

Modification of Minister's Approval

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the Development Consent referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie
Director
Industry Assessments

Sydney 22 DECEMBER 2017

SCHEDULE 1

Development Consent (DA 31-02-99), granted by the then Minister for Urban Affairs and Planning on 30 November 2000 for the Woodlawn Waste Management Facility at 619 Collector Road, Tarago, in the Goulburn Mulwaree and Palerang local government areas.

SCHEDULE 2

This consent is modified as follows:

In Schedule 2: Conditions of Development Consent

1. Insert the following definitions in alphabetical order:

Coffer Dam	means coffer dam in ED1 as referred to in MOD 3
ED1	Evaporation Dam No. 1 as referred to in MOD 3 (the unlined portion of ED1)
LTP	Leachate Treatment Plant as referred to in MOD 3
ML	Megalitres
MOD 3	Modification Application titled <i>Modification of DA 31-02-99 and MP10_0012 for the construction of a leachate treatment plant and associated infrastructure and changes to regional waste limits and operating hours prepared by SG Haddad Advisory and CW Strategic Planning Services, dated May 2017 and Response to Submissions dated October 2017</i>

2. Delete the definition for "Water NSW" and insert the following definition in alphabetical order:

Water NSW	NSW manager and protector of the Sydney Drinking Water Catchment
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3. Delete Condition 1 and replace with the following:

Adherence to Terms of DA and EIS

1. The Development shall be carried out in accordance with:
- (a) DA No. 31-02-99;
 - (b) the EIS prepared by Woodward-Clyde Pty Ltd, dated February 1999;
 - (c) the EIS Supplementary Report prepared by Woodward-Clyde Pty Ltd, dated March 1999;
 - (d) the Amended DA and accompanying information prepared by Woodward-Clyde, dated 12 November 1999;
 - (e) Modification Application DA31-02-99 Mod1 and accompanying Environmental Assessment titled "*Modification to DA31-02-99 to Receive Regional Council Waste at the Woodlawn Bioreactor*", prepared by Veolia Environmental Services, dated February 2010 and the associated '*Response to Submissions*' prepared by Veolia Environmental Services dated 12 April 2010;
 - (f) Modification Application DA 31-02-99 MOD 2; and
 - (g) Modification Application DA 31-02-99 MOD 3.

4. Delete Condition 18 and replace with the following:

Conditions Compliance Reports

18. The Applicant shall submit to the Secretary, the EPA, DPI Water, Water NSW and Council Conditions Compliance Reports as follows:
- (a) at least one month prior to the commencement of construction works for the purposes of landfilling, or within such period as otherwise agreed to by the Secretary;
 - (b) at least one month prior to the commencement of construction works for the purposes of the intermodal transfer facility, or within such period as otherwise agreed to by the Secretary;
 - (c) every two years following the date of commencement of construction for the purposes of landfilling activity, or within such period as otherwise agreed to by the Secretary.

Note: the requirements of (a) and (b) above may be satisfied by the same report if appropriate.

5. Delete Condition 19 and replace with the following:

Independent Environmental Audits

19. Every three years following the date of this consent, or at periods otherwise agreed to by the Secretary, and until such time as agreed to by the Secretary, the Applicant shall arrange for an independent audit of the environmental performance of the development. The audits shall:
- (a) be conducted pursuant to ISO 14010 – Guidelines and General Principles for Environmental Auditing, ISO 14011 – Procedures for Environmental Monitoring and any specifications of the Secretary;
 - (b) be conducted by a suitably qualified independent person approved by the Secretary;
 - (c) assess compliance with the requirements of this consent;
 - (d) assess the implementation of the LEMPs and review the effectiveness of the environmental management of the development; and
 - (e) be carried out at the Applicants' expense.

The audits shall be submitted to the Secretary, the EPA, DPI Water, Water NSW, Council and the Community Liaison Committee.

The Applicants shall comply with all reasonable requirements of the Secretary in respect of any measures arising from or recommended by the audits and within such time as agreed to be the Secretary.

6. Delete Condition 55 and replace with the following:

55. The Applicant shall prepare a Leachate Contingency Management Plan (LCMP) that addresses, but not necessarily be limited to the following matters:
- (a) the removal of leachate from the waste and its treatment to remove any metals or compounds at concentrations which may inhibit the biological processes of the bioreactor landfill, prior to discharging the leachate back into the landfilled waste;
 - (b) the storage of leachate external to the landfilled waste in the mine void;

- (c) method/s for removing leachate from the waste and disposing of it to ensure effective operation of the bioreactor landfill and to ensure that the groundwater gradient directs groundwater flows into the mine void;
 - (d) an estimate of the full costs for implementing each aspect of this plan (*EPA GTA*);
 - (e) contingency measures in the event that the leachate storage dams reach capacity sooner than anticipated, this should include the provision for the construction and operation of additional lined coffer dams in ED1 to the satisfaction of the EPA; and
 - (f) contingency measures should the modelling as required by Condition 70G demonstrate that the dams will overflow.
7. Insert new conditions 55A and 55B immediately after Condition 55 as follows:
- 55A. Prior to operation of the LTP, or as otherwise agreed by the Secretary, the Applicant must submit a revised LCMP to the satisfaction of the Secretary. The LTP is not permitted to operate until the revised LCMP is approved by the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include contingency measures should the leachate dams fill sooner than anticipated.
 - 55B. Should additional coffer dam(s) be required to be constructed as part of the LCMP the dam(s) must be designed constructed and maintained in accordance with Condition 70L to 70P.
8. Delete conditions 66A and 66B and replace with the following:
- 66A. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Stormwater Management Plan to the satisfaction of the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include the changes to stormwater management in MOD 2 and MOD 3, in accordance with the requirements of Condition 66.
 - 66B. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Applicant must submit a revised Management Plan for ED3N, ED3S, ED3S-S and the Cofferd Dam to the satisfaction of the Secretary. The LTP is not permitted to operate until the revised management plan is approved by the Secretary. The plan must be prepared in consultation with the EPA and Water NSW and include the changes to water and leachate management in MOD 2 and MOD 3, in accordance with the requirements of Condition 70. The plan must be documented in the LEMP.
9. Insert new Condition 66C immediately after Condition 66B as follows:
- 66C. Should any additional coffer dams in ED1 be required, the Applicant must submit revised management plans in accordance with conditions 70 and 70B to the satisfaction of the Secretary prior to any treated leachate being discharged to the coffer dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the LEMP.
10. Delete Condition 70 and replace with the following:
- ED3N, ED3S and ED3S-S and Cofferd Dam(s) – Management
- 70. The Applicant must prepare a management plan for ED3N, ED3S, ED3S-S and coffer dam(s), ED1, the LTP and pipeline to ensure that:
 - (a) each dam is lined in consultation with Water NSW and to the satisfaction of the EPA and maintained to prevent leakage from the dams in order to protect groundwater and surface water;
 - (b) a monitoring and inspection program is implemented including installation of monitoring bores, a review of monitoring data and six-monthly inspections to evaluate the integrity of the barrier and to assess if leakage from the dam is occurring;
 - (c) adequate capacity is retained in ED3N, ED3S and coffer dam(s) to meet the environmental performance requirements in condition 58;
 - (d) measures are identified to maintain adequate capacity within a suitable time period after receiving water from a rainfall event;
 - (e) there is an emergency plan for the management of leachate in excess of the capacity of ED3N, ED3S and coffer dam(s);
 - (f) the sources of leachate that are collected or received in ED3N, ED3S and coffer dam(s) are identified;
 - (g) the quantity of leachate from each source that reports to ED3 is monitored and compared in graphical format with rainfall data;
 - (h) ED3N is emptied of effluent from the existing leachate system by 31 December 2022;
 - (i) all pipelines which transfer leachate and treated leachate are monitored to ensure leaks do not occur;
 - (j) the operational details of the LTP include:

- (i) the leachate quality targets;
 - (ii) a description of the performance indicators that would be used to judge the performance of the LTP;
 - (iii) a description of the management measures that would be implemented to manage the operational impacts of the LTP including the chemical storage area and sludge skip bin;
 - (iv) contingency measures to manage any unpredicted impacts such as the bioreactor membrane failing; and
 - (v) the roles, responsibility, authority and accountability of all key personnel involved in the environmental management of the LTP.
- (k) An updated plan including MOD 2 and MOD 3 and must be documented in the LEMP.
11. Insert the following note after Condition 70C:
- Note: Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.*
12. In Condition 70D, delete the word "Proponent" and replace with the word "Applicant".
13. Delete Condition 70F and replace with the following:
- 70F. The Long-term Leachate Management Strategy must be operational no later than 30 September 2018 or as otherwise agreed by the Secretary.
14. Insert the following new conditions after Condition 70F:

Future Modelling

- 70G. Prior to the operation of the LTP, the Applicant must provide modelling which demonstrates that the evaporation dams will not overflow for the period between 2029 to 2058. Should overflow be predicted, the Applicant must provide contingency measures in accordance with Condition 55A.

Leachate Treatment Plant

- 70H. The Applicant must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.
- 70I. All run-off during construction must be contained on the site in accordance with Condition 58.
- 70J. The LTP must be:
- (a) capable of processing at least 4 litres per second of leachate; and
 - (b) bunded to contain 110 % of the facilities largest sized tank.
- 70K. The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.

Coffer Dam(s)

- 70L. Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).
- 70M. The coffer dam(s) in ED1 must be designed and constructed:
- (a) by a suitably qualified and experienced person(s);
 - (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and
 - (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.
- 70N. The Applicant must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 70M. The Applicant must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).
- 70O. Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Applicant must confirm in writing and provide a quality assurance report to the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Applicant shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.

- 70P. Prior to the discharge of treated leachate to any coffer dam(s), the Applicant must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.
- 70Q. Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1, unless otherwise agreed to by the Secretary.
- 70R. The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:
- (a) a new coffer dam has been designed and constructed in accordance with condition 70M to 70P and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 70; or
 - (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.
- 70S. No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.
- 70T. Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Applicant shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:
- (a) consult with the EPA, Water NSW and the Secretary;
 - (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September 2017. This must include:
 - (i) actual versus predicted inputs and outputs into and out of each dam;
 - (ii) actual versus predicted mechanical evaporation from each dam;
 - (iii) actual versus predicted rainfall and evaporation; and
 - (iv) the actual versus predicted volume of water or treated leachate stored in each dam.
 - (c) assess actual versus predicted performance of the LTP. This must include:
 - (i) actual versus target effluent quality; and
 - (ii) actual versus target throughput.
 - (d) determine whether the leachate and water management system is achieving its intended objectives; and
 - (e) outline all reasonable and feasible measures that may be required to improve water and leachate management at the site.

ED1

- 70U. The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.

ED3N

- 70V. ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.
- 70W. Prior to discharging treated leachate into sections of ED3N from the LTP, the Applicant must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.
- 70X. Should the integrity assessment identified in Condition 70W find that the liner in ED3N is not adequate for treated leachate storage, the Applicant must submit management options to the Secretary, the EPA and Water NSW which will be adopted to rectify any integrity issues.
- 70Y. The Applicant must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 70X are acceptable.

15. Delete Condition 131(a) and replace with the following:
- (a) location of bore holes around the perimeter of the mine void, ED3 and the coffer dam(s) including the depth at which they are screened to enable access of groundwater;

16. Delete Condition 132 and replace with the following:

Surface Water Monitoring

132. The Applicant shall prepare and implement a surface water-monitoring program to monitor the environmental performance of the construction, operation and rehabilitation of the development on surface water. The surface water-monitoring program must be documented in the LEMP.

Note: The specific requirements of the monitoring program will be stipulated in the EPL.

The program must include details on:

- (a) Monitoring locations including:
- (i) Crisps Creek;
 - (ii) Allianoyonyiga Creek;
 - (iii) coffer dam(s);
 - (iv) ED1;
 - (v) ED3N;
 - (vi) ED3S;
 - (vii) ED3S-S;
 - (viii) ED2;
 - (ix) Downstream receiving waters of ED2;
 - (x) All treated leachate effluent discharge lines;
 - (xi) Discharge line from ED3S to ED2;
 - (xii) rainwater collected in the mine void;
- (b) monitoring methodologies and standards to be employed;
- (c) monitoring frequency based on rainfall events and creek flow assessment;
- (d) an assessment of the contribution of surface water pollution from the Woodlawn Waste Management Facility as distinct from the Woodlawn Mine site;
- (e) the quantity of water relocated from the mine void into ED3;
- (f) the quantity of water relocated from ED3 into the mine void;
- (g) the chemical composition of liquids added to the landfilled waste;
- (h) the chemical composition of treated leachate in the effluent discharge line and the coffer dam;
- (i) the chemical composition of leachate within ED3S-S;
- (j) the quantity of water that reports to ED3, including its sources;
- (k) the quantity of water removed and/or discharged from ED3, including its destination;
- (l) the total quantity of water contained in ED3;
- (m) the quantity of water transferred from ED3S into ED2;
- (n) the quantity of water that reports to ED2 from Woodlawn Waste Management Facility, including its sources;
- (o) the total quantity of water contained in ED2;
- (p) the total quantity of treated leachate contained in the coffer dam(s);
- (q) the total quantity of water contained in ED1;
- (r) the parameters and substances that are proposed to be monitored, including sampling and analysis frequencies;
- (s) reporting and assessment of results; and
- (t) opportunities to integrate the monitoring program with other monitoring programs in the vicinity.

Notes: The EPA will require a broader range of elements and compounds to be monitored for a short period, prior to waste being received at the site. This comprehensive monitoring will then be required to be conducted on an annual basis.

The monitoring of ED3 will initially be at weekly intervals and will be reviewed 12 months after commencement of landfilling operations.

The Monitoring of ED2 will initially be at weekly intervals once the transfer of stormwater from ED3S to ED2 has commenced and will be reviewed 12 months after commencement of MOD 2.

Conditions pertaining to ED2 will be triggered only in the event of transfer of water from ED3S to ED2.

17. Delete conditions 159 and 159A and replace with the following:

159. In relation to matters identified in Condition 158, as part of the LEMP, the Applicant must prepare an Emergency Management Plan. The Plan shall address, but not necessarily be limited to:
- (a) identification of threats to the environment and/or public health that could arise in relation to the construction and operation of Waste Management Facility and Intermodal Facility including the

- transportation of waste. These threats may include fire (waste transportation or within the landfill), overflow, dam failure, power or other utility failure, natural disaster etc;
- (b) identification of strategies to minimise and ameliorate the effects of any groundwater surface water pollution identified from the groundwater and surface water monitoring programs;
 - (c) an estimate of the cost of implementation;
 - (d) actions to effectively respond to the disruption of operations so the risk of pollution is minimised;
 - (e) a communications strategy for alerting relevant agencies and the potentially affected community in the event of the disruption to operations leading to significant pollution;
 - (f) ensuring that all relevant employees are familiar with the emergency management plan; and
 - (g) any chemical storage required to operate the LTP and be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'.

The Applicant should regularly review the adequacy of the plan obtaining expert advice as required.

Note: When developing this emergency plan, opportunities may exist to integrate with the Woodlawn Mine site emergency management plans.

- 159A. Prior to the operation of the LTP, or within such further period as the Secretary may agree, the Applicant shall prepare and submit a revised Emergency Management Plan to the Secretary for approval. The plan shall include the site changes in MOD 2 and MOD 3, in accordance with the requirements of Condition 159.
18. Insert new conditions 159B and 159C immediately after Condition 159A as follows:

Safety Management System

- 159B. A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Chemical Storage

- 159C. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
- (a) the requirements of all relevant Australian Standards; and
 - (b) the NSW EPA's 'Storing and Handling of Liquids: Environmental Protection – Participants Handbook' if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

Modification of Minister's Approval

Section 75W of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning, under the Instrument of Delegation executed on 11 October 2017, I approve the modification of the Project Approval referred to in Schedule 1, subject to the conditions outlined in Schedule 2.



Chris Ritchie
Director
Industry Assessments

Sydney 22 DECEMBER 2017

SCHEDULE 1

Project Approval (MP 10_0012), granted by the Planning Assessment Commission on 16 March 2012 for the Woodlawn Waste Expansion Project at 619 Collector Road, Tarago, in the Goulburn Mulwaree and Palerang local government areas.

SCHEDULE 2

This approval is modified as follows:

1. Insert the following definitions in alphabetical order:

Coffer Dam	means coffer dam(s) in ED1 as referred to in MOD 3
ED1	Evaporation Dam No. 1 as referred to in MOD 3 (the unlined portion of ED1)
EPL	Environment Protection Licence
LTP	Leachate Treatment Plant
ML	Megalitre
MOD 2	Modification Application titled <i>Modification of DA 31-02-99 and MP10_0012 for the construction of a leachate treatment plant and associated infrastructure and changes to regional waste limits and operating hours prepared by SG Haddad Advisory and CW Strategic Planning Services, dated May 2017 and Response to Submissions dated October 2017</i>

2. Delete all references to "Water-NSW" and replace with "Water NSW".
3. Delete the definition of "Water NSW" and insert the following definition in alphabetical order:

Water NSW NSW manager and protector of the Sydney Drinking Water Catchment

In Schedule 3: Administrative Conditions

4. Delete Condition 2 and replace with the following:
 2. The Proponent shall carry out the Project generally in accordance with the:
 - (a) EA;
 - (b) statement of commitments (see Appendix 1);

- (c) site layout plans and drawings in the EA (see Appendix 2);
- (d) Modification Application MP 10_0012 MOD 1;
- (e) Modification Application MP10_0012 MOD 2; and
- (f) conditions of this approval.

5. Delete conditions 17 and 17A and replace with the following:

Soil and Water Management Plan

17. The Proponent shall prepare and implement a Soil & Water Management Plan for the Landfill to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with EPA, Water NSW and DPI Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary;
 - (b) be approved by the Secretary prior to the commencement of expanded operations;
 - (c) must specifically consider soil and water management (including leachate management) at the Landfill and ED3N, ED3S, ED3S-S, ED2, coffer dam(s) and ED1;
 - (d) include a water balance for the project;
 - (e) include a surface water monitoring program;
 - (f) include a groundwater monitoring program; and
 - (g) ensure that suitable measures are implemented to minimise water use, control soil erosion, prevent groundwater contamination, and comply with any surface water discharge limits.

This plan must be documented in the Landfill EMP (see Condition 3 in Schedule 7).

- 17A. The Proponent shall update the Soil and Water Management Plan for the landfill by including the proposed changes to water and leachate management in MOD 1 and MOD 2. The Plan shall be prepared in accordance with the requirements of Condition 17, in consultation with Water NSW and the EPA and to the satisfaction of the Secretary. Prior to the operations of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a Soil and Water Management Plan to the satisfaction of the Secretary.

6. Delete conditions 18 and 18A and replace with the following:

Leachate Management

18. The Proponent shall prepare and implement a Leachate Management Plan for the Landfill to the satisfaction of the Secretary. This plan must:
- (a) be prepared in consultation with EPA, Water NSW and DPI Water by a suitably qualified and experienced expert whose appointment has been endorsed by the Secretary;
 - (b) be approved by Secretary prior to the commencement of expanded operations;
 - (c) describe in the detail the leachate barrier system installed on site;
 - (d) detail measures to collect and store all leachate generated by the landfill;
 - (e) detail measures to prevent leachate from escaping to surface water, groundwater or the surrounding subsoils;
 - (f) ensure all surface water from areas not subject to waste disposal or leachate disposal is directed away from the leachate management system;
 - (g) treat all water that has entered areas filled with waste, or been contaminated by leachate, as leachate;
 - (h) detail the management measures for the LTP, pipeline and coffer dam(s); and
 - (i) detail how the LTP would be managed during an emergency or system failure.

This plan must be documented in the Landfill EMP (see Condition 3 in Schedule 7).

- 18A. The Proponent shall update the Leachate Management Plan for the landfill by including the proposed changes to the leachate management in MOD 1 and MOD 2. The Plan shall be prepared in accordance with the requirements of Condition 18, in consultation with Water NSW and the EPA and to the satisfaction of the Secretary. Prior to the operation of the LTP or as otherwise agreed by the Secretary, the Proponent must submit a revised Leachate Management Plan to the satisfaction of the Secretary.

7. Insert the following new Condition 18AA after Condition 18A as follows:

Coffer Dam(s)

- 18AA. Should any additional coffer dams in ED1 be required, the Applicant must submit revised management plans in accordance with conditions 17 and 18 to the satisfaction of the Secretary prior to any treated

leachate being discharged to the coffer dams. The plans must be prepared in consultation with the EPA and Water NSW and be documented in the Landfill LEMP.

8. Delete Condition 18E and replace with the following:
- 18E. The Long-term Leachate Management Strategy must be operational no later than 30 September 2018 or as otherwise agreed by the Secretary.
9. Insert the following new conditions after Condition 18E:

Leachate Treatment Plant

- 18F. The Proponent must construct the Leachate Treatment Plant (LTP) and associated infrastructure in accordance with the Construction Environment Management Plan prepared by Veolia dated 12 December 2017.
- 18G. All run-off during construction must be contained on the site, no discharges off-site are permitted.
- 18H. The LTP must be:
- (a) capable of processing at least 4 litres per second of leachate; and
 - (b) bunded to contain 110 % of the facilities largest sized tank.
- 18I. The sludge skip bin must be bunded and covered to prevent contaminants entering surface water.

Coffer Dam(s)

- 18J. Treated leachate must not be discharged to any part of ED1, other than within lined coffer dam(s).
- 18K. The coffer dam(s) in ED1 must be designed and constructed:
- (a) by a suitably qualified and experienced person(s);
 - (b) based on a geotechnical investigation and any recommendations prepared by a suitable qualified person(s); and
 - (c) ensuring that all coffer dams are lined with a High Density Polyethylene liner to the satisfaction of the EPA and in consultation with Water NSW.
- 18L. The Proponent must provide works-as-executed drawings signed by a registered surveyor demonstrating that the coffer dam(s) have been constructed in accordance with the design required by Condition 18K. The Proponent must submit the works-as-executed drawings to the EPA, Water NSW and Secretary prior to the discharge of treated leachate into the coffer dam(s).
- 18M. Prior to the discharge of treated leachate into any coffer dam(s) in ED1, the Proponent must confirm in writing and provide a quality assurance report to the EPA, Water NSW and the Secretary that the High Density Polyethylene dam lining has been adequately installed. From the commencement of discharge of treated leachate into the coffer dam(s), the Proponent shall provide quarterly updates to the EPA, Water NSW and the Secretary of the leachate volume in the coffer dam(s) and the remaining leachate storage volume.
- 18N. Prior to the discharge of treated leachate to any coffer dam(s), the Proponent must install a leak detection system which monitors flows along all pipelines which carry leachate. Any leaks must be investigated, contained and rectified.
- 18O. Only treated leachate from the LTP is permitted to be stored within coffer dam(s) in ED1 unless otherwise agreed to by the Secretary.
- 18P. The coffer dam(s) are not permitted to exceed 80 per cent capacity until either:
- (a) a new coffer dam has been designed and constructed in accordance with condition 18K to 18N and is ready to accept treated leachate from the LTP and a revised management plan has been submitted to the satisfaction of the Secretary in accordance with Condition 17 and 18; or
 - (b) sections of ED3N have been emptied of partially treated leachate, had its liner assessed and, if necessary, repaired, and is capable of receiving treated leachate from the LTP.
- 18Q. No interaction between the treated leachate in the coffer dam(s) and the mine stormwater in ED1 is permitted.
- 18R. Within six months of commissioning the LTP and annually thereafter, unless otherwise agreed to by the Secretary, the Proponent shall commission and pay the full cost of an independent assessment of the leachate and water management system. This audit must be conducted by a suitably qualified, experienced and independent expert whose appointment has been endorsed by the Secretary. During the audit, this expert must:
- (a) consult with the EPA, Water NSW and the Secretary;

- (b) assess actual performance against the assumptions and predictions made in the project water balance prepared by WSP dated September 2017. This must include:
 - (i) actual versus predicted inputs and outputs into and out of each dam;
 - (ii) actual versus predicted mechanical evaporation from each dam;
 - (iii) actual versus predicted rainfall and evaporation; and
 - (iv) the actual versus predicted volume of water or treated leachate stored in each dam.
- (c) assess actual versus predicted performance of the LTP. This must include:
 - (i) actual versus target effluent quality; and
 - (ii) actual versus target throughput.
- (d) determine whether the leachate and water management system is achieving its intended objectives; and
- (e) outline all reasonable and feasible measures that may be required to improve water and leachate management at the site.

ED1

18S. The volume of mine water stored in ED1 must be no more than 10 ML by 31 December 2023.

ED3N

- 18T. ED3N must be emptied of effluent from the existing leachate system by 31 December 2022.
- 18U. Prior to discharging treated leachate into sections of ED3N from the LTP, the Proponent must verify the integrity of the dam and prepare an integrity assessment of the ED3N liner to demonstrate the dam is not leaking and is suitable for the storage of treated leachate.
- 18V. Should the integrity assessment identified in Condition 18U find that the liner in ED3N is not adequate for treated leachate storage, the Proponent must submit management options to the Secretary, Water NSW and the EPA which will be adopted to rectify any integrity issues.
- 18W. The Proponent must not store treated leachate from the LTP in ED3N until the Secretary and the EPA are satisfied that either ED3N is not leaking or the management options identified in Condition 18V are acceptable.

10. Delete Condition 20 and replace with the following:

20. The Proponent shall comply with the operating hours in Table 7 for the site, unless otherwise agreed in writing by the EPA.

Table 7: Operating Hours

Activity	Day	Hours
Construction	Monday - Friday	7 am – 6 pm
	Saturday	7 am – 1 pm
	Sunday & Public Holidays	Nil
Operations	Monday - Saturday	6am – 10 pm
	Sunday, Christmas Day and Good Friday	Nil

11. Delete Condition 25 and replace with the following:

FIRE AND EMERGENCY MANAGEMENT

- 25. The Proponent shall prepare and implement a Fire and Emergency Management Plan for the Landfill. This plan must:
 - (a) be prepared by a suitably qualified and experienced expert;
 - (b) be approved by the Secretary prior to the commencement of expanded operations;
 - (c) identify all threats to the environment and public health that could arise from the operation of the project (e.g. fire, overflow or dam failure);
 - (d) identify strategies to contain and minimise the effects of any threats to the environment and public health such as (but not limited to):
 - (i) measures to minimise the risk of fire on site, including in the landfill area;
 - (ii) actions to extinguish any fires on site promptly;
 - (iii) measures to ensure adequate fire-fighting capacity on site, including a fire fighting tanker; and
 - (e) detail a communication strategy for notifying the relevant government agencies and potentially affected community in the event of an emergency; and

- (f) address any chemical storage required to operate the LTP and be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 1, 'Emergency Planning'.

This plan must be documented in the Landfill EMP (see condition 3 in schedule 7). Prior to the operation of the LTP, the Fire and Emergency Management Plan must be revised and approved by the Secretary.

12. Insert new conditions 25A and 25B immediately after Condition 25 as follows:

Safety Management System

- 25A. A comprehensive Safety Management System, covering all on-site operations and associated transport activities involving hazardous materials. Records from the Safety Management System must be kept on-site and must be available for inspection by the Secretary upon request. The Safety Management System shall be consistent with the Department of Planning and Environment's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Chemical Storage

- 25B. The Applicant must store all chemicals, fuels and oils used on-site in accordance with:
- (a) the requirements of all relevant Australian Standards; and
 - (b) the NSW EPA's 'Storing and Handling of Liquids: Environmental Protection – Participants Handbook' if the chemicals are liquids.

In the event of an inconsistency between the requirements listed from (a) to (b) above, the most stringent requirement must prevail to the extent of the inconsistency.

In Schedule 5: Specific Environmental Conditions – Crisps Creek IMF site

13. Delete Condition 17 and replace with the following:
17. The Proponent shall comply with the operating hours in Table 9 for the site, unless otherwise agreed in writing by the EPA.

Table 9: Operating Hours

Activity	Day	Hours
Construction	Monday - Friday	7 am – 6 pm
	Saturday	7 am – 1 pm
	Sunday & Public Holidays	Nil
Operations	Monday - Saturday	6am – 10 pm
	Sunday, Christmas Day and Good Friday	Nil