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| **North East Link Program – Central Package**  **IEA Six-Monthly Environmental Compliance Report – May to October 2022**  A Report to the Minister for Planning  NEL-CNT-AAA-2990-EEE-REP-0001  Revision 0  14 March 2023  **OFFICIAL** |

**Document control record**

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| --- | --- | --- | --- | --- | --- |
| **Document details** | |  | | | |
| **Project title** | | North East Link Program – Central Package | | | |
| **Document title** | | **IEA Six-Monthly Summary Environmental Compliance Report –  May to October 2022** | | | |
| **Document number** | | NEL-CNT-AAA-2990-EEE-REP-0001 | | | |
| **Rev** | **Date** | **Details** | **Prepared by** | **Reviewed by** | **Approved by** |
| A | 06/12/2022 | For review |  |  |  |
| B | 20/01/2023 | Response to NELP comments |  |  |  |
| C | 20/02/2023 | Response to NELP comments |  |  |  |
| 0 | 14/03/2023 | Issued for Use |  |  |  |
| **Current revision** | | **0** | | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Approvals** | | | | | |
| **Prepared by (Signature)** |  | **Reviewed by (Signature)** |  | **Approved by (Signature)** |  |
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# Abbreviations

|  |  |
| --- | --- |
| AAAJV | APP, Arup and Aurecon Joint Venture |
| **AfI** | Area for Improvement |
| **CCP** | Construction Compound Plan |
| **CEMP** | Construction Environmental Management Plan |
| **D&C** | Design and Construction |
| **EA** | Environmental Auditor |
| **EES** | Environmental Effect Statement |
| **EMF** | Environmental Management Framework |
| **EPA** | Environment Protection Authority |
| **EPR** | Environmental Performance Requirements |
| **ERSED** | Erosion and Sediment Control (Plan) |
| **IEA** | Independent Environmental Auditor |
| **IFU** | Issued for Use |
| **IR** | Independent Reviewer |
| **IREA** | Independent Reviewer and Environmental Auditor |
| **ITS** | Intelligent Traffic System |
| **MP** | Management Plan |
| **N** | Non-compliance |
| **NDD** | Non Destructive Drilling |
| **NELP** | North East Link Program |
| **O** | Observation |
| **OEMP** | Operations Environmental Management Plan |
| **PPP** | Public Private Partnership |
| **PSA** | Planning Scheme Amendment |
| **PSDR** | Project Scope and Delivery Requirements |
| **SP** | Secondary Package |
| **Spark D&C** | Spark Design and Construction (Contractor) |
| **TBM** | Tunnel Boring Machine |
| **UDLP** | Urban Design and Landscape Plan |
| **WEMP** | Worksite Environmental Management Plan |

# Summary

The North East Link connects the Eastern Freeway at Bulleen Road to the M80 Ring Road at Greensborough Bypass via a new roadway. It also provides for upgrading the Eastern Freeway between Springvale Road and Hoddle Street, and the M80 Ring Road between Greensborough and Plenty Roads.

Spark North East Link Pty Ltd as the Trustee of Spark North East Link Trust (Project Co) has been contracted by the Minister for Transport Infrastructure to design and construct the Central Package of works comprising of 6.5 km twin three or four-lane tunnels, interchanges at Manningham and Lower Plenty Roads and upgrades to Greensborough and Bulleen Roads.

The Environmental Management Framework (EMF) for the Project requires that the Contractor develop and implement a range of environmental documentation including:

* Environmental Strategy
* Construction Environmental Management Plan
* Management Plans required by the EPRs
* Worksite Environmental Management Plans (WEMPs)
* Construction Compound Plans (CCPs)

The EMF requires an Independent Environmental Auditor (IEA) be appointed to undertake reviews of the environmental documentation, and environmental audits of compliance with the documentation required by the Incorporated Document, the EMF, and the EPRs. The EMF also requires the IEA to prepare six-monthly summary reports. These reports must summarise audit activities during the reporting period, audit findings, the status of actions taken to address previous audit findings, and the contractors' compliance with the EMF and EPRs.

This six-monthly report summarises the audit activities and outcomes during the period covering construction activities by Spark D&C from May – October 2022.

Six audits were conducted during the audit period as shown in the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Key Documents** | **May 22 (Monthly)** | **June 22 (Monthly)** | **Jul 22 (Monthly)** | **Aug 22 (Quarterly)** | **Sep 22 (Monthly)** | **Oct 22 (Six-monthly)** |
| EPRs (as scheduled) | **ü** |  |  | **ü** |  | **ü** |
| Environmental Strategy |  |  |  |  |  | **ü** |
| Construction Environmental Management Plan |  |  |  | **ü**  **(**key elements) |  | **ü**  (all elements) |
| Management Plans required by the EPRs |  |  |  | **ü** |  | **ü** |
| Worksite Environmental Management Plans (WEMPs) | **ü** | **ü** | **ü** | **ü** | **ü** | **ü** |
| Construction Compound Plans (CCPs) |  |  |  |  | **ü** | **ü** |

A total of forty-six (46) audit findings were raised comprising five (5) Non-compliances, 28 Areas for Improvement, and 13 Observations. Fifteen (15) findings were closed during the reporting period. Thirty-one (31) findings remained open at the end of the reporting period.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 5 | 1 | 4 |
| **AfI** | 0 | 28 | 7 | 21 |
| **O** | 0 | 13 | 7 | 6 |
| **Total** | **0** | **46** | **15** | **31** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

The overall outcomes of the audits conducted showed that implementation of environmental management arrangements was initially immature. Some of the environmental management documentation did not reflect actual environmental management practices and processes, and some on-ground environmental management practices were either not in place as required by the works being undertaken, or not effective. There was improvement demonstrated over the six months reporting period.

Compliance with Plans Required in the Incorporated Document

The Incorporated Document defines the requirements for the Environmental Management Framework (EMF) for the Project. It further requires that Spark prepare and implement Management Plans for specific environmental aspects. Compliance with these Plans is formally audited (see section below on compliance with the Management Plans).

The IEA has reviewed the required Plans separately from the audits. Each of the required Plans includes responses to the EPRs. Conformance with the Environmental Performance Requirements (EPRs) is being audited through a rolling 12-month EPR audit program and the EPRs in the scope of the audits conducted during the reporting period are included in this report.

Compliance with Environmental Performance Requirements

The fifty (50) EPRs audited in the reporting period were met. No findings were raised against the requirements of the EPRs during the reporting period.

Implementation of the Environmental Strategy

The Environmental Strategy related audit findings reflected the developing relationship between Project Co and Spark with collaborative processes being not fully implemented during the reporting period, including the need to conduct the required six-monthly management review.

Implementation of the Construction Environmental Management Plan

Audit of the CEMP identified gaps in the implementation of Spark’s environmental management system, with some of the documented environmental management arrangements not reflected in actual environmental management practices.

Compliance with the Requirements of the Worksite Environmental Management Plans

The WEMPs have been established to meet the requirements on the EMF and the PSDR. However, as they are complex documents for managing site environmental management, several audit findings were raised relevant to on-ground environmental management and implementation of environmental controls.

Compliance with the Requirements of the Management Plans

The Incorporated Document and the EMF require the development and implementation of specific Management Plans. Spark has developed all Plans required for the scope of work undertaken during the reporting period. These were reviewed by the IEA for compliance with the Project environmental requirements and verified as compliant. The audits of the implementation of the Plans found that there were some issues with on-site environmental management, and process issues including monitoring and implementation of site based controls, and environmental management not being implemented as defined in the Plans.

Compliance with the Requirements of the Construction Compound Plans

No audit findings were raised against the requirements of the approved CCPs audited during the six month reporting period.

# Background to the audits

## The North East Link Program

The North East Link connects the Eastern Freeway at Bulleen Road to the M80 Ring Road at Greensborough Bypass via a new roadway. It also provides for upgrading the Eastern Freeway between Springvale Road and Hoddle Street, and the M80 Ring Road between Greensborough and Plenty Roads.

The North East Link Program (NEL) includes:

* A new roadway between the M80 Ring Road at Greensborough and Eastern Freeway at Bulleen Road;
* New, twin three-lane tunnels from Wattle Drive, Watsonia to Bulleen Road, Bulleen;
* Five new interchanges at the Eastern Freeway, Manningham Road, Lower Plenty Road, Grimshaw Street and the M80 Ring Road;
* Upgrades to the M80 Ring Road between Plenty and Greensborough Roads;
* Major upgrades to the Eastern Freeway between Springvale and Bulleen Roads, with upgrades also to the Eastern Freeway between Bulleen Road and Hoddle Street;
* A dedicated busway between the Doncaster ‘park and ride’ and Hoddle Street;
* Intelligent transport systems to create a fully coordinated managed motorway environment; and
* Tolling systems and associated infrastructure.

The Central Package Scope of Works includes:

* Design, financing, construction and commissioning of 6.5 km twin three or four-lane tunnels, interchanges at Manningham and Lower Plenty Roads and upgrades to Greensborough and Bulleen Roads, as well as the Secondary Package (SP) Intelligent Transport System (ITS) Works;
* Development of the SP Interface Zones Preliminary Design;
* Undertaking the Services for the Central Package and the Extended Operational Activities for the Extended Operational Area; and
* Tolling Enabling Works.

Figure 1 shows an outline of the NEL works.

This report is applicable to works in the D&C works for the Central Package from the Northern Portal to the Southern Portal.

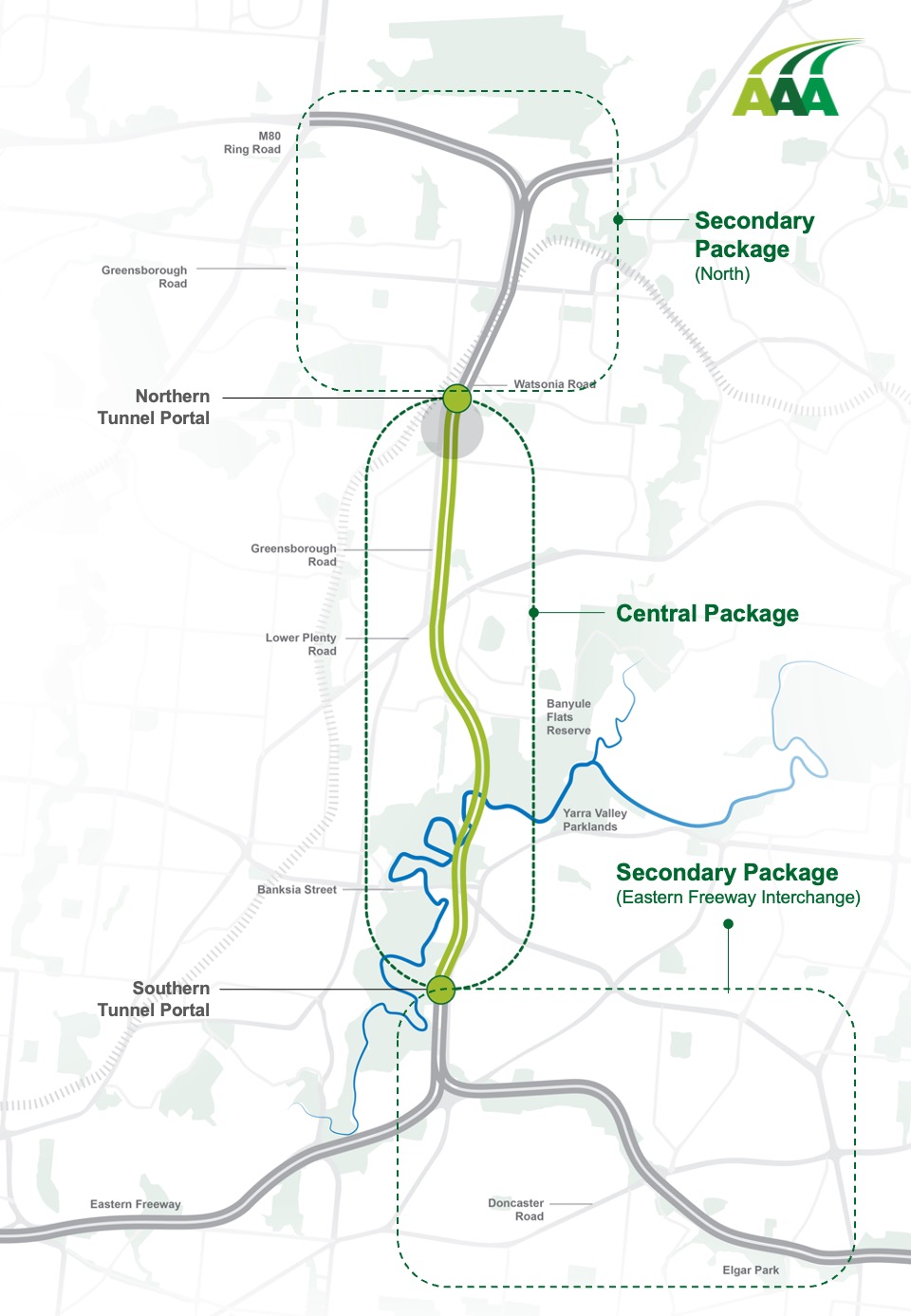


Figure 1: Schematic of the NEL works

## NEL works

The **Central Package** scope of works are divided into work zones as follows:

**Project Wide**

* Site establishment including vegetation clearing and installation of site huts and amenities
* Spoil management including spoil disposal
* Logistics – organising delivery of plant, equipment, and consumables required for construction
* Utilities and services relocation
* Precast concrete segment manufacturing
* Buildings
* Mechanical and electrical works.

**Northern**

* Watsonia portal and open trench works including piling, diaphragm walls, and bulk soil excavation
* Northern surface works including road works
* Lower Plenty cut and cover works including piling, diaphragm walls, and bulk soil excavation.

**Manningham**

* Manningham cut and cover works including piling, diaphragm walls, and bulk soil excavation
* Manningham surface works including road works

**Southern**

* Bulleen cut and cover works including piling, diaphragm walls, and bulk soil excavation
* Bulleen surface works including road works

**Tunnels**

* Tunnel Boring Machine (TBM) tunnels and associated support works such as spoil treatment and water treatment
* Mined tunnels

## Purpose of this report

The EMF requires the IEA to prepare six-monthly summary reports for the Minister for Planning. These reports must summarise audit activities during the reporting period, audit findings, the status of actions taken to address previous audit findings, and the contractors' compliance with the EMF and EPRs.

This six-monthly report summarises the audit activities and outcomes during the period covering construction activities by Spark D&C from May – October 2022.

# Environmental Management Requirements

## Environmental Management Framework

An Environmental Effects Statement (EES) was prepared for the Project and describes an Environmental Management Framework (EMF). The EMF specifies the environmental management arrangements for Project delivery including:

* Roles and responsibilities for environmental management to provide a transparent framework for governing the implementation of the EMF and EPRs
* A summary of key approvals that have/will be obtained and complied with
* Requirements for identification, assessment, and management of environmental risks
* No-go zones for the Project.

Environmental management documentation is required to be prepared to address the requirements of the Incorporated Document, EMF and EPRs, and manage environmental risks and impacts through design, construction, and operation.

The EMF requires that the contractors develop and implement an Environmental Management System (EMS) certified to AS/NZS ISO 14001:2015 Environmental management systems — Requirements with guidance for use.

The EMF also requires that the Contractor develop and implement a range of environmental documentation including:

* Environmental Strategy
* Urban Design and Landscape Plans (UDLP)
* Construction Environmental Management Plan (CEMP)
* Construction Compound Plan (CCP)
* Worksite Environment Implementation Plans (renamed as Worksite Environmental Management Plans; WEMPs)
* Other plans required by the EPRs.

The EMF documentation is summarised below in Figure 2.

 A schematic showing an overview of the key environmental management documentation and the relationship to other Environmental Management Framework components.  

Regulator 

1a. Legislation, Project Approvals and Incorporated Document.  

2. North East Link Project 

2a. Environmental Management System 

Environmental Framework with Environmental Performance Requirements  

Urban Design Strategy 

2b. Reporting 

Project Contracts 

Contractors 

4a. Environmental Management System 

Environmental Strategy 

Urban Design and Landscape Plans  

Construction Environmental Management Plan(s) 

Operation Environmental Management Plan(s)* 

Other Plans to Comply with PSA and EPRs 

Worksite Environmental Management Plans.LPE please write description 

4b. Independent Environmental Auditor 

Review and Auditing of Contractors 

Reporting to North East Link 

*Operation Environment Management Plan(s) are only relevant to the PPP Contract

**Figure 2: Environmental Documentation**

(adapted from the EMF)

## Planning Scheme Amendment Incorporated Document

The Incorporated Document is part of the Banyule, Boroondara, Manningham, Nillumbik, Whitehorse, Whittlesea, and Yarra Planning Schemes. The Incorporated Documents allows the development of North East Link and defines conditions under which the development can take place.

The Incorporated Document requires the preparation of an Environmental Management Framework (EMF) to the satisfaction of the Minister and defines the relevant matters the EMF must consider (see next section). It also defines conditions which must be met for urban design and landscape, and native vegetation, and defines the requirements for Construction Compound Plans (CCPs).

## Requirements of the EMF

The purpose of the EMF is to provide a framework to manage the environmental effects of the Project to meet statutory requirements, protect environmental values, and sustain stakeholder confidence.

The EMF specifies the environmental management arrangements for Project delivery including:

* Roles and responsibilities for environmental management to provide a transparent framework for governing the implementation of the EMF and EPRs
* A summary of key approvals that have/will be obtained and complied with
* Requirements for identification, assessment, and management of environmental risks
* No-go zones for the Project
* Environmental management documentation to prepare to address the requirements of the Incorporated Document, EMF and EPRs and manage environmental risks and impacts through design, construction, and operation
* The approach to evaluating compliance with the EMF and EPRs, including monitoring, auditing and reporting processes
* The EPRs that define the minimum environmental outcomes that must be achieved during Project delivery.

### Environmental Performance Requirements

The EMF defines 110 Environmental Performance Requirements (EPRs) in 17 categories:

* Environmental management framework
* Aboriginal cultural heritage
* Air quality
* Arboriculture
* Business
* Contamination and soil
* Flora and fauna
* Ground movement
* Groundwater
* Historic heritage
* Land use planning
* Landscape and visual
* Noise and vibration (surface and tunnel)
* Social and community
* Surface water
* Sustainability and climate change (including greenhouse gas)
* Traffic and transport.

Spark’s activities and scope of works must comply with all relevant EPRs, as defined in the EMF and Table H17.1 of the PSDR (which replicates the EPRs and defines responsibilities for meeting them). Not all the requirements of the EPRs are applicable to every stage of the works, and not all the requirements are the responsibility of Spark. Of the 110 EPRs, Spark must comply with 100 of these in whole or part.

The requirements applicable to Spark’s D&C activities are considered in audit planning. All applicable EPRs are audited in a rolling 12-month cycle, and 50 of the EPRs were audited in the reporting period.

## Spark environmental documentation

Spark has developed a range of environmental documentation to meet the requirements of the EMF and the Project PSDR. This includes:

* Environmental Strategy
* Construction Environmental Management Plan
* Management Plans required by the EPRs. These are:
  + Archaeology and Heritage Management Plan
  + Asbestos Management Plan
  + Communications and Community Engagement Plan
  + Construction Noise and Vibration Management Plan
  + Construction Noise and Vibration Management Plan – Simpsons Barracks
  + Dust and Air Quality Management and Monitoring Plan
  + Ecology Management Plan
  + Flood Emergency Management Plan (Construction)
  + Ground Movement Management Plan
  + Groundwater Management Plan
  + GS Rating Implementing Sub-Plan
  + IS Rating Implementing Sub-Plan
  + Spoil Management Plan
  + Surface Water Management Plan
  + Sustainability Management Plan
  + Transport Management Plan
  + Tree Removal and Tree Canopy Replacement Plan
  + Waste Acid Sulfate Soils (WASS) Management Plan.
* WEMPs. These are:
  + Worksite Environmental Management Plan – Site Investigations
  + Worksite Environmental Management Plan – Watsonia - Northern to Yallambie
  + Worksite Environmental Management Plan – Watsonia - Yallambie to Blamey
  + Worksite Environmental Management Plan – Lower Plenty - Blamey to Drysdale
  + Worksite Environmental Management Plan – Lower Plenty - Drysdale to Lower Plenty Road
  + Worksite Environmental Management Plan – Manningham
  + Worksite Environmental Management Plan – Bulleen
  + Worksite Environmental Management Plan – Bulleen – Southern Road Diversion.
* CCPs. These are:
  + Watsonia Construction Compound Plan (CCP) – TBM Compound
  + Lower Plenty Construction Compound Plan (CCP) – Structures Compound
  + Lower Plenty Construction Compound Plan (CCP) – Mobilisation Compound
  + Manningham Construction Compound Plan (CCP) – Mobilisation Compound
  + Manningham Structural and M&E Works Construction Compound Plan (CCP) – Structural M&E Compound.

## Role of the Independent Environmental Auditor

The EMF requires an IEA be appointed to undertake reviews of the environmental documentation, and environmental audits of compliance with the documentation required by the Incorporated Document, the EMF, and the EPRs. The overall objective for audits by the IEA is defined in the EMF: “*The Independent Environmental Auditor must conduct regular audits of contractors’ compliance with the EMF, EPRs, Environmental Strategy, CEMP, WEMPs, CCPs, OEMP, any other plans required by the EPRs, conditions of Project approvals, and as required by NELP. Audits must occur prior to and during construction and for five years after opening of the Project, or as otherwise agreed with the Minister for Planning*.”

The approach to environmental compliance auditing is risk based and aligns to the framework defined in AS/NZS ISO 19011:2019 (Guidelines for Auditing Management Systems).

# Audit activities

## Environmental documentation verification

The IEA is required to review Spark’s environmental documentation and verify conformance with the Project environmental requirements. This is undertaken for the initial versions of documents, and for each revision. The compliance audits are conducted against the version of the environmental documentation which has been verified by the IEA and accepted by NELP.

## Audit program

An annual audit program is developed in consultation with NELP and Project Co. Audits are conducted based on the annual audit program to ensure:

* EPRs are audited at least annually (with more frequent audits for high-risk activities)
* The Environmental Strategy audited at least six-monthly
* The environmental management system elements of the CEMP to be audited six-monthly
* The elements of the CEMP critical to effective environmental management to be audited quarterly
* The applicable CEMP sub-plans and Management Plans required by the EPRs to be audited quarterly
* Applicable WEMPs and CCPs based on construction activities and environmental risks.

## Audit conduct

The audit planning process for each environmental audit includes defining the objectives, scope, criteria, and additional information. The overall process for each audit is given in **Figure 3** below.

Each audit includes:

* Review of relevant Spark environmental records
* Interviews with relevant Spark environment and site personnel
* Observation of construction activities.

**A diagram of the IEA’s audit process. The process is set out in 3 parts: planning, conduct and reporting.  

1. Planning 

a. Develop audit scope and criteria and checklists taking into account:  

i. Project requirements (EMF, EPRs, etc.) 

ii. Design and construction activities 

iii. Project environmental documentation 

iv. Findings of previous audits 

v. Annual audit planning workshop agreed outcomes. 

2. Conduct 

a. Undertake audit 

i. Interviews 

ii. Observations 

iii. Record interviews 

iv. Develop audit findings. 

3. Reporting 

a. Prepare audit report 

i, Project fact check 

ii. Prepare and issue final report 

iii. Update register of findings. ****Figure 3: Audit process**

## Audit objectives, scope, and criteria

The audit objectives and scope for each audit as detailed in the audit program is confirmed through the following activities:

* Review of the Development Phase Program to identify the Project Activities occurring during the audit period
* Identification of environmental risks relevant to the identified Project activities, and the related identified controls (documented in the EMP Sub Plans or other requirements). The relevant elements of the controls form part of the audit criteria
* Review of the information gained from IREA site surveillance and results of previous audits to identify any areas in which the planned environmental arrangements may not be met
* Review of the Environmental Strategy, the EPRs, the CEMP and any associated sub-plans, Management Plans required by the EPRs, WEMPs, and CCPs requirements
* Review of the relevant environmental approvals. The environmental approvals relevant to the identified Project Activities will be reviewed to identify compliance requirements. The key compliance requirements will be included as part of the audit criteria
* Review of Project Co records relating to internal audits; environmental monitoring; non-compliances, corrective and preventive actions; and incidents
* Confirmation of audit criteria and development of checklists. Audit criteria are developed from the audit areas identified in the tasks above and included in checklists which are used to guide audit interviews, records reviews, and inspections.

The scope of audits conducted during the reporting period is provided in the following table, and the EPRs audited each quarter are given in Appendix 1 – EPRs audited in the reporting period.

Table 1: Summary audit scope

| **Key Documents** | **May 22 (Monthly)** | **June 22 (Monthly)** | **Jul 22 (Monthly)** | **Aug 22 (Quarterly)** | **Sep 22 (Monthly)** | **Oct 22 (Six-monthly)** |
| --- | --- | --- | --- | --- | --- | --- |
| EPRs (as scheduled – see Appendix 1)) | **ü** |  |  | **ü** |  | **ü** |
| Environmental Strategy |  |  |  |  |  | **ü** |
| Construction Environmental Management Plan |  |  |  | **ü**  **(**key elements) |  | **ü**  (all elements) |
| Management Plans required by the EPRs |  |  |  | **ü** |  | **ü** |
| Worksite Environmental Management Plans (WEMPs) | **ü** | **ü** | **ü** | **ü** | **ü** | **ü** |
| Construction Compound Plans (CCPs) |  |  |  |  | **ü** | **ü** |

The criteria for each audit were derived from the Spark environmental documentation in scope as given above in section 2.4. The audit criteria were included in checklist to assist in developing objective audit evidence.

## Construction activities during the reporting period

During the reporting period the following construction activities were being conducted:

Table 2: Construction activities during the reporting period.

| **Date** | **Construction activities** |
| --- | --- |
| May 2022 | * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD and waste disposal. |
| June 2022 | * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD, and waste disposal. |
| July 2022 | * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD, and waste disposal. |
| August 2022 | * Site establishment works * Clearing and grubbing including tree removal * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD, and waste disposal. |
| September 2022 | * Site establishment and civil works * Clearing and grubbing including tree removal * Excavation and spoil removal * Traffic management * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD, and waste disposal. |
| October 2022 | * Site establishment and civil works * Clearing and grubbing including tree removal * Piling * Excavation and spoil removal * Traffic management * Drilling of geotechnical and groundwater investigation bores * Spoil, NDD, and waste disposal. |

# Audit outcomes

## Audit findings classifications

The findings of the audits have been classified into categories as follows:

|  |  |
| --- | --- |
| Compliance | There is sufficient evidence to confirm that actions have been undertaken, prepared and/or implemented in full compliance with the requirements of the audit criterion. |
| Non-compliance | The absence of, or the failure to implement and maintain, one or more requirements of the relevant environmental documentation, or a situation, which would, on the basis of available objective evidence raise significant doubt as to the effectiveness of environmental management.  Note: A non- compliance may be an individual non-compliance or a number of minor but related audit non-compliances, which when considered in total are judged to constitute a non-compliance |
| Area for improvement | A deficiency in the implementation of the relevant element of the documentation judged to be a risk to the environment, or to environmental management, without constituting an overall failure in the area concerned. |
| Observation | An audit finding which may relate to an incidental or isolated system discrepancy, which does not compromise the effectiveness of environmental management, or constitute an actual or potential environmental risk. |
| Undetermined | There was insufficient evidence or information accessible during the audit to objectively classify the nature of compliance. |
| Not Applicable | The auditable element falls outside the scope of the audit, e.g., work relevant to the element being audited has not yet commenced. |

### Significance of audit findings

The nature of audit findings may vary depending on the context in which they have been raised. For example, some findings may be administrative in nature compared with those that pose an immediate and/or significant risk to the environment. Administrative findings usually related to documented environmental management arrangements. An example of an administrative finding might include the requirement for Spark to use a particular system to record incidents, where this is defined in the CEMP. However, if Spark has upgraded this system and replaced it with an alternative, this means the CEMP is now out of date and does not reflect current practices. In this case Spark may not be conforming with the original CEMP (which is captured as a finding in an audit), but it does not necessarily mean that incidents are not being reported. This requirement is likely to be revised in the next version of the CEMP. Administrative findings accordingly do not always pose a significant risk to the environment.

Alternatively, if Spark was found to have caused an event resulting in an impact to a sensitive environment or to residents, this would be viewed as a finding of greater significance.

Similarly, some findings are localised (rather than systemic) in nature. For example, a finding raised against a WEMP may reflect an immediate issue at a particular worksite, which can be addressed and closed out by taking on-site action.

## Overall audit findings

All the audit findings raised during the reporting period, and actions taken to address audit findings open from previous audits, are given in Appendix 2 – Audit findings and summary of actions taken.

The audit findings raised during the reporting period are summarised below.

Table 3: Total audit findings May - October 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 5 | 1 | 4 |
| **AfI** | 0 | 28 | 7 | 21 |
| **O** | 0 | 13 | 7 | 6 |
| **Total** | **0** | **46** | **15** | **31** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

A total of 46 audit findings were raised during the reporting period, comprising five (5) Non-compliances, 28 Areas for Improvement, and 13 Observations. Of these findings 15 were closed during the reporting period, with 31 findings remaining open.

Most of the audit findings were raised in the August 2022 quarterly audit, which assessed compliance against the requirements of most of Spark’s environmental documentation, and the requirements of selected EPRs (see Figure 4).

Figure 4: Audit findings by type and audit date (Project commencement to October 2022)

Spark D&C established corrective actions to address the audit findings. During the reporting period fifteen (15) findings were closed comprising of seven (7) Areas for Improvement, seven (7) Observations, and one (1) Non-compliance (see Figure 5).

Figure 5: Cumulative audit findings raised and closed - Project commencement to October 2022

## Compliance with the Incorporated Document

Compliance with the EMF is audited through audits of the EPRs, and the Plans required by the EPRs (see below). The EPRs related to urban design and landscape are included in these audits, as are Spark’s Landscape Plans. Native vegetation management is integrated with Spark’s overall ecology management including the tree management plans and the documentation is reviewed, verified, and audited as for all management plans.

Implementation of the requirements of approved CCPs is separately audited (see below).

## Compliance with Environmental Performance Requirements

All the fifty (50) planned and applicable EPRs as agreed with NELP and Project Co were audited for the period. This represents half of the applicable EPRs. At least one EPR from each of the 17 EPR categories was included in the six-month period., and six EPRs were audited more than once.

Not all the requirements of the EPRs are applicable to every stage of the works, and not all the requirements are the responsibility of Spark. The requirements applicable to Spark’s D&C activities are considered in audit planning.

Based on the nature of the design and construction activities undertaken at the time of the audits, there were no findings were raised against the specific requirements of the audited EPRs (see Table 4

Table 4). Findings against EPRs are raised when the EPR is formally audited. While some findings raised against other audit criteria (such as Management Plans) may relate in part to an environmental issue covered by an EPR, the finding is not repeated for the EPR.

Table 4: Summary of EPR audit findings May – October 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 0 | 0 | 0 |
| **AfI** | 0 | 0 | 0 | 0 |
| **O** | 0 | 0 | 0 | 0 |
| **Total** | **0** | **0** | **0** | **0** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

Figure 6 shows the distribution of EPRs in each of the categories noting which were audited, and the level of compliance for the reporting period. Only EPRs relevant to the design and construction underway during the reporting period were included in the audit schedule for the period. Further, not all EPRs have equally detailed requirements, and there are different numbers of EPRs in each EPR category. The number of EPRs audited does not directly reflect the relative weight of environmental management requirements.

As each EPR category includes several EPRs, some of these were not included in the audits in the reporting period. All environmental issues are audited through the audits of Management Plans.

Figure 6: EPR audit findings by EPR category May - October 2022

## Implementation of the Environmental Strategy

The implementation of the Environmental Strategy was audited once during the reporting period, in October 2022. Two (2) Areas for Improvement were raised (see Table 5) reflecting the developing relationship between Project Co and Spark D&C with collaborative processes being not fully implemented, and that the required six-monthly management review had not taken place.

The collaborative arrangements between Project Co and Spark D&C continued to mature and establish over the six-month reporting period. The findings are related to documented environmental management arrangements and do not represent a material risk to the environment.

Table 5: Environment Strategy audit findings May - October 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 0 | 0 | 0 |
| **AfI** | 0 | 2 | 0 | 2 |
| **O** | 0 | 0 | 0 | 0 |
| **Total** | **0** | **2** | **0** | **2** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

## Implementation of the Construction Environmental Management Plan

An audit of the selected key elements of the CEMP was conducted in August 2022, and an audit of all applicable elements was conducted in October 2022. A total of 15 audit findings were raised comprising three (3) Non-compliances, eight (8) Areas for Improvement, and four (4) Observations. Two (2) of the Observations were closed during the audit period. See Table 6.

The audit findings revealed that Spark’s environmental management system was initially immature and that the documented environmental management arrangements were not reflected in actual environmental management practices. The Non-compliances related to incomplete implementation of a process for the identification, tracking, and evaluation of compliance obligations, and to the lack of alignment between documented environmental management processes and actual practice.

In general, the findings are related to documented environmental management arrangements and do not represent a material risk to the environment. A summary of the audit findings is given below.

Table 6: CEMP audit findings May - October 2022

| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| --- | --- | --- | --- | --- |
| **N** | 0 | 3 | 0 | 3 |
| **AfI** | 0 | 8 | 0 | 8 |
| **O** | 0 | 4 | 2 | 2 |
| **Total** | **0** | **15** | **2** | **13** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

## Implementation of the Worksite Environmental Management Plans

The WEMPs applicable to the works underway were audited each month during the reporting period. A total of seventeen (17) findings were raised comprising one (1) Non-compliance, eight (8) Areas for Improvement, and eight (8) Observations. Twelve (12) findings comprising the one (1) Non-compliance, seven (7) Areas for Improvement and four (4) Observations were closed in the reporting period. See Table 7.

The Non-compliance related to the lack of a formal emergency response and incident management plan for site investigations works. The remainder of the findings related to the lack of, or ineffective, environmental controls at works sites, and to several documentation issues.

Ineffective environmental controls present a localised risk to the environment.

Table 7: WEMP audit findings May - October 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 1 | 1 | 0 |
| **AfI** | 0 | 8 | 7 | 1 |
| **O** | 0 | 8 | 4 | 4 |
| **Total** | **0** | **17** | **12** | **5** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

## Implementation of Management Plans

Spark has developed Management Plans to address the environmental management requirements for specific environmental aspects, and to meet the requirements of the EPRs. The applicable elements of the Management Plans were audited in August and October 2022. A total of twelve (12) findings were raised ruing the audit period comprising one (1) Non-compliance, ten (10) Areas for Improvement, and one (1) Observation.

One of the Observations was closed during the reporting period.

The Non-compliance related to inadequate air quality monitoring and management. The remining findings related to inadequate site environmental controls and to documentation and process issues. Ineffective environmental controls present a risk of damage to the environment.

Table 8: Management Plans findings May - October 2022

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Finding Type** | **Open at start of May - Oct 2022 Period** | **Raised during May - Oct 2022 Period** | **Closed during May - Oct 2022 Period** | **Open at end of May - Oct 2022 Period** |
| **N** | 0 | 1 | 0 | 1 |
| **AfI** | 0 | 10 | 0 | 10 |
| **O** | 0 | 1 | 1 | 0 |
| **Total** | **0** | **12** | **0** | **11** |

N – Non-compliance; AfI – Area for Improvement; O – Observation

## Implementation of Construction Compound Plans

The Construction Compound Plans approved by the Minister were audited in September and October 2022. No findings were raised against the requirements of the CCPs.

# Audit conclusions

## Compliance with Plans required in the Incorporated Document

The Incorporated Document defines the requirements for the Environmental Management Framework (EMF) for the Project. It further requires that Spark prepare and implement Management Plans for specific environmental aspects.

The Independent Environmental Auditor (IEA) has reviewed the required Plans separately from the audits. Each of the required Plans includes responses to the EPRs. Conformance with the Environmental Performance Requirements (EPRs) is being audited through a rolling 12-month EPR audit program and the EPRs in the scope of the audits conducted during the reporting period are included in this report.

## Compliance with Environmental Performance Requirements

All the fifty (50) planned and applicable EPRs as agreed with NELP and Project Co were audited for the period. Based on the nature of the design and construction activities undertaken at the time of the audits, there were no findings raised against the requirements of the EPRs during the reporting period.

## Implementation of the Environmental Strategy

Key elements from the Environmental Strategy were audited in October 2022. The two audit findings raised reflect that the relationship between Project Co and Spark D&C is in development and not all processes have been implemented as required.

## Implementation of the Construction Environmental Management Plan

The CEMP is the main overarching document which outlines the processes and systems to manage Spark D&C’s environmental aspects. The CEMP has been documented to meet the requirements from ISO14001. CEMP-related audit findings show that Spark’s environmental management system is immature and that the documented environmental management arrangements are not reflected in actual environmental management practices.

## Compliance with the requirements of the Worksite Environmental Management Plans

The WEMPs have been established to meet the requirements on the EMF and the PSDR. However, they are complex documents for managing site environmental management. Several audit findings have been raised relevant to on-ground environmental management and implementation of environmental controls.

## Compliance with the requirements of the Management Plans

The EMF requires the development and implementation of specific Management Plans. Spark has developed all the plans required for the scope of work undertaken during the reporting period. The audits found that there were some issues with on-site environmental management, and process issues including monitoring and implementation of site-based controls.

## Compliance with the requirements of the Construction Compound Plans

The development of Construction Compound Plans (CCPs) to the satisfaction of the Minster for Planning is required by the Incorporated Document. No audit findings were raised against the requirements of the approved CCPs audited for the six-month reporting period.

# Appendix 1 – EPRs audited in the reporting period

| **Audit date** | **EPRs audited** |
| --- | --- |
| May 2022 | Arboriculture (AR) AR2  Contamination and soil (CL) CL5  Noise and Vibration (NV) NV3  Surface Water (SW) SW1, SW3  Sustainability and Climate Change (SCC) SCC4 |
| August 2022 | Environmental Management (EMF) EMF1, EMF2, EMF4  Aboriginal Heritage (AH) AH1  Air Quality (AQ) AQ1  Arboriculture (AR) AR1, AR2  Business (B) B8  Contamination and soil (CL) CL5  Flora and Fauna (FF) FF1, FF2, FF3, FF5  Historical Heritage (HH) HH2, HH5  Noise and Vibration (NV) NV2, NV3, NV4  Social and Community (SC) SC3, SC4  Surface Water (SW) SW1, SW2, SW5  Sustainability and Climate Change (SCC) SCC1, SCC4  Traffic and Transport (TT) T2, T3 |
| October 2022 | Business (B) B1, B2, B6  Contamination and soil (CL) CL1, CL2, CL3  Ground Movement (GM) GM1, GM3  Groundwater (GW) GW1  Historical Heritage (HH) HH3  Land Use Planning (LP) LP1, LP4  Landscape and Visual (LV) LV3  Noise and Vibration (NV) NV5, NV8, NV9  Social and Community (SC) SC5, SC6  Surface Water (SW) SW3, SW7, SW13  Sustainability and Climate Change (SCC) SCC2  Traffic and Transport (TT) T5 |

# Appendix 2 – Audit findings and summary of actions taken

Audit Findings Raised During the Reporting Period

Table 9: Summary of audit findings against the Environmental Strategy

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Audit Date** | **Finding No.** | **Finding type** | **Finding** | **Summary of actions taken by Spark** | **Status (Open/ Closed)** | **Date Closed** |
| Oct-22 | IEA-1022-01 | AfI | **Environmental Strategy 3.3.2.2 Environmental collaboration across D&C:** There is no design environmental compliance report prepared to verify compliance of the relevant design phase as noted in section 3.3.2.2 of the Environmental Strategy. | PCo and Spark are to further define and implement a process for design reviews.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Oct-22 | IEA-1022-02 | AfI | **Environmental Strategy 7.1 Management Reviews and Continuous Improvement:** A six-monthly management review of the Development Phase management plans as required by the PSDR has not occurred. | A schedule for management reviews to meet the requirements of the PSDR is to be implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |

Table 10: Summary of audit findings against the CEMP

| **Audit Date** | | **Finding No.** | **Finding type** | **Finding** | | **Summary of actions taken by Spark** | | **Status (Open/ Closed)** | | **Date Closed** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Jul-22 | IEA-0722-05 | | AfI | **CEMP 11 Monitoring and compliance:**  Weekly inspection checklists were not always effectively completed with clear and timely information. | As construction works have expanded, this finding was closed and added into a consolidated CEMP level related finding. See finding IEA-0822-09.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Closed | | Aug-22 | |
| Aug-22 | | IEA-0822-01 | N | **CEMP 4.1 Compliance requirements:** A framework for managing obligations and for obtaining approvals is in place. However, processes for identifying, tracking, and evaluating compliance with these obligations are not fully implemented. | | The Obligations Register has been revised and updated, and a process for evaluating compliance has been documented, but not fully implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-02 | AfI | **CEMP 4.5.2 Package Management Procedures:** Cited WeBuild procedures are not customised for Spark’s scope of work. | | A process has been implemented to identify required procedures and revise these for Spark’s operations.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-03 | AfI | **CEMP 5.2 Key Risk Objectives and Targets:** The objectives and targets are not quantitative or measurable, andtracking progress towards meeting these is not in place. | | A process has been implemented to revise the Environment Policy, and the environmental objectives and targets. A process for tracking progress has been implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-04 | N | **CEMP 5.5 Project Plans** Not all management processes and requirements specified in the CEMP, sub-plans, or other EPR plans including the Sustainability MP, CCEMP and TrMP, have been implemented as described. | | The Plans are being progressively revised to reflect actual environmental management and sustainability practices. This process is not yet complete.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-05 | N | **CEMP 5.5.2. Worksite environmental management plans:** Controls identified in SEPs are not consistent or always aligned with WEMPs and Sub Plans. | | Site Environmental Plans (SEPs) are being revised to reflect actual environmental controls required. This process is not yet complete.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-06 | O | **CEMP 6.1 Leadership [resources]:** Not all systems required for environmental management were accessible by the environment team. | | The environment team has access to required internal systems to support environmental management.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Closed | | Oct-22 | |
| Aug-22 | | IEA-0822-07 | AfI | **CEMP 8. Environmental training and awareness.** While good progress has been made, not all the training defined in the CEMP and CEMP Sub Plans is being delivered. | | Training requirements are being progressively included in a training matrix, and implementation of the training has commenced.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-08 | AfI | **CEMP 9.1. Monitoring**. Monitoring requirements in the CEMP, Sub Plans, and WEMPs are not being managed and conducted as defined. | | An Environmental Monitoring Management Plan is being developed but is not yet approved.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-09 | AfI | **CEMP 9.1.2 Environmental Site Inspections:** The weekly inspections process is not fully established and not all inspections checklists were completed effectively. | | A process for recording site environmental inspections and tracking required actions has been developed but is not fully implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-10 | AfI | **CEMP 9.3.1 Internal environmental audits:** Internal audits have not commenced for management plans that have been issued for use. PSDR Part F1 1.11 requires internal audits to commence from financial close. | | A draft internal audit schedule has been developed, but audits have not commenced.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-11 | O | **CEMP 10.3.3.1 Immediate reporting [incidents].** Incident notification requirements in the EMF are not documented in the CEMP. No agreement with the State on formal incident reporting is documented. | | The CEMP is being revised and will include required incident reporting arrangements.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-12 | O | **CEMP 12 Document Control:** Documents continue to have quality control issues and require minor editorial amendments. | | The quality of documentation improved significantly during the reporting period.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Aug-22 | | IEA-0822-13 | O | **CEMP 12 Document Control:** Not all environmental records were readily available. | | Environmental records are now maintained appropriately.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Closed | | Oct-22 | |
| Oct-22 | | IEA-1022-03 | AfI | **CEMP 5.1.1 Environmental Aspects, Activities and Impacts:** Environmental opportunities are not identified in the Aspects and Impacts Register, as required by ISO 14001. | | The environmental risk register is being progressively integrated into the Project wide risk register. This process is not yet complete.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |
| Oct-22 | | IEA-1022-04 | AfI | **CEMP 6.5 Environment in Design**: The process for validating integration of EPRs in temporary packages is not formally established. | | A formal process for reviewing the integration of environmental requirements in Temporary design packages is being implemented. This is not yet complete.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | | Open | |  | |

Table 11: Findings raised against the WEMPs

| **Audit Date** | **Finding No.** | **Finding type** | **Finding** | **Actions** | **Status (Open/ Closed)** | **Date Closed** |
| --- | --- | --- | --- | --- | --- | --- |
| May-22 | IEA-0522-01 | N | **WEMP Site Investigation 12 Emergency response and incident management:** There was no formal emergency response and incident management plan established for the site investigation works. | The WEMP was formally revised and approved for use.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Jul-22 |
| May-22 | IEA-0522-02 | AfI | **WEMP Site Investigation 11 Monitoring and compliance:** There was no formal process to consistently record and track closure of actions arising from the weekly environmental inspections. | The Inspections spreadsheet has been updated and is in use to track actions raised from weekly inspections.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Jun-22 |
| May-22 | IEA-0522-03 | O | **WEMP Site Investigation 8 Environmental aspects:** The WEMP has been revised and differs from the version verified by the IREA. | The WEMP has been revised to reference the correct emergency response plan.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Jul-22 |
| Jun-22 | IEA-0622-01 | AfI | **WEMP Site Investigation 8.6 Surface water**: Sedimentation controls to protect surface water runoff into the Banyule Creek drain were not all in place and effective. | Actions were taken to improve sediment controls at Borlase to protect run off into Banyule Creek. This included additional use of bog mats and limiting vehicle access to the area.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Aug-22 |
| Jun-22 | IEA-0622-02 | AfI | **WEMP Site Investigation 8.6 Surface water**: Evidence of mud tracking was observed on Watsonia Reserve exit on Service Road. | The area was cleaned and verified to be free of mud tracking.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Jul-22 |
| Jun-22 | IEA-0622-03 | AfI | **WEMP 8.8 Sustainability and Climate Change.** Systems to implement the sustainability objectives and for tracking sustainability performance are not established. | Systems for the collection and tracking of fuel, water, other data for sustainability reporting have commenced.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Nov-22 |
| Jun-22 | IEA-0622-04 | AfI | **WEMP 11 Monitoring and compliance:**  The processes for planning, managing, and conducting weekly inspections is not fully established and effective. | Progress has been made on the management of weekly inspections.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Aug-22 |
| Jul-22 | IEA-0722-01 | AfI | **WEMP Site Investigation 8.6 Surface water:** Not all measures were implemented or effective to protect receiving waterways from sediment laden run off or local erosion. | Erosion and sediment controls continue to be improved.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Aug-22 |
| Jul-22 | IEA-0722-02 | O | **WEMP Site Investigation 8.6 Surface water:** There were no controls to prevent vehicles from bypassing the rumble grid when leaving the Lower Plenty site. | This had been addressed.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Aug-22 |
| Jul-22 | IEA-0722-03 | AfI | **WEMP 8.7 Contamination and soils:** Not all micro-sites had established effective secondary containment for the drilling spoil. | Secondary containment at the site investigations micro sites had been addressed.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Aug-22 |
| Jul-22 | IEA-0722-04 | O | **WEMP Site Investigation Hazardous substances key controls and monitoring:** Debris and waste was observed within the fenced are for bore PC-BH6609 (Trinity, Manningham). | The area has been cleaned.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Aug-22 |
| Aug-22 | IEA-0822-21 | O | **WEMP Lower Plenty Drysdale to Lower Plenty Road 9.6 Contamination and Soil:** Three jerry cans of fuel were observed stored outside a bunded area during the site inspection at the Borlase site compound area. | This was addressed.  This finding related to on site environmental controls and represented a low risk to the environment. | Closed | Sep-22 |
| Sep-22 | IEA-0922-01 | O | **WEMP 0018 Site Investigations - 8.7 Contamination of soil:** The pop-up bund in the site investigations Manningham micro site was filled with containers that exceeded the bund containment capacity. | A drum containing drill waste and minor quantities of chemical containers were observed outside the portable bunds at the Bulleen SRD micro-site.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |
| Sep-22 | IEA-0922-03 | O | **WEMP 0019 Watsonia Northern to Yallambie - 9.6 Contamination and Soil:** Hazardous chemicals were observed stored outside the designated bunded areas at Watsonia Diversion and Watsonia Box. | Minor quantities of unbunded chemicals were observed at the Watsonia area. These were promptly stored in the appropriate chemical storage areas.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |
| Sep-22 | IEA-0922-04 | O | **WEMP0025 Manningham - 9.6 Contamination and Soil:** Hazardous chemicals were observed stored outside the designated bunded areas. | Minor quantities of unbunded chemicals were observed at the Manningham area. These were promptly stored in the appropriate chemical storage areas.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |
| Oct-22 | IEA-1022-09 | O | **WEMP-0026 9.4 Arboriculture:** Not all tree protection zones were in place. | Actions to address this finding have not been formally implemented.  However, tree protection measures were observed to be in place.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |

Table 12: Findings raised against the Management Plans

| **Audit Date** | **Finding No.** | **Finding type** | **Finding** | **Actions** | **Status (Open/ Closed)** | **Date Closed** |
| --- | --- | --- | --- | --- | --- | --- |
| Aug-22 | IEA-0822-14 | O | **CCEMP section 4.1:** While actions arising from current meetings with external stakeholders tracked, the status of actions arising at early meetings were not formally tracked for completion. | Historical meeting minutes have been reviewed and actions consolidated into a common list. These have been checked for completion. Open actions have been compiled and linked to the respective stakeholder.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Closed | Oct-22 |
| Aug-22 | IEA-0822-15 | AfI | **CNVMP 5.5 Construction activities:** The noise barrier on the west side of Greensborough Road adjacent to Powley Parade was removed before applicable new or temporary noise barriers (including noise walls) or other noise attenuation devices was commissioned (PSDR Part F6 s3(d)). | Spark’s noise consultant identified potential acoustic treatment options currently under consideration. Three options are (1) at property noise treatment; (2) common noise wall at all property boundaries; (3) noise wall cash equivalent per property. Spark is working with NELP regarding presentation of these options to the affected residents.  Consultation with affected stakeholders has been conducted and agreement obtained. However, records of the agreements were not available, and the agreements not recorded in the Agreed Stakeholder Mitigation Register.  This finding related to on site environmental controls and represented a medium risk to the environment. | Open |  |
| Aug-22 | IEA-0822-16 | AfI | **CNVMP 6.6.2 Permit to Work Out of Hours**: The IREA approval timeline and the notification timeline for unavoidable OOH permits has not always met the procedure described in the CNVMP and associated procedures. | The OOHW permit process and the flowchart are currently being revised as part of the review of the CNVMP.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Sep-22 | IEA-0922-02 | N | **Dust and Air Quality Management and Monitoring Plan. 7.1 Controls for Dust Emissions; 9.1 Air Quality Monitoring – Construction:** Air quality monitoring, management, and reporting was not adequate during the audit period. This includes but is not limited to:   * Air quality monitors were not deployed as required and defined for the scope of construction works during the audit period. * Limits, alarms, and alerts were not always configured in the air quality monitoring system. Accordingly, exceedences of PM 2.5 levels were not detected. * Air quality monitoring was not reviewed or reported in August 2022. * Incidents were not recorded for unnoticed exceedences, so no corrective or preventive actions were identified. | Alarms and alerts have been reconfigured with the associated monitors. Further evidence was sighted that that air quality monitoring, management, and reporting requires further improvement.  This finding related to on site environmental controls and represented a high risk to the environment. | Open |  |
| Aug-22 | IEA-0822-17 | AfI | **CNVMP Section 7 CN08**: Noise hoarding was not installed prior to commencement of vegetation clearing and grubbing construction works at Northern to Yallambie as required in the associated WEMPs. The specified height of the noise hoarding height in the Northern to Yallambie SEP was only 2.4 m instead of the 3 metres specified by the associated WEMP and CNVIA. | Noise hoarding installation continues but not all are in place as required.  This finding related to on site environmental controls and represented a medium risk to the environment. | Open |  |
| Aug-22 | IEA-0822-18 | AfI | **Flood Emergency MP 7 Environmental Control CFE07:** The SEPs do not include flood response and mitigation measures for works in flood impacted areas. | Not all SEPs have been updated with relevant flood controls.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Aug-22 | IEA-0822-19 | AfI | **Spoil MP 10.1.1 Inspections**: Spoil specific control measures are not included in weekly inspection checklist. | The weekly inspection checklist hast been updated. However, the checklist does not include all items defined in the Spoil Management Plan.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Aug-22 | IEA-0822-20 | AfI | **SWMP 7.1 Water quality risk and controls CSW25:** Not all measures were implemented or effective to protect receiving waterways from sediment laden run off or local erosion. | Review of ERSED controls and plans is in progress.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |
| Oct-22 | IEA-1022-05 | AfI | **CCEMP 4.3.3 Complaints Management Process:** Process for consistent and clear reporting of information about complaints in the monthly report is not yet established. | Actions to address this finding have not been formally implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Oct-22 | IEA-1022-06 | AfI | **Flood MP 6.2.4 Flood Emergency Procedures and Response.** Not all flood planning, preparation and response measures were implemented. | Actions to address this finding have not been formally implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment | Open |  |
| Oct-22 | IEA-1022-07 | AfI | **Spoil MP 10.3 Incident Management:** Spoil related incidents and events have not been recorded in Synergy and communicated to relevant stakeholders. | Actions to address this finding have not been formally implemented.  This finding related to documented environmental management arrangements and did not represent an immediate material risk to the environment. | Open |  |
| Oct-22 | IEA-1022-08 | AfI | **WASS MP 6.1 WASS Controls:** Controls to manage the PASS temporary stockpile at Watsonia vent tunnel were not fully implemented as per the WASS MP. | Actions to address this finding have not been formally implemented.  This finding related to on site environmental controls and represented a low risk to the environment. | Open |  |

Previous Open Audit Findings

There were no audits before the reporting period and accordingly no open findings.

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