Government of **Western Australia**
Department of **Environment Regulation**

DER Regulatory Reform

Environment Institute of Australia and New Zealand
November 2016

DER's Functions

Environmental regulation approvals scope:

Clearing of native vegetation

Industry regulation of prescribed premises

Regulatory Reform – Industry Regulation

- Focus of reform has been Industry Regulation of prescribed premises.
- Prescribed premises are categories specified in Schedule 1 to the *Environmental Protection Regulations 1987.*
- There are approx 90 different categories.
- Diverse range of industries.

Prescribed premises

- Waste industries
- Resources industries
- Process industries

Challenges

- One size fits all does not work
  - Problems with generic conditions
- Needs of stakeholders
  - Readability of documents
  - Simple and effective framework
- Absence of documented policy positions
  - 30 years of operation through custom and practice under the *Environmental Protection Act 1986*
- Lessons learnt from previous inquiries, in particular:
  - Welker review
  - Robinson review
  - Esperance lead
  - Bio-Organics

DER Policy Documentation

Key Document hierarchy

The types and attributes of Key Documents are listed below in hierarchical order:

1. Guidance Statements/Environmental Standards

Statements of policy that generally bind DER in its administration of statutory or other functions.

2. Guidelines/Fact Sheets

Explanatory material to assist persons interested in or subject to DER's statutory or other functions. May contain statements of policy.

3. Reports/Papers

External reports or papers (discussion/option/direction) prepared to inform, or consult with, interested parties.

4. Materials

External publications for information purposes only.

Regulatory Framework

- Guidance Statements
  - Explain principles, structure and scope of DER's regulatory activities.
- Environmental Standards
  - Standards for specific categories of prescribed premises.
- Guidelines
  - Specific to emissions.
  - Provides guidelines regarding monitoring and modelling requirements.
- Factsheets
  - Specific to categories of prescribed premises.

Final Guidance Statements

Guidance Statement	Summary
Regulatory Principles	Foundational document for all of DER's regulatory functions
Licence Duration	Reduces regulatory burden by providing for longer term licences
Setting Conditions	Ensures legal principles for enforceable and valid conditions in licences and works approvals
Land Use Planning	Provides clarity as to the timing of DER environmental approvals and planning approvals
Environmental Standards	Explains how Environmental Standards will be applied

Close to final documents

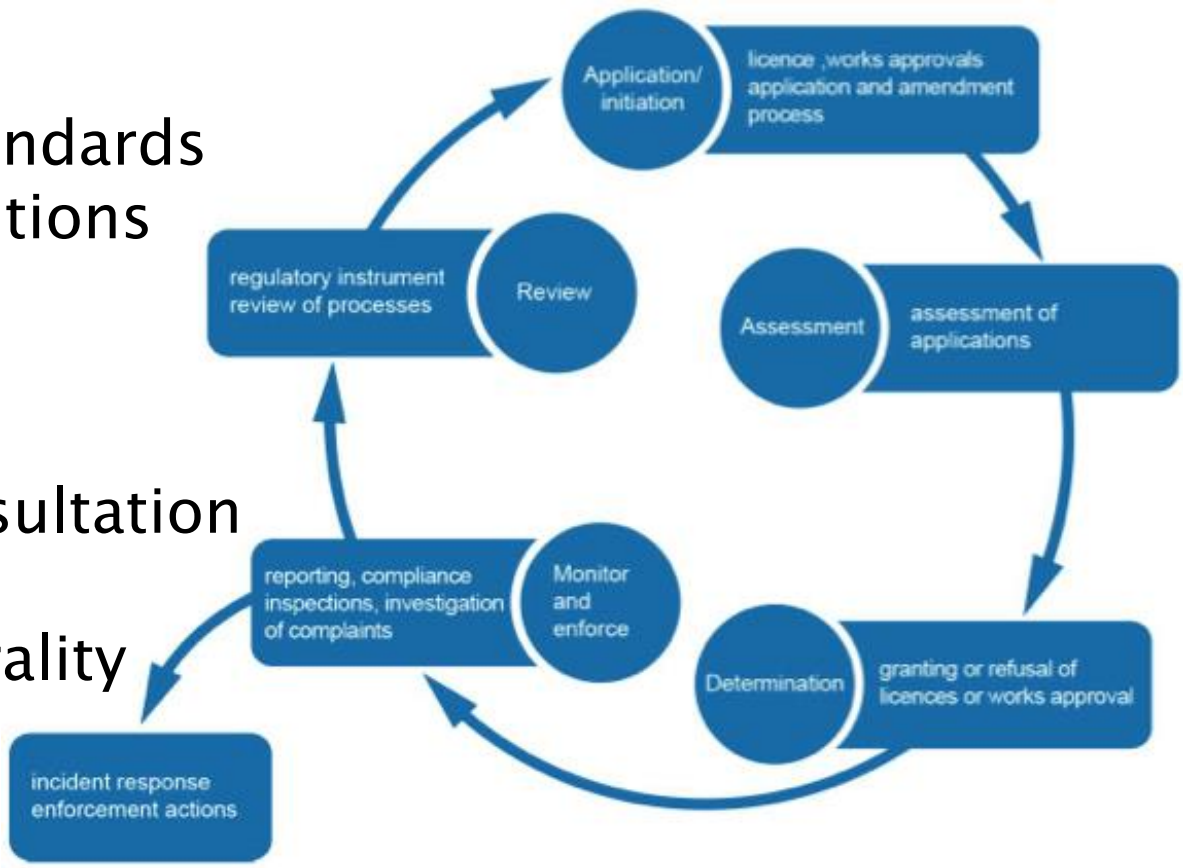
Document	Summary
Guidance Statement: Decision Making	Formerly draft Guidance Statement Assessment Framework. Provides clear decision pathway, including target timeframes and transparent processes ensuring procedural fairness.
Guidance Statement: Risk Assessments	Formerly draft Guidance Statement Environmental Risk Assessment Framework. Provides step by step description of risk assessment process. Clarifies what is and what is not assessed. Applied source-pathway-receptor model.

Close to final documents

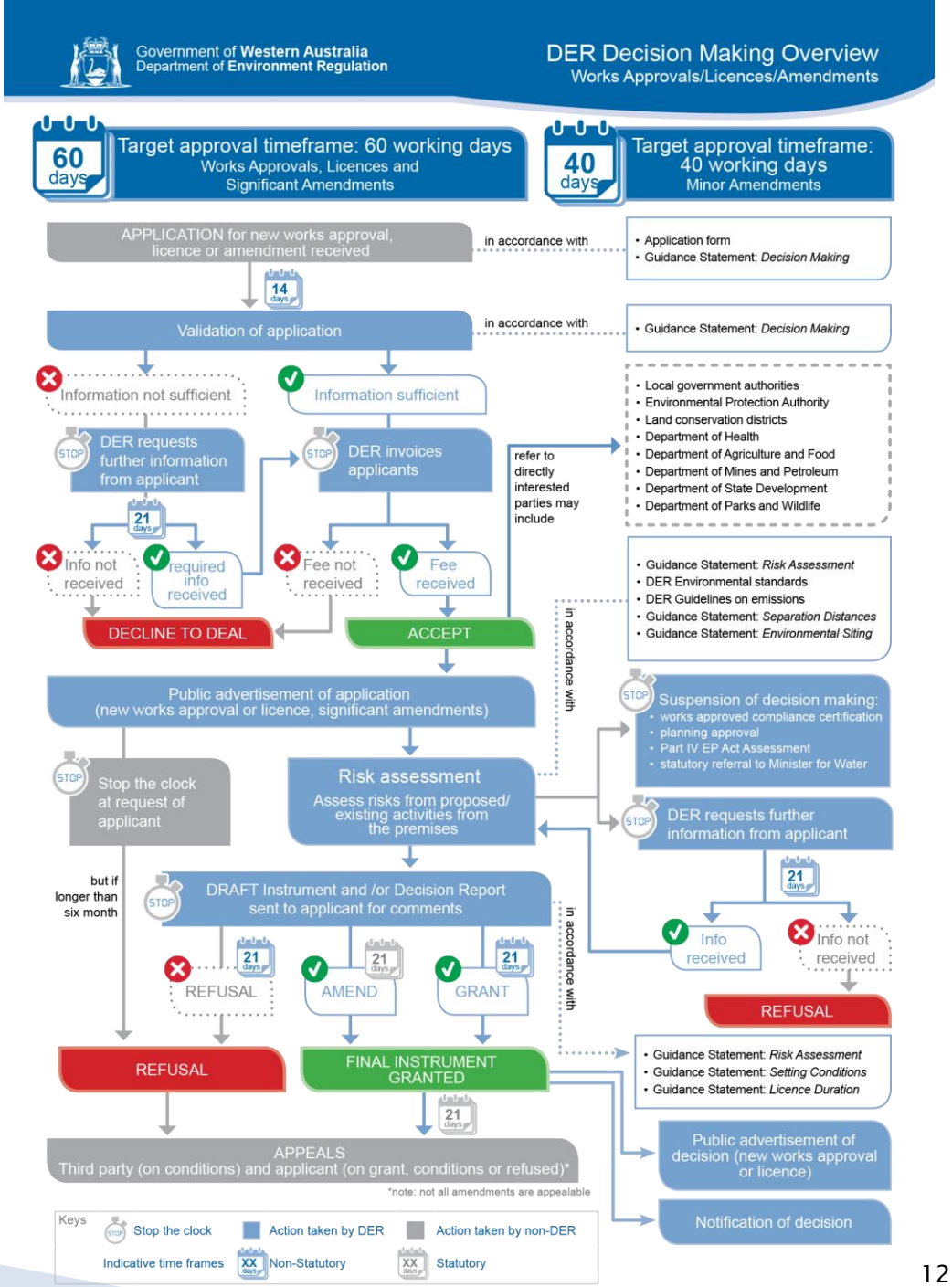
Document	Summary
Guidance Statement: Separation Distances	Explains how DER considers separation distances to sensitive receptors in its risk assessment process.
Guidance Statement: Environmental Siting	Identifies relevant environmental receptors. Explains how DER considers distances to environmental receptors in its risk assessment process.
Environmental Standard: Composting	Provides a risk-based environmental standard for composting activities. Not a one-sized fits all approach.

Regulatory Principles

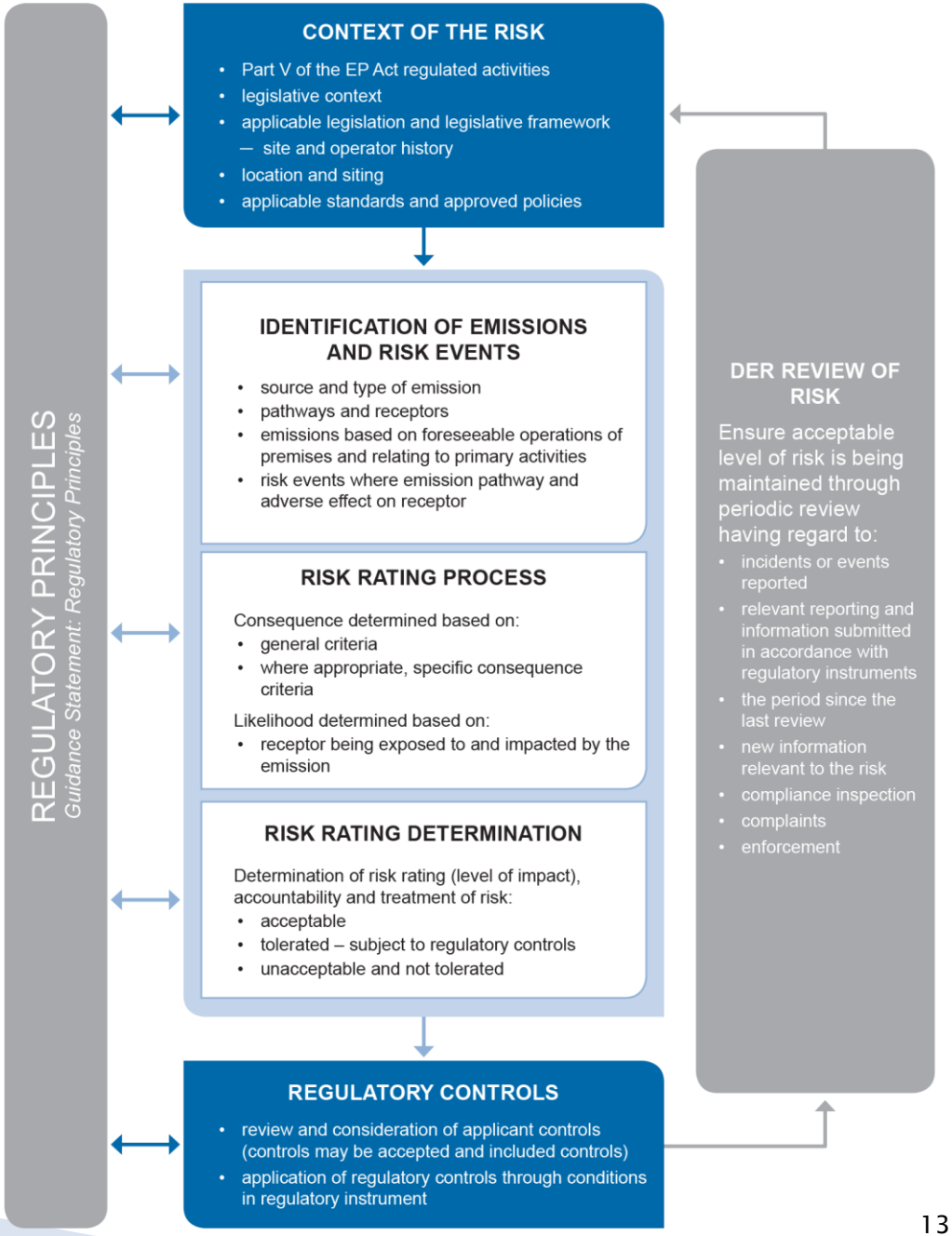
- ✧ Risk-based regulation
- ✧ Evidence-based decision-making
- ✧ Application of Environmental Standards
- ✧ Appropriate conditions
- ✧ Fair and equitable decision making processes
- ✧ Engagement, consultation and transparency
- ✧ Competitive neutrality



Decision Making



Risk Assessment



Pilot implementation

- Over 30 reviews to date
- Ports assessments
  - Pilbara Ports
  - Fremantle Ports
  - Southern Ports
  - Port Hedland port premises
- Conversion of a number of licences held by one licence holder
- Range of diverse matters –
  - Piggeries
  - Composting facilities
  - Waste water treatment plant
  - Screening and crushing
  - Ore beneficiation process
  - Wineries
  - Abattoirs
  - Cattle Feedlots
  - Waste to energy plants

Pilot implementation

- Applied reform – proof of concept – framework works for diverse industries
- Real time learning and improvements which has informed finalisation of draft documents
- Training and development is tailored for applied learning

Historical Approach

- Mix of REFIRE template instruments and approach prior to REFIRE.
- Risk-assessment largely unstructured.
- Varying degree of information provided.
- Conditions not all suitable/appropriate.
- Conditions not all clearly drafted.

Reform: Risk-Based decision making

- Still evolving.
- Risk assessment highly structured.
- Provides consistent information regarding:
  - Infrastructure
  - Operations
  - Relevant approvals – eg Part IV
  - Siting and Location
    - Identification of receptors
    - Site conditions
    - Meteorological conditions

Reform: Risk-Based decision making

- Source-pathway-receptor analysis
  - Elimination of matters for assessment where there is emission but no pathway or no receptor
  - Characterisation of hazard
  - Clear identification of impact on receptor
- Determination of risk
- Determination of controls

Reform: Risk-Based decision making

- Applicant or existing controls taken into consideration for determination of consequence/likelihood.
- Where applicant or existing controls are appropriate, they are documented in the instrument.
- Additional regulatory controls may be required. Where this is the case, the grounds for these controls are provided.

Example – Infrastructure – Utah Point

2.1 Infrastructure

The Utah facility infrastructure, as it relates to Category 58 activities, is detailed in Table 1 and with reference to the Site Plan (attachment in the Issued Licence).

Table 1 - Utah facility Category 58 infrastructure

	Infrastructure	Plan reference
1	Sealed ring road stockyard 1 and stockyard 2 (elevated for ring road to stockyard 1)	Premises Map: Ring Road (Stockyard 1) Ring Road (Stockyard 2).
2	Sea wall around the perimeter stockyard 1 ring	Premises Map: Sea wall
3	Bunkers	Premises Map: Bunker 1-13, 21, 22

Example – Operational – KBT

2.2 Operational Aspects

The conveyor system delivers bulk product to and from KBB2 with imported material being transferred off site by trucks. The berth loader and conveying system has a maximum loading rate of 2000t/h. KBB2 is available for 24 hours a day, seven days a week.

Bulk products currently handled through KBT include bauxite, cement clinker, iron ore, gypsum, granulated slag and nut coke. Iron ore exports are the largest bulk cargo handled annually by volume. The handling of coal from the Griffin mine in Collie was discontinued in 2015.

The Licensee is responsible for all operations and facilities onsite at KBT including all material handling systems, stockpile management and rail line management. DER confirms that the Licensee is the occupier of the premises for the purposes of holding a licence under Part V of the EP Act.

Example – Other Approvals – Tianqi

5.2 Part IV of the EP Act

5.2.1 Background

The Applicant proposes to discharge wastewater to the SDOOL. The wastewater will consist of cooling tower blowdown water, boiler blowdown water, and demineralisation plant reject water. Water Corporation holds Ministerial Statement No. 665 for the use of the SDOOL to dispose of treated sewage and industrial wastewaters to the Sepia Depression. EPA Bulletin 1135 (May 2004) contributed to the determination of MS665.

The key matters of Bulletin 1135 and Ministerial Statement 665 as they pertain to the proposal are discussed below.

5.2.2 Bulletin 1135

The advice provided in Bulletin 1135 has been considered by the Delegated Officer during the proposed LHPP assessment process and drafting of the works approval conditions. In particular, this advice is relevant to DER's consideration of discharges of wastewater via the SDOOL to the marine environment.

Pertinent EPA advice in Bulletin 1135 relevant to the Delegated Officer's determination of the application is summarised in Table 6.

Example – Siting and Locatior KBT

5.1 Siting Context

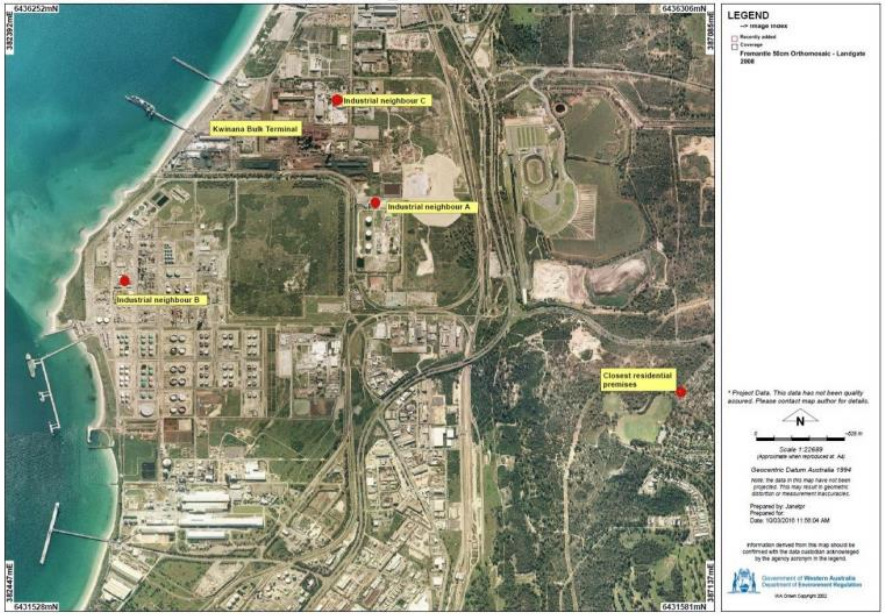
KBT is located centrally within the KIA, a significant industrial estate in Western Australia established in the early 1950's. The KIA covers an area of approximately eight kilometers (km) north-south and 2km east-west on the eastern side of Cockburn Sound, approximately 30km south of the Perth Central Business District. The KIA contains a highly diverse range of industries from smaller service industries to very large heavy process industries.

5.2 Residential and Industrial Neighbours

Table 6. Distance to residential and industrial neighbours

Residential and Sensitive Premises	Distance from Prescribed Premises
Closest residential premises (zoned residential)	3,130 metres (m) to the south-east
Industrial neighbour A (IN A) (industrial zoning)	660m to the south-east
Industrial neighbour B (IN B) (industrial zoning)	980m to the south-west
Industrial neighbour C (IN C) (industrial zoning)	600m to the north-east

Figure 1. Residential and Industrial Neighbours



Example – Risk Rating – KBT

6.7.3 Summary of Risk Assessment and Acceptability

The risk items identified in section 6 including the application of risk criteria and the acceptability with treatment are summarised in Table 17 below.

Table 17. Risk rating of emissions

	Emission		Pathway and Receptor	Impact	Proponent controls	Risk Rating (with proponent controls)	Acceptability with treatment (conditions on instrument)
	Type	Source					
1.	Dust from iron ore	Infrastructure and handling process	Amenity and public health.	Air, moving with direction of wind. IN A IN B IN C	Infrastructure and management controls.	Minor consequence on receptor Unlikely likelihood of causing minor consequence **Moderate risk**	Acceptable subject to proponent controls conditioned.
2.	Dust from Cement Clinker	Infrastructure and handling process	Amenity and public health.	Air, moving with direction of wind. IN A IN B IN C	Infrastructure and management controls.	Minor consequence on receptor Unlikely likelihood of causing minor consequence **Moderate risk**	Acceptable subject to proponent controls conditioned.
3.	Dust from bauxite, gypsum, granulated slag and nut coke	Infrastructure and handling process	Amenity and public health.	Air, moving with direction of wind. IN A IN B IN C	Infrastructure and management controls.	Minor consequence on receptor Rare likelihood of causing minor consequence **Low risk**	Acceptable, no regulatory controls required.
4.	Noise from infrastructure and operations	Infrastructure and handling process	Amenity	Air, moving with direction of wind IN A IN B IN C	None specified	Insignificant consequence on receptor Rare likelihood of causing insignificant consequence **Low risk**	Acceptable, no regulatory controls required.

Example – Controls – Kojonup Saleyards

8.1 Summary of Controls

		Controls			
		8.2 Specified Infrastructure and Equipment Controls	8.3 Specified Action for Contaminated Stormwater, Wastewater and Leachate Risk	8.4 Specified Action for Dust Risk	8.5 Specified Action for Odour Risk
Risk Items (see Section 7.0)	1. Odour from the operation of the saleyards, truck wash, hardstand area, and settling ponds	●			●
	2. Dust from movement of animals in the saleyards and vehicle movements	●		●	
	3. Land runoff to surface water and infiltration to groundwater of contaminated stormwater, wastewater, and overflow of settling ponds	●	●		

Reform: Instruments

- Controls proportionate to risk
- Instruments specify details of what has been assessed
- Valid and enforceable condition drafting
- Longer term durations

Controls proportionate to risk

- Derived from the risk assessment
- Direct link between risks, controls and conditions

9. Setting Conditions

The conditions in the Issued Licence have been determined in accordance with DER's *Guidance Statement on Setting Conditions*.

DER's *Guidance Statement on Licence Duration* has been applied, and the Issued Licence expires in 20 years from the date of issue.

Condition Ref	Grounds
Environmental Compliance 1	Environmental compliance is a valid, risk-based condition to ensure appropriate linkage between the licence and the EP Act.
Notification of Material Change 2, 3 and 4	These conditions are valid, risk-based and enable flexibility in operations.
Infrastructure and Equipment 5 and 6	These conditions are valid, risk-based and contain appropriate controls (see section 8.2 of this decision report).
Specified Action for Contaminated Stormwater, Wastewater and Leachate Risk 7, 8, 9, 10 and 12.	These conditions are valid, risk-based and contain appropriate controls (see section 8.3 of this decision report).
Specified Action for Fugitive Dust Emissions 11	This condition is valid, risk-based and contains appropriate controls (see section 8.4 of this decision report).
Specified Action for Odour Emissions 13 and 14	These conditions are valid, risk-based and contain appropriate controls (see section 8.5 of this decision report).
Emissions 15	This condition is valid, risk-based and consistent with the EP Act.
Information 16, 17, 18, 19, and 20	These conditions are valid and are necessary administration and reporting requirements to ensure compliance.

DER notes that it may review the appropriateness and adequacy of controls at any time and that following a review, DER may initiate amendments to the licence under the EP Act.

Example – What has been assessed – Tianqi

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Instrument – Longer durations

- Implementation of Guidance Statement: Licence Duration
- Extension of almost all licensed prescribed premises through administrative notice
- Licence expiries extended. Re-assessments reviews will occur during this period on an as-needed basis, such as:
  - As part of amendment applications
  - If the risk profile has changed
  - If monitoring, complaints etc. identify an issue
- Benefits:
  - Reduce regulatory burden of renewal applications
  - Enables time for training and development

Concluding Comments

- Evolving process through increased application
- Continuous improvement through stakeholder engagement and staff feedback
- Consistency will take time
- First step to ensuring a virtuous regulatory cycle

Concluding Comments

- Successful implementation requires:
  - Staff engagement and support
  - Training and development