The regulated structures inspection is scheduled to be carried out in the middle of this month with the report likely to be available to the department at the end of November or early December.
- QNS have a number of mobile pumps and critical spares at the facility that can be mobilised if necessary for a heavy rain event to move water around site.
- QNS also advised that they are in contact with Workplace Health and Safety and Queensland Fire and Rescue service regarding incident response plans required under their legislation.
- The site is maintaining a 24 hour security presence with regular patrols of site access points and checking on pumping infrastructure.
- Although isolated dust complaints were received in previous months, no dust was observed to be originating from the site at the time of the inspection. QNS advised they had applied dust suppression agents to the exposed areas of the TSF since the complaints were received by the department.

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

- Departmental officers obtained a number of samples from compliance points of Alick Creek and Blind Creek as well as the TSF and Toe Drain Dam. Sample results received from ALS on 10 November 2017 and the results do not indicate any non-compliances with the receiving surface water compliance limits specified in the EA. QNS also provided the information below in relation to current water storage capacity in the TSF and Brine Pond.

**Situation as at 31/10/2017**

### TSF

Water stored approximately 3,107 ML, Total void above tailings is 8,432 ML, Therefore 37% full.

Cell 3 level is approximately 19.78 m which is approximately 2.22 m below the MRL of 22.0 m.

TSF rainfall holding capacity is approximately 2,421 mm.

### Evaporation Ponds

Water stored approximately 956 ML, Total void is 2,102 ML, Therefore 45% full.

Cell 2B level is approximately 24.25 m which is approximately 1.75 m below the MRL of 26.0 m.

Evaporation pond rainfall holding capacity is approximately 2,796 mm.

**Situation at 31/10/17**

### DSA

#### TSF

At 31/10/2017, the TSF has approximately 5325 ML of freeboard

This volume is approximately 1231 ML more than the volume required to meet the DSA

Therefore the DSA requirement for the TSF is met

#### EP

At 31/10/2017, the Evaporation ponds have approximately 1146 ML of freeboard

This volume is approximately 286 ML more than the volume required to meet the DSA

Therefore the DSA requirement for the EP is met



# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Part C: Post Evaluation

#### 5. Outcome and follow-up of non-compliances and matters of concern

Delete Part C if no matters/non-compliances were identified as part of the compliance activity.

Following consideration of the issues identified in Part B- Compliance Evaluation, list any conditions/sections of legislation in the table below which require further action, and assign an outcome and follow-up action.

**Outcomes:** A matter of concern may be identified that could become a potential non-compliance or increase risk to environmental values if not addressed by the operator. A condition may be inadequate in addressing the risk posed by an activity or may be out of date. A non-compliance with a condition may be identified.

**Follow – up actions:** Where a matter of concern has been identified that does not amount to a non-compliance, the issue should be included in a follow up letter to the client. Referral means referral to a Business Centre for amendments to conditions or for the need to commence an application for an environmental authority etc. An enforcement tool includes any type of enforcement from a warning to a prosecution e.g. PIN, EPO etc.

| Issue                                                                            | Condition/section of legislation                                                                   | Outcome                                                                                                                                                          | Follow-up                                                                                                                                                                                             |
|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1<br>Liquid observed in collection trench and sump to the west of the Brine Pond | General environmental duty pursuant to section 319 of the <i>Environmental Protection Act 1994</i> | <input checked="" type="checkbox"/> Matter of concern<br><input type="checkbox"/> Non-compliance<br><input type="checkbox"/> Condition inadequate or out of date | <input type="checkbox"/> Enforcement tool to be considered (complete Part D)<br><input checked="" type="checkbox"/> Include issue in letter to client/operator*<br><input type="checkbox"/> Referral* |

### Part E: Sign-off

Do not delete Part E. This section must be completed as part of all compliance activities even if the recommendation is for no further action.

#### 6. Recommendation

The officer must make a recommendation in relation to the proposed compliance or enforcement response.

It is recommended that a post inspection letter is issued to Queensland Nickel Sales outlining the matter of concern that has been identified.

#### Recommending Officer

Signature: (6) Personal Infor

Print Name: Laura Rehn

Position: Senior Environmental Officer

Date: 28/4/17

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### 7. Supervisory Review

To be completed by Team Leader or CDM as appropriate.

I have reviewed the compliance evaluation and agree with the officers' recommendation to issue a post inspection letter to QNS outlining the matter of concern that has been identified.

☐ I confirm I have completed the Quality Assurance checklist for submission with this document. A copy of the Quality Assurance checklist can be obtained from Compliance.Support@ehp.qld.gov.au

| Reviewing Officer     |                           |
|-----------------------|---------------------------|
| Signature:            | Print Name: Jane Makowski |
| Position: Team Leader | Date:                     |

### 8. Decision

The Manager (Compliance) or CDM must either support or not support the recommendation and sign and date below.

|                                         |                         |
|-----------------------------------------|-------------------------|
| Decision for recommendation             | SUPPORTED               |
| Reason for decision                     |                         |
| Signature: [Redacted]                   | Print Name: Nina Groves |
| Position: A/Compliance Delivery Manager | Date: 28.11.17.         |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Appendix 1: Workplace and personal health and safety considerations prior to going on site.

| Industry specific hazards – consider personal safety |     |
|------------------------------------------------------|-----|
| Engineering                                          | No  |
| Light manufacturing                                  | No  |
| Food processing                                      | No  |
| Waste                                                | Yes |
| Chemical production                                  | Yes |
| Health/medical                                       | No  |
| Other                                                | No  |
| Farming                                              | No  |
| Mining                                               | Yes |
| Quarrying                                            | Yes |

| Personal protective equipment (PPE) – consider whether any PPE is required                  |                                                                                                               |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Safety helmet                                                                               | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Hearing protection                                                                          | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Eye protection                                                                              | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Protective clothing                                                                         | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Protective footwear                                                                         | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                           |
| Respiratory protection                                                                      | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                           |
| Other                                                                                       | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, <INSERT a description of the PPE> |
| Arrange safety induction training with occupier of site before the inspection is undertaken | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If yes, <INSERT date of training>         |

### Appendix 2: Inspection Plan considerations prior to going on site.

| Topic                                                   | Details                                                                    |
|---------------------------------------------------------|----------------------------------------------------------------------------|
| Inspection level and timeframe                          | Level B proactive inspection, allow 4 hours                                |
| Audit team - roles and responsibilities of team members | Laura Rehn: Lead, notes and sampling<br>Jane Makowski: Photos, GPS and YSI |
| Methods and procedures to be used                       | Visual inspection, document request and onsite discussions                 |

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

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|                                                                                        |                                                                                                                                                          |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Onsite staff accompanying audit/inspection team (names, positions and contact details) | Ross Hultgren (previously Environmental Technician, now consulting to QNS) and George Lukacs (previously Director – Environment, now consulting to QNS). |
|----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|

Published on DES Disclosure Log  
RTI Act 2009



# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Appendix 3: Attachment Register

Insert photos, maps, satellite images, QA checklist, response to pre-enforcement letter etc. to support CAR and include reference details. You can delete this appendix if not applicable.

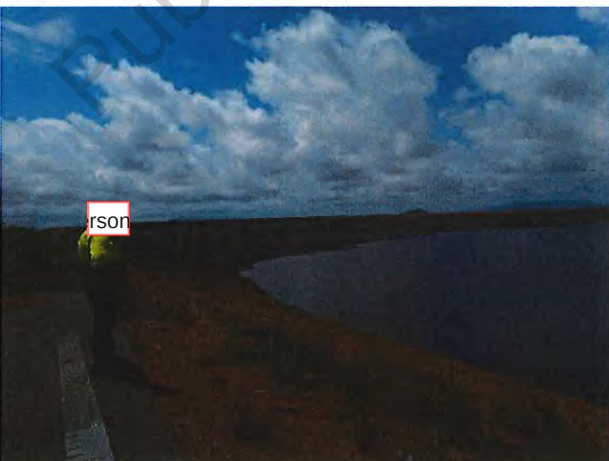
Photos taken by Jane Makowski and located on eDOCS at ref #5949219



DSCN7758. Blind Creek compliance point



DSCN7765. Toe dam level



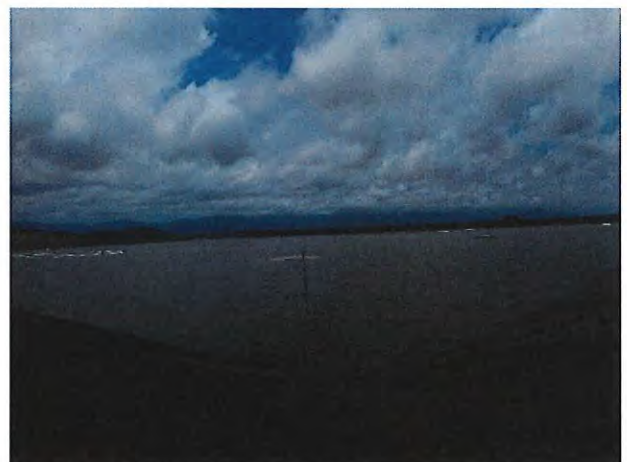
DSCN7769. TSF MRL marker and spillway



DSCN7778. Alick Creek sampling



DSCN7782. Interception trench and sump west of the Brine Pond



DSCN7787. New liner on SW corner of Cell 1, looking SW

# Compliance Activity Report

## Pre-Evaluation, Compliance Evaluation, Post Evaluation and Enforcement Response

### Appendix 3: Attachment Register

Insert photos, maps, satellite images, QA checklist, response to pre-enforcement letter etc. to support CAR and include reference details. You can delete this appendix if not applicable.



DSCN7794. MRL marker and Brine Pond level marker



DSCN7798. Brine Pond spillway, looking north



## CERTIFICATE OF ANALYSIS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Work Order</b> : ET1701499<br><b>Client</b> : QLD DEPT OF ENVIRONMENT & HERITAGE PROTECTION<br><b>Contact</b> : MS LAURA REHN<br><b>Address</b> : GPO BOX 5391<br>TOWNSVILLE MC QLD, AUSTRALIA 4810<br><b>Telephone</b> : +61 07 47225353<br><b>Project</b> : QNS<br><b>Order number</b> : —<br><b>C-O-C number</b> : —<br><b>Sampler</b> : LAURA REHN<br><b>Site</b> : YABULU<br><b>Quote number</b> : BNBQ/082/16<br><b>No. of samples received</b> : 4<br><b>No. of samples analysed</b> : 4 | <b>Page</b> : 1 of 4<br><b>Laboratory</b> : Environmental Division Townsville<br><b>Contact</b> : Customer Services ET<br><b>Address</b> : 14-15 Desma Ct, Bohle Townsville QLD AUSTRALIA 4814<br><br><b>Telephone</b> : +61 7 4796 0600<br><b>Date Samples Received</b> : 02-Nov-2017 12:50<br><b>Date Analysis Commenced</b> : 03-Nov-2017<br><b>Issue Date</b> : 10-Nov-2017 16:08 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



Accreditation No. 825  
Accredited for compliance with  
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

**Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.**

### Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

| <i>Signatories</i> | <i>Position</i>          | <i>Accreditation Category</i>          |
|--------------------|--------------------------|----------------------------------------|
| Kim McCabe         |                          | Townsville Inorganics, Townsville, QLD |
| Kim McCabe         | Senior Inorganic Chemist | Brisbane Inorganics, Stafford, QLD     |
| Tom Maloney        |                          | Townsville Inorganics, Townsville, QLD |



### General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- It is recognised that EG020-T (Total Metals by ICP-MS) is less than EG020-F (Dissolved Metals by ICP-MS) for some samples. However, the difference is within experimental variation of the methods.
- EG020-T (Total Metals by ICP-MS): Limit of reporting raised for some samples due to matrix interference.
- EG020-F (Dissolved Metals by ICP-MS): Limit of reporting raised due to matrix interference.
- The presence of high SO<sub>4</sub> may bias the EC low.
- EA005-P, EA010-P, EA015H, ED037-P, ED041G and ED045G analysis conducted by ALS Townsville, NATA accreditation no. 825, (Site no. 23313)





## Analytical Results

| Sub-Matrix: WATER<br>(Matrix: WATER)                              |             |       |         | Client sample ID | QNBC              | QNAC              | QNTOE             | QNTSF             | --- |
|-------------------------------------------------------------------|-------------|-------|---------|------------------|-------------------|-------------------|-------------------|-------------------|-----|
| Client sampling date / time                                       |             |       |         |                  | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | --- |
| Compound                                                          | CAS Number  | LOR   | Unit    |                  | ET1701499-001     | ET1701499-002     | ET1701499-003     | ET1701499-004     | --- |
|                                                                   |             |       |         |                  | Result            | Result            | Result            | Result            | --- |
| <b>EA005P: pH by PC Titrator</b>                                  |             |       |         |                  |                   |                   |                   |                   |     |
| pH Value                                                          | ---         | 0.01  | pH Unit |                  | 7.52              | 7.56              | 7.30              | 6.32              | --- |
| <b>EA010P: Conductivity by PC Titrator</b>                        |             |       |         |                  |                   |                   |                   |                   |     |
| Electrical Conductivity @ 25°C                                    | ---         | 1     | µS/cm   |                  | 56400             | 53600             | 9520              | 9830              | --- |
| <b>EA015: Total Dissolved Solids dried at 180 ± 5 °C</b>          |             |       |         |                  |                   |                   |                   |                   |     |
| Total Dissolved Solids @180°C                                     | ---         | 10    | mg/L    |                  | 39800             | 38000             | 7960              | 8830              | --- |
| <b>ED037P: Alkalinity by PC Titrator</b>                          |             |       |         |                  |                   |                   |                   |                   |     |
| Hydroxide Alkalinity as CaCO <sub>3</sub>                         | DMO-210-001 | 1     | mg/L    |                  | <1                | <1                | <1                | <1                | --- |
| Carbonate Alkalinity as CaCO <sub>3</sub>                         | 3812-32-6   | 1     | mg/L    |                  | <1                | <1                | <1                | <1                | --- |
| Bicarbonate Alkalinity as CaCO <sub>3</sub>                       | 71-52-3     | 1     | mg/L    |                  | 199               | 132               | 82                | 8                 | --- |
| Total Alkalinity as CaCO <sub>3</sub>                             | ---         | 1     | mg/L    |                  | 199               | 132               | 82                | 8                 | --- |
| <b>ED041G: Sulfate (Turbidimetric) as SO<sub>4</sub> 2- by DA</b> |             |       |         |                  |                   |                   |                   |                   |     |
| Sulfate as SO <sub>4</sub> - Turbidimetric                        | 14808-79-8  | 1     | mg/L    |                  | 2660              | 2480              | 5730              | 5920              | --- |
| <b>ED045G: Chloride by Discrete Analyser</b>                      |             |       |         |                  |                   |                   |                   |                   |     |
| Chloride                                                          | 16887-00-6  | 1     | mg/L    |                  | 19600             | 18300             | 257               | 232               | --- |
| <b>ED093F: Dissolved Major Cations</b>                            |             |       |         |                  |                   |                   |                   |                   |     |
| Calcium                                                           | 7440-70-2   | 1     | mg/L    |                  | 463               | 422               | 177               | 215               | --- |
| Magnesium                                                         | 7439-95-4   | 1     | mg/L    |                  | 1340              | 1220              | 832               | 942               | --- |
| Sodium                                                            | 7440-23-5   | 1     | mg/L    |                  | 11200             | 10400             | 229               | 230               | --- |
| Potassium                                                         | 7440-09-7   | 1     | mg/L    |                  | 418               | 397               | 29                | 21                | --- |
| <b>EG020F: Dissolved Metals by ICP-MS</b>                         |             |       |         |                  |                   |                   |                   |                   |     |
| Arsenic                                                           | 7440-38-2   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Chromium                                                          | 7440-47-3   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Cobalt                                                            | 7440-48-4   | 0.001 | mg/L    |                  | <0.005            | <0.005            | 0.019             | 0.136             | --- |
| Copper                                                            | 7440-50-8   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Lead                                                              | 7439-92-1   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Manganese                                                         | 7439-96-5   | 0.001 | mg/L    |                  | 0.911             | 0.085             | 9.29              | 14.0              | --- |
| Nickel                                                            | 7440-02-0   | 0.001 | mg/L    |                  | 0.006             | <0.005            | 0.153             | 1.45              | --- |
| <b>EG020T: Total Metals by ICP-MS</b>                             |             |       |         |                  |                   |                   |                   |                   |     |
| Arsenic                                                           | 7440-38-2   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Chromium                                                          | 7440-47-3   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | 0.002             | --- |
| Cobalt                                                            | 7440-48-4   | 0.001 | mg/L    |                  | <0.005            | <0.005            | 0.021             | 0.148             | --- |
| Copper                                                            | 7440-50-8   | 0.001 | mg/L    |                  | <0.005            | <0.005            | 0.001             | <0.001            | --- |
| Lead                                                              | 7439-92-1   | 0.001 | mg/L    |                  | <0.005            | <0.005            | <0.001            | <0.001            | --- |
| Manganese                                                         | 7439-96-5   | 0.001 | mg/L    |                  | 0.942             | 0.123             | 9.53              | 14.2              | --- |





## Analytical Results

| Sub-Matrix: WATER<br>(Matrix: WATER)              |            |       |       | Client sample ID  | QNBC              | QNAC              | QNTOE             | QNTSF             | --- |
|---------------------------------------------------|------------|-------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-----|
| Client sampling date / time                       |            |       |       | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | 31-Oct-2017 00:00 | --- |
| Compound                                          | CAS Number | LOR   | Unit  | ET1701499-001     | ET1701499-002     | ET1701499-003     | ET1701499-004     | ---               | --- |
| Result                                            |            |       |       | Result            | Result            | Result            | Result            | ---               | --- |
| <b>EG020T: Total Metals by ICP-MS - Continued</b> |            |       |       |                   |                   |                   |                   |                   |     |
| Nickel                                            | 7440-02-0  | 0.001 | mg/L  | 0.006             | <0.005            | 0.161             | 1.47              | ---               | --- |
| <b>EK055G: Ammonia as N by Discrete Analyser</b>  |            |       |       |                   |                   |                   |                   |                   |     |
| Ammonia as N                                      | 7664-41-7  | 0.01  | mg/L  | 6.96              | 0.30              | 522               | 496               | ---               | --- |
| <b>EN055: Ionic Balance</b>                       |            |       |       |                   |                   |                   |                   |                   |     |
| Total Anions                                      | ---        | 0.01  | meq/L | 612               | 570               | 128               | 130               | ---               | --- |
| Total Cations                                     | ---        | 0.01  | meq/L | ---               | ---               | 125               | 134               | ---               | --- |
| Total Cations                                     | ---        | 0.01  | meq/L | 631               | 584               | ---               | ---               | ---               | --- |
| Ionic Balance                                     | ---        | 0.01  | %     | ---               | ---               | 1.18              | 1.52              | ---               | --- |
| Ionic Balance                                     | ---        | 0.01  | %     | 1.53              | 1.17              | ---               | ---               | ---               | --- |

Published on DES Disclosure Log  
 RTI Act 2009

## DELANEY Deanna

---

**From:** REHN Laura  
**Sent:** Tuesday, 31 October 2017 1:08 PM  
**To:** GROVES Nina; SULLIVAN Scott (EHP)  
**Subject:** FW: Pre-wet season inspection Queensland Nickel Sales

FYI for your records



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection

-----  
P 07 4722 5354  
Level 10, Verde Tower, 445 Flinders Street, Townsville QLD 4810  
PO Box 5391, Townsville QLD 4810

---

**From:** Lukacs, George [mailto:George.Lukacs@qni.com.au]  
**Sent:** Tuesday, 31 October 2017 12:48 PM  
**To:** REHN Laura <Laura.Rehn@ehp.qld.gov.au>  
**Cc:** MAKOWSKI Jane <Jane.Makowski@ehp.qld.gov.au>; TASSAN Genevieve <Genevieve.Tassan@ehp.qld.gov.au>  
**Subject:** RE: Pre-wet season inspection Queensland Nickel Sales

Laura,

As requested, please see below:

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RTI Act 2009



|                                                                                                 |                   |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------|-------------------|--|--|--|--|--|--|
| Situation as at                                                                                 | <b>31/10/2017</b> |  |  |  |  |  |  |
|                                                                                                 |                   |  |  |  |  |  |  |
| <b>TSF</b>                                                                                      |                   |  |  |  |  |  |  |
| Water stored approximately 3,107 ML, Total void above tailings is 8,432 ML, Therefore 37% full. |                   |  |  |  |  |  |  |
| Cell 3 level is approximately 19.78 m which is approximately 2.22 m below the MRL of 22.0 m.    |                   |  |  |  |  |  |  |
| TSF rainfall holding capacity is approximately 2,421 mm.                                        |                   |  |  |  |  |  |  |
|                                                                                                 |                   |  |  |  |  |  |  |
| <b>Evaporation Ponds</b>                                                                        |                   |  |  |  |  |  |  |
| Water stored approximately 956 ML, Total void is 2,102 ML, Therefore 45% full.                  |                   |  |  |  |  |  |  |
| Cell 2B level is approximately 24.25 m which is approximately 1.75 m below the MRL of 26.0 m.   |                   |  |  |  |  |  |  |
| Evaporation pond rainfall holding capacity is approximately 2,796 mm.                           |                   |  |  |  |  |  |  |
|                                                                                                 |                   |  |  |  |  |  |  |
| Situation at 31/10/17                                                                           |                   |  |  |  |  |  |  |
| <b>DSA</b>                                                                                      |                   |  |  |  |  |  |  |
| <b>TSF</b>                                                                                      |                   |  |  |  |  |  |  |
| At 31/10/2017, the TSF has approximately 5325 ML of freeboard                                   |                   |  |  |  |  |  |  |
| This volume is approximately 1231 ML more than the volume required to meet the DSA              |                   |  |  |  |  |  |  |
| Therefore the DSA requirement for the TSF is met                                                |                   |  |  |  |  |  |  |
|                                                                                                 |                   |  |  |  |  |  |  |
| <b>EP</b>                                                                                       |                   |  |  |  |  |  |  |
| At 31/10/2017, the Evaporation ponds have approximately 1146 ML of freeboard                    |                   |  |  |  |  |  |  |
| This volume is approximately 286 ML more than the volume required to meet the DSA               |                   |  |  |  |  |  |  |
| Therefore the DSA requirement for the EP is met                                                 |                   |  |  |  |  |  |  |

If you require further information, please don't hesitate to contact me.

Regards,

**George Lukacs**

M > (6) Personal Info  
E > [George.Lukacs@gni.com.au](mailto:George.Lukacs@gni.com.au)

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---

**From:** REHN Laura [<mailto:Laura.Rehn@ehp.qld.gov.au>]  
**Sent:** Monday, 30 October 2017 1:11 PM  
**To:** Lukacs, George  
**Cc:** MAKOWSKI Jane; TASSAN Genevieve  
**Subject:** Pre-wet season inspection Queensland Nickel Sales

Good afternoon George

Reconfirming the pre-wet season inspection for tomorrow morning, we will aim to arrive on site at 9:30am. It will be myself and either Jane Makowski or Genevieve Tassan conducting the inspection.

I have not issued a document request at this point but will request a copy of the annual inspection report when it is available. We can discuss this further tomorrow onsite but feel free to give me a call in the meantime if you have any questions or concerns.

Kind regards,



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection  
-----  
P 07 4722 5354  
Level 10, Verde Tower, 445 Flinders Street, Townsville QLD 4810  
PO Box 5391, Townsville QLD 4810

---

**From:** REHN Laura  
**Sent:** Monday, 18 September 2017 10:03 AM  
**To:** 'Lukacs, George' <[George.Lukacs@qni.com.au](mailto:George.Lukacs@qni.com.au)>  
**Cc:** MAKOWSKI Jane <[Jane.Makowski@ehp.qld.gov.au](mailto:Jane.Makowski@ehp.qld.gov.au)>  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Good morning George

Thank you for the information.

Tuesday the 31<sup>st</sup> October would suit best, we will arrive on site around 9:30 and I can send more information closer to the time. Would you like any information requested in the form of a pre-inspection letter or email?

Cheers



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection  
-----  
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PO Box 5391, Townsville QLD 4810

---

**From:** Lukacs, George [<mailto:George.Lukacs@qni.com.au>]  
**Sent:** Thursday, 14 September 2017 2:43 PM  
**To:** REHN Laura <[Laura.Rehn@ehp.qld.gov.au](mailto:Laura.Rehn@ehp.qld.gov.au)>  
**Cc:** WAKE Chris <[Chris.Wake@ehp.qld.gov.au](mailto:Chris.Wake@ehp.qld.gov.au)>; MAKOWSKI Jane <[Jane.Makowski@ehp.qld.gov.au](mailto:Jane.Makowski@ehp.qld.gov.au)>  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Laura,

Transfer of ammonia from thickener. Internal transfers (from one cell to another) will commence next week after final repairs are completed (should take siphons about 3-4 weeks to transfer).

Is it possible to undertake pre-wet inspection later in October? Two reasons:

- Its only 10 weeks or so since last inspection
- By late October internal transfers will be completed, as too most of our pre-wet preparations.

Would Mon 23<sup>rd</sup> or Tues 24<sup>th</sup> in the afternoon be ok? Later in this week and it's hard to get outgoing tides during daylight hours.

Alternatively, Mon 30<sup>th</sup> or Tues 31<sup>st</sup> Oct are ok for us too (if you want a morning outgoing tide).

Regards

**George Lukacs**

M > (6) Personal Info

E > [George.Lukacs@qni.com.au](mailto:George.Lukacs@qni.com.au)

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---

**From:** REHN Laura [<mailto:Laura.Rehn@ehp.qld.gov.au>]  
**Sent:** Tuesday, 12 September 2017 1:19 PM  
**To:** Lukacs, George  
**Cc:** WAKE Chris; MAKOWSKI Jane  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Hi George

Thank you for the information provided. Just wanted to clarify when you mentioned 'the last transfer of ammonia to the Brine dam was 27 August 2017', was this the transfer of ammonia from the thickeners to the Brine Pond or does this mean transfer of liquid between the Brine Pond Cells to undertake the relining?

Also looking toward scheduling the pre-wet season inspection, how does either Tuesday 3<sup>rd</sup> or Wednesday 4<sup>th</sup> October suit yourself/your team to undertake the inspection? It will likely be myself and Jane Makowski conducting the inspection.

Kind regards,



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection  
-----  
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PO Box 5391, Townsville QLD 4810

---

**From:** Lukacs, George [<mailto:George.Lukacs@qni.com.au>]  
**Sent:** Friday, 8 September 2017 2:13 PM  
**To:** REHN Laura <[Laura.Rehn@ehp.qld.gov.au](mailto:Laura.Rehn@ehp.qld.gov.au)>  
**Cc:** WAKE Chris <[Chris.Wake@ehp.qld.gov.au](mailto:Chris.Wake@ehp.qld.gov.au)>  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Laura,

QNS can confirm there has not been any change to infrastructure, nor were there any actions being undertaken at the time to cause the alleged odour at Saunders Beach.

The last transfer of ammonia to the brine dam was 27 August 2017. Subsequent ammonia air monitoring results are below:

- 31/8/2017 brine pond wall monitoring location 1. Results: 6:30 am – 5ppm, 11:30 am - 2ppm, 15:30 – 1ppm
- 30/8/2017 brine pond wall monitoring location 5. Results: 10:00 am - 4.5 ppm, 2:00 pm – 2 ppm



- 29/8/2017 brine pond wall monitoring location 1 and 5 as well as Saunders Beach Road location  
6. Results: No ammonia detected at all locations (0ppm) measurements taken at 12:30 am and 3:45 am. Additional measurements taken at approx. 4:00 am at Gate 44 and Gate 5 at were also 0ppm.

At the end of August, QNS ceased the air monitoring program, given these results. Since then, there has been no change to the brine dams or related operations.

Please let me know if you require clarification or further information,

Regards  
George

**George Lukacs**

M > (6) Personal Info  
E > [George.Lukacs@qni.com.au](mailto:George.Lukacs@qni.com.au)

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---

**From:** REHN Laura [<mailto:Laura.Rehn@ehp.qld.gov.au>]  
**Sent:** Wednesday, 6 September 2017 12:08 PM  
**To:** Lukacs, George  
**Cc:** WAKE Chris  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Hi George

This instance is a single complaint and was stated to be about 20 minutes in duration. The resident also stated that they briefly smelt it again this morning around the same time, but was not as strong as yesterday.

Thanks for your quick response



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection  
-----  
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PO Box 5391, Townsville QLD 4810

---

**From:** Lukacs, George [<mailto:George.Lukacs@qni.com.au>]  
**Sent:** Wednesday, 6 September 2017 12:03 PM  
**To:** REHN Laura <[Laura.Rehn@ehp.qld.gov.au](mailto:Laura.Rehn@ehp.qld.gov.au)>  
**Cc:** WAKE Chris <[Chris.Wake@ehp.qld.gov.au](mailto:Chris.Wake@ehp.qld.gov.au)>  
**Subject:** RE: Complaint received: ammonia odour in Saunders Beach

Laura,

I will get back to you once I've spoken with maintenance/operations staff - but I am not aware of anything.

To help define the possible issue, can you please advise me whether this complaint was a single occurrence (e.g. 1 person, 1 time) or multiple people/times? Also, the duration for which the odour was noticed?

Thanks

George

---

**From:** REHN Laura [Laura.Rehn@ehp.qld.gov.au]  
**Sent:** Wednesday, 6 September 2017 10:21 AM  
**To:** Lukacs, George  
**Cc:** WAKE Chris  
**Subject:** Complaint received: ammonia odour in Saunders Beach

Good morning George

Advising that the department received a complaint regarding ammonia odour alleged to originate from the Queensland Nickel Sales refinery. The odour was experienced at 6:45am yesterday (5 September) by a resident in the Saunders Beach community.

Can you please advise if there has been any change in infrastructure or if there were actions at the site at this time (early yesterday morning) that may have contributed to an odour being experienced in the Saunders Beach area?

Kind regards,



**Laura Rehn**  
Senior Environmental Officer  
**Environmental Services and Regulation | North Queensland Compliance**  
Department of Environment and Heritage Protection  
-----  
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**From:** GROVES Nina [Nina.Groves@des.qld.gov.au]  
**Sent:** Thursday, 2 November 2017 10:33 AM  
**To:** REHN Laura  
**Subject:** RE: QNS 2017 pre-wet season inspection observations

Thanks Laura!!

---

**From:** REHN Laura  
**Sent:** Thursday, 2 November 2017 10:31 AM  
**To:** GROVES Nina  
**Cc:** MAKOWSKI Jane  
**Subject:** QNS 2017 pre-wet season inspection observations

Hi Nina

Please see summary of observations from the Queensland Nickel Sales Yabulu refinery pre-wet season inspection undertaken on 31 October 2017.

- Both the Tailings Storage Facility (TSF) and Brine Pond was observed to be well below the mandatory reporting levels (MRL). QNS staff advised that ample design storage allowance (DSA) is available for the coming wet season.
- Modelling provided by QNS indicates that the TSF and Brine pond holding capacity is in excess of 2000mm rainfall.
- The regulated structures inspection is scheduled to be carried out in the middle of this month with the report likely to be available to the department at the end of November or early December.
- QNS have a number of mobile pumps and critical spares at the facility that can be mobilised if necessary for a heavy rain event to move water around site.
- QNS will form an incident response team in the first week of November for the purpose of wet season contingency planning and incident response where necessary.
- QNS also advised that they are in contact with Workplace Health and Safety and Queensland Fire and Rescue service regarding incident response plans required under their legislation.
- The site is maintaining a 24 hour security presence with regular patrols of site access points and checking on pumping infrastructure.
- Although isolated dust complaints were received in previous months, no dust was observed to be originating from the site at the time of the inspection. QNS advised they had applied dust suppression agents to the exposed areas of the TSF since the complaints were received by the department.
- Departmental officers obtained a number of samples from compliance points and water storages and these will be analysed in due course.

Let me know if you need any further information.

Cheers

**Laura Rehn**

Senior Environmental Officer

**Environmental Services and Regulation | North Queensland Compliance**

Department of Environment and Heritage Protection



-----  
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**From:** GROVES Nina [Nina.Groves@des.qld.gov.au]  
**Sent:** Thursday, 16 November 2017 4:32 PM  
**To:** REHN Laura  
**Subject:** RE: RESULTS & EDD for ALS Workorder : ET1701499 | Your Reference: QNS

Thanks Laura

---

**From:** REHN Laura  
**Sent:** Thursday, 16 November 2017 4:23 PM  
**To:** GROVES Nina  
**Subject:** RE: RESULTS & EDD for ALS Workorder : ET1701499 | Your Reference: QNS

Hi Nina

Interpretation of the surface water sample results taken during inspection on 31 October 2017 from compliance points Alick Creek (QNAC) and Blind Creek (QNBC) do not exceed any of the trigger value or contaminant limits in the EA, therefore the results were complaint.

Cheers

**Laura Rehn**

Senior Environmental Officer

**Environmental Services and Regulation | North Queensland Compliance**

Department of Environment and Heritage Protection



-----  
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---

**From:** REHN Laura  
**Sent:** Monday, 13 November 2017 8:37 AM  
**To:** MAKOWSKI Jane <[Jane.Makowski@ehp.qld.gov.au](mailto:Jane.Makowski@ehp.qld.gov.au)>; GROVES Nina <[Nina.Groves@ehp.qld.gov.au](mailto:Nina.Groves@ehp.qld.gov.au)>  
**Subject:** FW: RESULTS & EDD for ALS Workorder : ET1701499 | Your Reference: QNS

FYI

**Laura Rehn**

Senior Environmental Officer

**Environmental Services and Regulation | North Queensland Compliance**

Department of Environment and Heritage Protection



-----  
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---

**From:** [angel-no-reply@alsglobal.com](mailto:angel-no-reply@alsglobal.com) [<mailto:angel-no-reply@alsglobal.com>]

**Sent:** Friday, 10 November 2017 4:09 PM

**To:** REHN Laura <[Laura.Rehn@ehp.qld.gov.au](mailto:Laura.Rehn@ehp.qld.gov.au)>

**Subject:** RESULTS & EDD for ALS Workorder : ET1701499 | Your Reference: QNS



# Deliverables for ALS Workorder ET1701499

## Project: QNS

Dear LAURA REHN,

Please find enclosed the following deliverables for **ET1701499**:

- ET1701499\_0\_COA.pdf
- ET1701499\_0\_XTAB.XLS
- ET1701499\_0\_QC.pdf
- ET1701499\_0\_QCI.pdf
- ET1701499\_COC.pdf

### Report Recipients

- LAURA REHN
  - ET1701499\_0\_COA.pdf (Email)
  - ET1701499\_0\_XTAB.XLS (Email)
  - ET1701499\_0\_QC.pdf (Email)
  - ET1701499\_0\_QCI.pdf (Email)
  - ET1701499\_COC.pdf (Email)
- MaNQC ADMIN
  - ET1701499\_COC.pdf (Email)

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**From:** CARPENTER Justin  
**Sent:** Tuesday, 22 March 2016 9:53 AM  
**To:** WAKEFIELD Hollie  
**CC:** BUTLER Hamish; SHARPE Dean; GONZO Gus; Corro DES ESR MaNQC; SULLIVAN Scott (DES); WAKE Chris  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Attachments:** MinsRoundtableQs - ESR responses.docx

**Importance:** High

Hello Holly

A consolidated response has been provided to Trinity - below (amended version of a document produced by EPP).  
Rob gave a verbal approval for me to provide our content (which contributed to this version – attached - that is being considered by Dean)

---

**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 9:46 AM  
**To:** LOWE Trinity  
**Cc:** WELLS Melissa; CARPENTER Justin  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Trinity,  
STOP PRESS!  
Last-minute update from MaNQC included in this version.  
st

**Sam Tarlinton**

A/Director

**Resource Sector Regulation and Support**

Department of Environment and Heritage Protection



P 07 3330 5904 M (6) Personal Info

Level 7 400 George St, Brisbane

GPO Box 2454, Brisbane QLD 4001

---

**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 9:38 AM  
**To:** LOWE Trinity  
**Cc:** WELLS Melissa; CARPENTER Justin  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Hi Trinity,  
Final consolidated responses attached.

st

**Sam Tarlinton**

Director



**Resource Sector Regulation and Support**

Department of Environment and Heritage Protection

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Level 7 400 George St, Brisbane

GPO Box 2454, Brisbane QLD 4001

---

**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 9:31 AM  
**To:** TARLINTON Sam  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Sam coal section highlighted and approved by Reuben with track changes

**Melissa Wells**

Director (Coal)

**Business Centre (Coal) | Coal and Central Qld Compliance**

Department of Environment and Heritage Protection

P 07 4987 9343 M (6) Personal Info

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

---

**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 9:19 AM  
**To:** Corro EHP ESR CaQC; Carlos Reuben ([Reuben.Carlos@ehp.qld.gov.au](mailto:Reuben.Carlos@ehp.qld.gov.au))  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Reuben,

Can you please URGENTLY approve the highlighted yellow section that coal were responsible for. Note EPP also had the same request and therefore we have updated the EPP document.

Thanks,  
Melissa.

**Melissa Wells**

Director (Coal)

**Business Centre (Coal) | Coal and Central Qld Compliance**

Department of Environment and Heritage Protection

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99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

---

**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 8:34 AM  
**To:** WELLS Melissa; CARPENTER Justin  
**Subject:** RE: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

Consolidated doc attached, with CaCQC, MaNQC and PGC responses included.

Any mods required back to be in track changes please.

Note that Anne will be presenting at Roundtable Meeting from 9:30am, so I'll be giving her this version to review now.

st

---

**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 7:42 AM  
**To:** TARLINTON Sam  
**Cc:** CARPENTER Justin; VENZ Mark  
**Subject:** Re: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

I'm good with that

Kind regards,

**Melissa Wells**

Director (Coal)

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Heritage Protection

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[PO Box 3028, Emerald QLD 4720](#)

On 22 Mar 2016, at 5:51 AM, TARLINTON Sam <[Sam.Tarlinton@ehp.qld.gov.au](mailto:Sam.Tarlinton@ehp.qld.gov.au)> wrote:

Hi Melissa,

Yes, RSRS is contributing.

The request from Trinity allocates the Costs and Financial Assurances questions to PGC. RSRS are dealing with those questions. Mark has received a separate set of CSG-related questions to answer.

Since we are located closest to the DDG's office, I suggest that if regional EDs can approve the contributions from their own business centres (as stand-alone doc or highlighted sections in the working doc), RSRS can consolidate into a final document & forward it. This will mean that ED-approved sections will need to be with us no later than 930. Otherwise, Trinity will have to receive each section from the assigned business centre.

st

On 21 Mar 2016, at 10:41 pm, WELLS Melissa <[Melissa.Wells@ehp.qld.gov.au](mailto:Melissa.Wells@ehp.qld.gov.au)> wrote:

Mark sorry no idea why but I didn't cc you!

I think you guys have the FA response?? Have a look at the attached final from EPP (they got same request) with Minerals and Coal comments included. Justin is your suggestion we go back to our respective ED's for approval of the area we had responsibility for - not whole doc?

Sam is RSRS contributing?

Kind regards,

**Melissa Wells**

Director (Coal)

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Heritage Protection

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[PO Box 3028, Emerald QLD 4720](#)

On 21 Mar 2016, at 3:54 PM, CARPENTER Justin <[Justin.Carpenter@ehp.qld.gov.au](mailto:Justin.Carpenter@ehp.qld.gov.au)> wrote:

Alex

As discussed – I think we should just add to Maria's/EPP's document. Attached is a revised version with some content from Minerals (EPP's content is in italics).

Please review and amend as you see fit.

When we are in agreement we can progress to our respective ED's for them to endorse (?).

Happy to discuss.

(Sam – there is probably scope to include some content about RSRS's work with the QRC working group on rehab sign-off. See bottom of page 3. Will call to discuss)

Thanks

<image003.png>

**Justin Carpenter**

A/Director - Minerals

**Minerals and North Queensland Compliance | Environment Services & Regulation**

Department of Environment and Heritage Protection

-----  
P 07 4222 5337

Level 3, Stage 2, 5b Sheridan Street, Cairns QLD 4870

PO Box 7230, Cairns QLD 4870

---

**From:** WELLS Melissa

**Sent:** Monday, 21 March 2016 2:46 PM  
**To:** ROSIER Maria; TARLINTON Sam  
**Cc:** CARPENTER Justin; GRUNDY Alex; BUTLER Hamish  
**Subject:** RE: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

All can we update the document as to who is answering what please so we are not doubling up and I can update DDG office

<image004.png> **Melissa Wells**  
Director (Coal)  
**Business Centre (Coal) | Coal and Central Qld Compliance**  
Department of Environment and Heritage Protection  
-----  
P 07 4987 9343 M (6) Personal Info  
99 Hospital Road, Emerald QLD 4720  
PO Box 3028, Emerald QLD 4720

---

**From:** WELLS Melissa  
**Sent:** Monday, 21 March 2016 2:37 PM  
**To:** ROSIER Maria; Tarlinton Sam ([sam.tarlinton@ehp.qld.gov.au](mailto:sam.tarlinton@ehp.qld.gov.au))  
**Cc:** CARPENTER Justin; GRUNDY Alex; BUTLER Hamish  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Hi Maria could you assist with a response to this dot question?

Sam is there any assistance that RSRS can provide to this request?

Alex can you call Hamish please to confirm who is doing what.

- How do current restoration/rehabilitation practices in Qld compare with world's best practice?

<image007.png> **Melissa Wells**  
Director (Coal)  
**Business Centre (Coal) | Coal and Central Qld Compliance**  
Department of Environment and Heritage Protection  
-----  
P 07 4987 9343 M (6) Personal Info  
99 Hospital Road, Emerald QLD 4720  
PO Box 3028, Emerald QLD 4720

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**From:** STEGEMANN Rachael **On Behalf Of** Corro EHP ESR CaCQC  
**Sent:** Monday, 21 March 2016 2:01 PM  
**To:** WELLS Melissa  
**Cc:** WALSH Sacha; Corro EHP ESR CaCQC; FRANKS Emma  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Hi Melissa,



Please see below urgent request from the DDG's office for your action and response by **4:00pm today.**

If there are any issues with responding to this request within the allotted timeframe please advise ASAP so I can contact Trinity Lowe.

Kind Regards,

<image008.png> **Rachael Stegemann**

Senior Project Officer

**Coal and Central Queensland Compliance, Directorate**

**Environmental Services and Regulation**

Department of Environment and Heritage Protection

P 07 4837 3515

Level 2 209 Bolsover Street Rockhampton QLD 4700

PO Box 413 Rockhampton QLD 4700

---

**From:** LOWE Trinity

**Sent:** Monday, 21 March 2016 1:45 PM

**To:** WAKEFIELD Hollie; WALSH Sacha; PROWSE Petrina; WELLS Melissa

**Cc:** Corro EHP ESR MaNQC; Corro EHP ESR CaCQC; Corro EHP ESR PGC

**Subject:** URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

Afternoon

Please see attached a Briefing paper we received this morning for the Minister Environmental round table meeting tomorrow and Wednesday this week. I have highlighted the questions we need to provide answers for the DDG as he will be on a panel on Wednesday. Our answers are requested by 4:00pm today if possible.

PGC - Costs and Financial Assurances (FAs)

MaNQC - Qld Nickel

CaSQC - Mine Closures & Progressive Rehabilitation

Sorry for the tight turn around – please just do your best.

Cheers

Trin

<QA v2 - Minerals.docx>

**From:** CARPENTER Justin  
**Sent:** Tuesday, 22 March 2016 9:53 AM  
**To:** WAKEFIELD Hollie  
**CC:** BUTLER Hamish; SHARPE Dean; GONZO Gus; Corro DES ESR MaNQC; SULLIVAN Scott (DES); WAKE Chris  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Attachments:** MinsRoundtableQs - ESR responses.docx

**Importance:** High

Hello Holly

A consolidated response has been provided to Trinity - below (amended version of a document produced by EPP).  
Rob gave a verbal approval for me to provide our content (which contributed to this version – attached - that is being considered by Dean)

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**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 9:46 AM  
**To:** LOWE Trinity  
**Cc:** WELLS Melissa; CARPENTER Justin  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Trinity,  
STOP PRESS!  
Last-minute update from MaNQC included in this version.  
st

**Sam Tarlinton**

A/Director

**Resource Sector Regulation and Support**

Department of Environment and Heritage Protection



P 07 3330 5904 M (6) Personal Info

Level 7 400 George St, Brisbane

GPO Box 2454, Brisbane QLD 4001

---

**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 9:38 AM  
**To:** LOWE Trinity  
**Cc:** WELLS Melissa; CARPENTER Justin  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Hi Trinity,  
Final consolidated responses attached.

st

**Sam Tarlinton**

Director

**Resource Sector Regulation and Support**

Department of Environment and Heritage Protection

P 07 3330 5904 M (6) Personal Info

Level 7 400 George St, Brisbane

GPO Box 2454, Brisbane QLD 4001

---

**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 9:31 AM  
**To:** TARLINTON Sam  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Sam coal section highlighted and approved by Reuben with track changes

**Melissa Wells**

Director (Coal)

**Business Centre (Coal) | Coal and Central Qld Compliance**

Department of Environment and Heritage Protection

P 07 4987 9343 M (6) Personal Info

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

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**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 9:19 AM  
**To:** Corro EHP ESR CaQC; Carlos Reuben ([Reuben.Carlos@ehp.qld.gov.au](mailto:Reuben.Carlos@ehp.qld.gov.au))  
**Subject:** FW: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table  
**Importance:** High

Reuben,

Can you please URGENTLY approve the highlighted yellow section that coal were responsible for. Note EPP also had the same request and therefore we have updated the EPP document.

Thanks,  
Melissa.

**Melissa Wells**

Director (Coal)

**Business Centre (Coal) | Coal and Central Qld Compliance**

Department of Environment and Heritage Protection

P 07 4987 9343 M (6) Personal Info

99 Hospital Road, Emerald QLD 4720

PO Box 3028, Emerald QLD 4720

---

**From:** TARLINTON Sam  
**Sent:** Tuesday, 22 March 2016 8:34 AM  
**To:** WELLS Melissa; CARPENTER Justin  
**Subject:** RE: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

Consolidated doc attached, with CaCQC, MaNQC and PGC responses included.

Any mods required back to be in track changes please.

Note that Anne will be presenting at Roundtable Meeting from 9:30am, so I'll be giving her this version to review now.

st

---

**From:** WELLS Melissa  
**Sent:** Tuesday, 22 March 2016 7:42 AM  
**To:** TARLINTON Sam  
**Cc:** CARPENTER Justin; VENZ Mark  
**Subject:** Re: URGENT ACTION - QUESTIONS for Ministers Environmental Round Table

I'm good with that

Kind regards,

**Melissa Wells**

Director (Coal)

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Heritage Protection

**P** 07 4987 9343 **M** 4(6) Personal Infor

[99 Hospital Road, Emerald QLD 4720](#)

[PO Box 3028, Emerald QLD 4720](#)

On 22 Mar 2016, at 5:51 AM, TARLINTON Sam <[Sam.Tarlinton@ehp.qld.gov.au](mailto:Sam.Tarlinton@ehp.qld.gov.au)> wrote:

Hi Melissa,

Yes, RSRS is contributing.

The request from Trinity allocates the Costs and Financial Assurances questions to PGC. RSRS are dealing with those questions. Mark has received a separate set of CSG-related questions to answer.

Since we are located closest to the DDG's office, I suggest that if regional EDs can approve the contributions from their own business centres (as stand-alone doc or highlighted sections in the working doc), RSRS can consolidate into a final document & forward it. This will mean that ED-approved sections will need to be with us no later than 930. Otherwise, Trinity will have to receive each section from the assigned business centre.

st

On 21 Mar 2016, at 10:41 pm, WELLS Melissa <[Melissa.Wells@ehp.qld.gov.au](mailto:Melissa.Wells@ehp.qld.gov.au)> wrote:



Mark sorry no idea why but I didn't cc you!

I think you guys have the FA response?? Have a look at the attached final from EPP (they got same request) with Minerals and Coal comments included. Justin is your suggestion we go back to our respective ED's for approval of the area we had responsibility for - not whole doc?

Sam is RSRS contributing?

Kind regards,

**Melissa Wells**

Director (Coal)

Business Centre (Coal) | Coal and Central Qld Compliance

Department of Environment and Heritage Protection

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[99 Hospital Road, Emerald QLD 4720](#)

[PO Box 3028, Emerald QLD 4720](#)

On 21 Mar 2016, at 3:54 PM, CARPENTER Justin <[Justin.Carpenter@ehp.qld.gov.au](mailto:Justin.Carpenter@ehp.qld.gov.au)> wrote:

Alex

As discussed – I think we should just add to Maria's/EPP's document. Attached is a revised version with some content from Minerals (EPP's content is in italics).

Please review and amend as you see fit.

When we are in agreement we can progress to our respective ED's for them to endorse (?).

Happy to discuss.

(Sam – there is probably scope to include some content about RSRS's work with the QRC working group on rehab sign-off. See bottom of page 3. Will call to discuss)

Thanks

<image003.png>

**Justin Carpenter**

A/Director - Minerals

**Minerals and North Queensland Compliance | Environment Services & Regulation**

Department of Environment and Heritage Protection

-----  
P 07 4222 5337

Level 3, Stage 2, 5b Sheridan Street, Cairns QLD 4870

PO Box 7230, Cairns QLD 4870

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All can we update the document as to who is answering what please so we are not doubling up and I can update DDG office

<image004.png> **Melissa Wells**  
Director (Coal)  
**Business Centre (Coal) | Coal and Central Qld Compliance**  
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