



Report and recommendations of the Environmental Protection Authority



Tronox Chandala Synthetic Rutile Plant – s46 amendments to Ministerial Statement 412

Tronox Management Pty Ltd

Report 1490

October 2013

ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT

**TRONOX CHANDALA SYNTHETIC RUTILE PLANT – INQUIRY UNDER
S46 OF THE *ENVIRONMENTAL PROTECTION ACT 1986* TO AMEND
IMPLEMENTATION CONDITIONS AND REMOVE ALL PROPONENT
COMMITMENTS OF MINISTERIAL STATEMENT 412**

The Minister for Environment has requested (5 November 2012) that the Environmental Protection Authority (EPA) inquire into and report to the Minister on the proponent's, Tronox Management Pty Ltd, proposed changes to the environmental conditions for the Chandala Synthetic Rutile Plant – Ministerial Statement 412.

The following is the EPA's Report and Recommendations (No. 1490) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986* (EP Act).

Background

The proponent has approval under Ministerial Statement 412 to construct and operate a synthetic rutile plant, 5 km north of Muchea, for the purpose of processing heavy mineral concentrates, from the existing Cooljarloo mine into various constituent products, namely ilmenite, rutile and zircon.

The proponent has requested amendments to implementation conditions 1-16 and deletion of all proponent commitments from Ministerial Statement 412 to contemporise and rationalise the implementation conditions for the Chandala Synthetic Rutile Plant. A summary of the proposed changes and the EPA's assessment of the proposed changes are outlined below.

Table 1 - Summary of condition changes

Original condition	Assessment
<u>Condition 1</u> Proponent Commitments	All commitments are to be deleted. All proponent commitments have either been completed, are no longer relevant, or are managed under other regulatory processes.
<u>Condition 2</u> Implementation	Condition has been revised to contemporise wording and removes reference to production rate. Production rate is not considered to be an environmental aspect and is not a clear determinant of environmental impact. Such matters are addressed by EP Act Part V licence provisions. This condition is replaced by a more contemporary form of the condition
<u>Condition 3</u> Proponent	Replace with standard contemporary condition.
<u>Condition 4</u> Groundwater Extraction	Condition deleted - managed under the <i>Rights in Water and Irrigation Act 1914</i> .
<u>Condition 5</u> Dieback Fungus	Condition is retained and has been revised to modernise wording without changing the intent.
<u>Condition 6</u> Drainage and Wastewater Disposal	Condition deleted - managed under EP Act Part V processes.
<u>Condition 7</u> Landscaping	Condition deleted - condition has been completed.
<u>Condition 8</u> Dust	Condition deleted - managed under EP Act Part V processes.
<u>Condition 9</u> Noise	Condition deleted - managed under EP Act Part V processes, and the Environmental Protection (Noise) Regulations 1997.
<u>Condition 10</u> Chandala Brook Crossing	Deleted as condition requirement has been met.
<u>Condition 11</u> Brand Highway Entry	Deleted as condition requirement has been met.
<u>Condition 12</u> Spill Contingency Plans.	Deleted as condition requirement has been met.
<u>Condition 13</u> Environmental Management Programme	Condition deleted – Those plans which are still required (Dieback and Decommissioning) are conditioned separately.
<u>Condition 14</u> Time Limit on Approval	Condition deleted - project has substantially commenced.
<u>Condition 15</u> Decommissioning	Condition has been revised to modernise wording without changing the intent.
<u>Condition 16</u> Compliance Auditing	Condition has been revised to modernise wording without changing the intent.

Table 2 - Summary of Commitment amendments

Original Commitment	Assessment
<u>Commitments 1 – 2</u> Environmental Management Programme (EMP)	Commitment deleted - no longer required as the various management plans that were contained in the management programme have been either removed from the Statement or included as conditions.
<u>Commitments 3-5</u> Radiation Management Plan (RMP)	Commitment deleted - managed under the <i>Radiation Safety Act 1975</i> .
<u>Commitments 6-8</u> Noise Management	Commitment deleted - managed under EP Act Part V processes, and the Environmental Protection (Noise) Regulations 1997.
<u>Commitments 9-11</u> Atmospheric Emissions (gases, particulates and odours) Management	Commitment deleted - managed under EP Act Part V processes.
<u>Commitment 12</u> Surface and ground water monitoring	Commitment deleted – requirements have been completed by the proponent.
<u>Commitments 13-14</u> Liquid wastes	Commitment deleted - managed under EP Act Part V processes.
<u>Commitments 15-16</u> Waste ponds	Commitment deleted - managed under EP Act Part V processes.
<u>Commitment 17</u> Management of Site Discharge	Commitment deleted - managed under EP Act Part V processes.
<u>Commitments 18-20</u> Solid wastes	Commitment deleted - managed under EP Act Part V processes.
<u>Commitments 21-26</u> Site Hydrology Monitoring	Commitment deleted – requirements have been completed by the proponent.
<u>Commitment 27</u> Water consumption	Commitment deleted - managed under the <i>Rights in Water and Irrigation Act 1914</i> .
<u>Commitment 28</u> Aboriginal sites	Commitment deleted - managed under the <i>Aboriginal Heritage Act 1972</i> .

Assessment of the proposed change to conditions

The EPA has reviewed the Tronox Management Pty Ltd application and relevant implementation conditions and commitments, and has outlined its conclusions and recommendations below.

EPA conclusions and recommendations

The EPA concludes that in relation to Ministerial Statement 412 it is appropriate to remove certain conditions and proponent commitments which have been complied with, and which are adequately regulated under Part V of the EP Act, through works approvals and licences, and under the *Rights in Water and Irrigation Act 1914* and change the remaining conditions to update them to current standards.

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

1. That it is appropriate to delete conditions 1, 4, and 6 to 14 and re-word conditions 2, 3, 5, 15, and 16 so that the Ministerial Statement is consistent with contemporary presentation of implementation conditions;
2. Remove all Proponent Commitments of Ministerial Statement 412 as they are considered to have been completed, or are redundant, and are now replaced by the proposed implementation conditions 1 to 5; and
3. That after complying with section 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to amend Ministerial Statement 412 in the manner provided for in the attached recommended statement.

OEPA MIN2013-0343

RECOMMENDED ENVIRONMENTAL CONDITIONS

**STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

Tronox Chandala Synthetic Rutile Plant

Proposal: The proposal is for processing of mineral and other sands and preparation of synthetic rutile including by-products at the Tronox Chandala processing facility near the town of Muchea, as documented in Schedule 1 of this Statement.

Proponent: Tronox Management Pty Ltd

Proponent Address: 1 Brodie Hall Drive, Bentley,
Western Australia 6102

Assessment Number: 1949

Previous Assessment Number: 967

Previous Statement Number: Statement 412 (published on 9 April 1996)

Report of the Environmental Protection Authority: 1490

Previous Report of the Environmental Protection Authority: Bulletin 799

The implementation of the proposal to which the above report of the Environmental Protection Authority relates is subject to the following conditions and procedures, which replace and supersede all previous conditions and procedures of Statement 412.

1. Proposal Implementation

1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Column 3 of Table 2 in Schedule 1, unless amendments to the proposal and the authorised extent of the Proposal has been approved under the EP Act.

2. Proponent Nomination and Contact Details

- 2-1 The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within 28 days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

3. Compliance Reporting

- 3-1 The proponent shall prepare and maintain a Compliance Assessment Plan to the satisfaction of the CEO.

- 3-2 The proponent shall submit to the CEO the compliance assessment plan required by condition 3-1 prior to the submission of the compliance assessment report required by condition 3-6.

The compliance assessment plan shall indicate:

- (1) the frequency of compliance reporting;
- (2) the approach and timing of compliance assessments;
- (3) the retention of compliance assessments;
- (4) the method of reporting of potential non-compliances and corrective actions taken;
- (5) the table of contents of compliance assessment reports; and
- (6) public availability of compliance assessment reports.

- 3-3 The proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.

- 3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.

- 3-5 The proponent shall advise the CEO of any potential non-compliance within seven days of that non-compliance being known.

- 3-6 The proponent shall submit to the CEO a Compliance Assessment Report by 31 March 2014 addressing the previous calendar year, and then annually thereafter or as otherwise agreed by the CEO.

The Compliance Assessment Report shall:

- (1) be endorsed by the proponent's Managing Director / General Manager / Chief Executive Officer or a person delegated to sign on the Managing Director's / General Manager's / Chief Executive Officer's behalf;
- (2) include a statement as to whether the proponent has complied with the conditions;
- (3) identify all potential non-compliances and describe corrective and preventative actions taken;
- (4) be made publicly available in accordance with the approved compliance assessment plan; and

- (5) indicate any proposed changes to the compliance assessment plan required by condition 3-1.

4. Dieback

- 4-1 The Proponent shall prevent the introduction of the dieback fungus *Phytophthora cinnamomi* into the borefield and along the pipeline and access route.
- 4-2 The proponent shall implement the proposal in accordance with the “Chandala Dieback Management Plan”, dated 20 June 2012, or subsequent revisions approved by the CEO.

5. Decommissioning

- 5-1 Unless otherwise approved by the CEO, the proponent shall decommission the project, including removal of the plant and installations and rehabilitation of the site and its environs.
- 5-2 To ensure that the requirements of condition 5-1 are met the proponent shall submit, at least six months prior to decommissioning, a Decommissioning and Rehabilitation Plan to the requirements of the CEO.
- 5-3 The proponent shall implement the Decommissioning and Rehabilitation Plan required by condition 5-2 until such time as the CEO determines the decommissioning is complete.

Signed [date]

**HON Albert Jacob MLA
MINISTER FOR ENVIRONMENT; HERITAGE**

Table 1: Summary of the Proposal

Proposal Title	Tronox Chandala Synthetic Rutile Plant
Short Description	<p>This proposal is for the processing of ilmenite to synthetic rutile at the Synthetic Rutile Plant located at the Chandala Site, Muchea, Western Australia.</p> <p>Processing in the Synthetic Rutile Plant involves chemical reduction with sulphur in a coal fired kiln to produce reduced ilmenite, separation from waste fines, oxidation in aerated ammonium chloride liquor and polishing by immersion in sulphuric acid to produce synthetic rutile.</p> <p>Water is to be sourced from borefields and wastewater will be treated at the on-site wastewater treatment facility.</p> <p>Process waste will be returned to the Tronox Cooljarloo mine site or other appropriate licensed waste disposal facility.</p>

Table 2: Location and authorised extent of physical and operational elements

Column 1	Column 2	Column 3
Element	Location	Authorised Extent
Vegetation Clearing	Figure 1	Up to 53 ha

Table 3: Definitions of terms and phrases used in the implementation conditions and procedures

Term or Phrase	Definition
CEO	The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the <i>Environmental Protection Act 1986</i> , or his delegate.
EPA	Environmental Protection Authority
EP Act	<i>Environmental Protection Act 1986</i>

Figure 1 – Project Location

