The recovered soil order March 2022

Important information about this resource recovery order

Please read this order carefully.

You must comply with all the requirements in the most current version of this order. The current version of this order is available on www.epa.nsw.gov.au.

The EPA may vary or revoke this order by publishing a further notice in the Government Gazette.

Bolded terms used in this order are defined in clause 7 (below).

This order is to be read in conjunction with *The recovered soil exemption March 2022*.

What this order does, and does not do

This order sets out the requirements for **suppliers** of **recovered soil** and **blended recovered soil** that is the subject of a **resource recovery exemption** under clause 93 of the *Protection of the Environment Operations (Waste) Regulation 2014* (NSW) ("POEO Waste Regulation").

This order is concerned with those that supply **recovered soil** and **blended recovered soil**, while any corresponding **resource recovery exemption** is concerned with those users of the waste that apply, or intend to apply, the waste to land.

The EPA's intent is that if a **supplier** of **recovered soil** and **blended recovered soil** complies with the requirements in this order and the users of that waste comply with the terms of the corresponding **resource recovery exemption**, that the risk of harm, or potential harm, to human health and the environment, by the use of the waste, will be reduced.

However, the EPA does not guarantee that if a **supplier** complies with the requirements of this order and the users of **recovered soil** and **blended recovered soil** comply with the conditions of the corresponding **resource recovery exemption**, that human health or the environment will not be harmed or exposed to the potential for harm by the use of the waste.

Nor does the EPA guarantee that if a **supplier** complies with the requirements of this order and the users of **recovered soil** and **blended recovered soil** comply with the conditions of the corresponding **resource recovery exemption**, that the waste is suitable, or safe, for its use.

Suppliers and users of **recovered soil** and **blended recovered soil** deal with, and use, the waste at their own risk. Accordingly, you should make your own inquiries as to whether or not the waste is fit for purpose and whether the use will cause harm to human health and/or the environment. You may need to seek expert advice.

Failure to comply with this order

If you fail to comply with the requirements of this order, it may mean that the person you supply the waste to is no longer covered by the corresponding **resource recovery exemption**.

It is also an offence for you:

- not to comply with the requirements of this order under clause 93(7) of the **POEO Waste Regulation** in relation to the supply of **recovered soil** and **blended recovered soil**;
- not to record information if required to do so by this order, keep those records for at least 6 years and make the record available for inspection and copying by an authorised officer on request, under clause 94(1) of the **POEO Waste Regulation**; and
- not to provide information concerning test results relating to the waste, if required to do so by this order or the corresponding **resource recovery exemption**, under clause 95(1) of the **POEO Waste Regulation**.

If found guilty of one of these offences, or another offence under the **POEO Waste Regulation** or the *Protection of the Environment Operations Act 1997* ("POEO Act"), you may be liable to a fine, face imprisonment or be subjected to other penalties or court orders. The same risk applies if you do anything that is not specifically permitted by this order or the corresponding **resource recovery exemption**.

Please read this order and the corresponding **resource recovery exemption** carefully and seek legal advice if you are unsure about any of your obligations.

The recovered soil order March 2022

1. WASTE TO WHICH THIS ORDER APPLIES

1.1 This order applies to **recovered soil** and **blended recovered soil**.

1.2 In this order:

1.2.1 **recovered soil** means excavated soil (including but not limited to natural materials such as sandstone, shale and clay) that:

a. has been mechanically sieved or screened to remove **physical contaminants** and **construction and demolition waste**;
b. contains at least 98% (by weight) natural material after the process in clause 1.2.1(a) has been carried out; and
c. does not include **acid sulfate soils**.

1.2.2 **blended recovered soil** means **recovered soil** that is blended with any of the following in the circumstances set out in clause 5.2 of this order:

a. **virgin excavated natural material**;
b. compost as defined in *The compost order 2016* and *The compost exemption 2016*;
c. pasteurised garden organics as defined in *The pasteurised garden organics order 2016* and *The pasteurised garden organics exemption 2016*;
d. mulch as defined in *The mulch order 2016* and *The mulch exemption 2016*.

2. PERSONS TO WHOM THIS ORDER APPLIES

2.1 This order applies to:

2.1.1 a **generator** of **recovered soil**; and
2.1.2 a **processor** of **blended recovered soil**;

who supplies, or intends to supply, **recovered soil** or **blended recovered soil** to which *The recovered soil exemption March 2022* applies to any person.

2.2 In this order, a **generator** or **processor** is also referred to as a **supplier**.

2.3 This order does not apply to **suppliers** who supply **recovered soil** or **blended recovered soil** that is, or is intended to be, **applied to land** by a person who holds an **environment protection licence** authorising them to carry out any of the following scheduled activities on the **premises**:

2.3.1 energy recovery under clause 18 of Schedule 1 to the **POEO Act**;
2.3.2 resource recovery under clause 34 of Schedule 1 to the **POEO Act**;
2.3.3 waste disposal (application to land) under clause 39 of Schedule 1 to the **POEO Act**;
2.3.4 waste disposal (thermal treatment) under clause 40 of Schedule 1 to the **POEO Act**;
2.3.5 waste processing (non-thermal treatment) under clause 41 of Schedule 1 to the **POEO Act**; or
2.3.6 waste storage under clause 42 of Schedule 1 to the **POEO Act**.

3. REQUIREMENTS FOR ALL SUPPLIERS

Notification of first supply

3.1 A **supplier** must not supply any **recovered soil** or **blended recovered soil** unless, and until, the **supplier** has notified the EPA, by [*insert manner of notification*] in accordance with clause 3.2 below, prior to the supply of the first **batch of waste** of **recovered soil** or **blended recovered soil** respectively by the **supplier** from each **premises** under this order. A **supplier** is not required to notify the EPA of any subsequent supply of the **recovered soil**, or **blended recovered soil**, respectively by the **supplier** from that **premises** under this order. Notifications to the EPA under other orders, including revoked orders, do not constitute notification for the purposes of this clause.

3.2 The notification must include:

3.2.1 the name and address of the **supplier** (and A.C.N. if a corporation);

3.2.2 the name, phone number and email address of a contact person for the **supplier** who can answer questions about the notification;

3.2.3 the licence number of each **environment protection licence** held by the **supplier** for the **premises** (if applicable); and

3.2.4 the type of **resource recovery waste** to be supplied by the **supplier**.

Asbestos

3.3 A **supplier** must not supply **recovered soil** or **blended recovered soil** that contains **asbestos**, regardless of whether:

3.3.1 the test results from any samples collected and tested from any **batch of waste** show no **asbestos** found; or

3.3.2 suspected **asbestos** is observed in any **batch of waste** and is confirmed not to be **asbestos**.

Exceedances

3.4 A **supplier** must not supply **recovered soil** to any person if the concentration of the chemical or value of the attribute in the **recovered soil** is more than the absolute maximum concentration or value listed in Column 3 of Table 2 for the corresponding chemical or attribute, regardless of whether the test results from any samples collected and tested from any **batch of waste** show otherwise.

Notification of failures to comply with this order

3.5 A **supplier** must notify the EPA of any failure to comply with this order by emailing info@epa.nsw.gov.au within 7 days of the failure.

4. ADDITIONAL REQUIREMENTS FOR GENERATORS

Sample collection, testing and validation

4.1 Prior to supplying **recovered soil**, a **generator** must do the following things, in the order set out in this clause. The **generator** must ensure that clauses 4.1.1 and 4.1.3 to 4.1.9 (except for 4.1.5 and 4.1.7(g) and (h)) are done by a **certified environmental practitioner** engaged by the **generator**:

4.1.1 prepare a written **sampling plan**;

4.1.2 separate **recovered soil** into **batches of waste**;

4.1.3 assign a unique batch identifier to each **batch of waste**;

4.1.4 record the quantity of the **batch of waste** against the unique batch identifier;

4.1.5 ensure that the labels or signposts at all storage areas containing **recovered soil** intended to meet the requirements of this order that is awaiting compliance test results must contain the words “awaiting validation”;

4.1.6 undertake an **assessment** of the **recovered soil** to assess the potential presence of **acid sulfate soil** in the **batch of waste**;

4.1.7 collect samples from each **batch of waste** in accordance with the **sampling plan** and collect and test the number of **discrete samples** for **bonded ACM** set out in Column 2 of Table 1 with respect to the quantity of the **batch of waste** listed in Column 1 of Table 1. The samples collected must be representative of the material from the **batch of waste** and each sample must be a minimum of 10 litres. For each sample:

a. record the weight of the sample;

b. take a digital photograph of the sample;

c. create a **material log**;

d. sieve the sample using a 7mm sieve;

e. record the number of potential **bonded ACM** pieces retained on the 7mm sieve and take a digital photograph of the potential **bonded ACM** pieces retained on the 7mm sieve;

f. send all the potential **bonded ACM** pieces retained on the 7mm sieve to an **accredited laboratory** for testing for **asbestos***:*

i. using the sample preparation, technique, test procedure and **limit of reporting** set out in Column 2 of Table 3, and reporting in accordance with Column 3 of Table 3, for attribute 33; and

ii. in accordance with clause 4.3;

g. ensure that the **batch of waste** remains on the **premises** while awaiting the test results for that **batch of waste**; and

h. if the test results from the **accredited laboratory** show, or the **generator** suspects or ought reasonably to suspect, that **asbestos** is present in the **batch of waste**, then the **generator** must not supply the **batch of waste** and the **batch of waste** must not be screened despite clauses 4.7 to 4.9 or segregated despite clauses 4.10 and 4.11. If the **generator** is a **scheduled waste facility**, the **generator** must also:

i. label the **batch of waste** as not compliant and store it separately;

ii. dispose of the non-compliant **batch of waste** by taking it to a **waste facility** that can lawfully accept the waste;

iii. record where and when the non-compliant **batch of waste** was disposed of;

iv. notify the EPA within 7 days of receiving the test results from the **accredited laboratory** by emailing info@epa.nsw.gov.au of the non-compliant **batch of waste**. The notification must include the name of this order, the unique batch identifier and quantity of the non-compliant **batch of waste**, and where and when the waste was disposed;

4.1.8 collect samples from each **batch of waste** in accordance with the **sampling plan** and collect and test the number of **discrete samples** set out in Columns 3 and 4 of

Table 1 with respect to the quantity of the **batch of waste** listed in Column 1 of Table 1. The samples collected must be representative of the material from the **batch of waste**. The locations of the samples collected must be physically identified and marked on the **batch of waste**, and a digital photograph must be taken of the marked sampling locations and the samples collected. A **material log** must be created. If you collect and test more samples than set out in Column 3 and 4 of Table 1, then all test results from all samples collected and tested from the **batch of waste** must be assessed as set out in clause 4.1.10.

TABLE 1 – SAMPLING OF STOCKPILED MATERIAL

Column 1	Column 2	Column 3	Column 4
Quantity (tonnes)	**Number of discrete samples for bonded ACM**	**Number of discrete samples for all chemicals and attributes in rows 1 to 28 in Table 2**	**Number of discrete samples for all chemicals in rows 29 to 32 in Table 2**
<250	8	8	2
250 – 500	9	9	2
500 – 1,000	10	10	3
1,000 – 1,500	12	12	4
1,500 – 2,000	14	14	4

4.1.9 send all the samples collected in clause 4.1.8 to an **accredited laboratory** for testing in accordance with requirements set out in clauses 4.2 and 4.3 below;

4.1.10 the **generator** must ensure that each **batch of waste** remains on the **premises** while it is awaiting the test results for that **batch of waste**; and

a. if the test results from the **accredited laboratory** show:

i. the average concentration of the chemical or value of the attribute (based on arithmetic mean) from all the samples of the **batch of waste** is less than or equal to the maximum average concentration or value listed in Column 2 of Table 2 for the corresponding chemical or attribute, and

ii. the concentration of the chemical or value of the attribute in all samples of the **batch of waste** is less than or equal to the absolute maximum concentration or value listed in Column 3 of Table 2 for the corresponding chemical or attribute,

the **generator** must label the **batch of waste** as validated and store it separately prior to supply, or any blending carried out in accordance with clause 5; but

b. if the test results from the **accredited laboratory** show, or the **generator** suspects or ought reasonably to suspect:

i. the average concentration of the chemical or value of the attribute (based on arithmetic mean) from all the samples of the **batch of waste** is more than the maximum average concentration or value listed in Column 2 of Table 2 for the corresponding chemical or attribute; or

ii. the concentration of the chemical or value of the attribute in any sample of the **batch of waste** is more than the absolute maximum

concentration or value listed in Column 3 of Table 2 for the corresponding chemical or attribute,

then the **generator** must not supply the **batch of waste** despite clause 4.1.10(a), unless the **generator** has carried out screening or segregation in accordance with this order.

c. If clause 4.1.10(b) applies, the **generator** must:

i. label the **batch of waste** as not compliant;

ii. store the non-compliant **batch of waste** separately;

iii. if the **generator** is:

1. a **scheduled waste facility** – either (i) screen the non-compliant **batch of waste** in accordance with clauses 4.7 to 4.9 of this order or (ii) segregate it in accordance with clauses 4.10 to 4.11 or (iii) dispose of it by taking it to a **waste facility** that can lawfully receive that waste. However, if the batch of **waste** contains any **asbestos** then the entire **batch of waste** be lawfully disposed of and none of it can be screened or segregated;

2. not a **scheduled waste facility** – either (i) screen the non-compliant **batch of waste** in accordance with clauses 4.7 to 4.9 of this order or (ii) segregate it in accordance with clauses 4.10 to 4.11, or (iii) ensure it is kept on the p**remises** and not supplied or (iv) dispose of it by taking it to a **waste facility** that can lawfully accept that waste. However, if the **batch of waste** contains any **asbestos** then the entire **batch of waste** must either be kept on the **premises** or lawfully disposed of and none of it can be screened or segregated;

iv. record whether the non-compliant **batch of waste** was screened, segregated, kept on the **premises** or lawfully disposed of (and if so, where and when) against the unique batch identifier;

v. if the **generator** is a **scheduled waste facility**, notify the EPA within 7 days of receiving the test results from the **accredited laboratory** by emailing info@epa.nsw.gov.au of the non-compliant **batch of waste**. The notification must include:

1. the name of this order, being *The recovered soil order March 2022*;

2. the unique batch identifier and the quantity of the non-compliant **batch of waste** and a copy of the laboratory report and test results for that **batch of waste**;

3. the decision to screen, segregate or dispose the non-compliant **batch of waste**; and

4. if disposed, where and when the waste was disposed.

TABLE 2 – CHEMICAL AND ATTRIBUTE REQUIREMENTS

Column 1	Column 2	Column 3
Chemicals & Attributes	**Maximum average concentration or value ("MAC")[1]**	**Absolute maximum concentration or value ("AMC")[2]**
1. Mercury	0.5	1
2. Cadmium	0.5	1
3. Lead	75	150
4. Arsenic	20	40
5. Chromium (total)	75	150
6. Copper	100	250
7. Nickel	40	80
8. Zinc	150	450
9. Electrical Conductivity	2.5 **dS**/m	3.5 **dS**/m
10. pH[3]	5 to 9	4.5 to 10
11. Total Polycyclic Aromatic Hydrocarbons ('PAHs')	20	50
12. Benzo(a)pyrene TEQ[4]	1	3
13. Naphthalene	1	2
14. Benzene	Not applicable	0.5
15. Toluene	Not applicable	65
16. Ethyl-benzene	Not applicable	25
17. Xylenes	Not applicable	15
18. Total Recoverable Hydrocarbons (TRH) F1[6]	Not applicable	30
19. TRH F2[5, 7]	Not applicable	80
20. TRH F3 ($>C_{16}$-C_{34})[5,8]	Not applicable	150
21. TRH F4 ($>C_{34}$-C_{40})[5,9]	Not applicable	450
22. Asbestos fines / fibrous asbestos	Not applicable	No asbestos found
23. Paper and cardboard, asphalt, cloth, paint, rubber	0.05%	0.1%
24. Hard plastic	Not applicable	0.1%
25. Light plastic	Not applicable	0.01%
26. Glass	0.05%	0.1%
27. Metal	0.05%	0.1%
28. Wood	0.05%	0.1%
29. Polychlorinated bi-phenyls ('PCBs')[10]	Not applicable	0.2

Column 1	Column 2	Column 3
Chemicals & Attributes	**Maximum average concentration or value ("MAC")[1]**	**Absolute maximum concentration or value ("AMC")[2]**
30. Individual organochlorine pesticides ('OCPs')[11]	Not applicable	0.1
31. Per- and polyfluoroalkyl substances ('PFAS')[12]	Not applicable	5 µg/kg
32. **Chlorinated hydrocarbons**[13]	Not applicable	0.1

Note:

1. mg/kg 'dry weight' unless otherwise specified
2. mg/kg 'dry weight' unless otherwise specified
3. The ranges given for pH are for the minimum and maximum acceptable pH values in the **recovered soil**.
4. Benzo(a)pyrene TEQ means Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b+j)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Dibenz(a,h)anthracene, and Indeno(1,2,3-c,d)pyrene multiplied by their toxicity equivalence factor (potency relative to B(a)P) in Schedule B1 of *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended April 2013), and summing these concentrations to give B(a)P TEQ.
5. The TRH test may include silica gel clean-up. The absolute maximum concentration and the maximum average concentration may include silica gel clean-up. TRH silica gel clean-up may be undertaken if the initial TRH test (without silica gel clean-up) exceeds the absolute maximum concentration or the maximum average concentration.
6. TRH F1 means C_6-C_{10} fraction minus the sum of BTEX concentrations.
7. TRH F2 means >C_{10}-C_{16} fraction minus the concentration of naphthalene.
8. TRH F3 means >C_{16}-C_{34} fraction.
9. TRH F4 means >C_{34}-C_{40} fraction.
10. PCBs means polychlorinated bi-phenyls and includes the following chemicals: Aroclors 1016, 1221, 1232, 1242, 1248, 1254 and 1260. Each individual chemical must comply with the AMC of 0.1 mg/kg in Table 2.
11. OCPs means organochlorine pesticides and includes the following chemicals: aldrin, chlordane, DDT, DDD, DDE, dieldrin, endosulfan, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorophene, isodrin, methoxychlor, Mirex pentachloronitrobenzene, pentachlorophenol and 2,4,5-T toxaphene. Each individual chemical must comply with the AMC of 0.2 mg/kg in Table 2.
12. PFAS means per- and polyfluoroalkyl substances specifically related to perfluorooctaine sulfonate ('PFOS'), perfluorooctanoic acid ('PFOA'), and perfluorohexane sulfonate ('PFHxS'). The sum of the concentrations of PFOS + PFHxS must comply with the AMC of 5 µg/kg in Table 2. PFOA must comply with the AMC of 5 µg/kg in Table 2.
13. Chlorinated hydrocarbons means the following chemicals: trichloroethylene (TCE), tetrachloroethene (PCE), cis and trans dichloroethane (DCE) and vinyl chloride. Each individual chemical must comply with the AMC of 0.1 mg/kg in Table 2.

Testing

4.2 Samples collected in accordance with clause 4.1.8 above must be tested by an **accredited laboratory** for the chemicals and attributes in Column 1 of Table 2 using the sample preparation, technique, test procedure and **limit of reporting** prescribed in Column 2 of Table 3 and reporting in accordance with Column 3 of Table 3.

4.3 The product and service listed in the **accredited laboratory's** scope of accreditation must be appropriate for testing the samples for the chemical or attributes in Column 1 of Table 3.

Note: The scope of accreditation of an accredited laboratory can be found on the NATA website: www.nata.com.au.

TABLE 3: TESTING REQUIREMENTS

Column 1	**Column 2**	**Colum 3**
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
1. Mercury	**a. Sample preparation:** Sample preparation by digestion using USEPA SW-846 7471B: Mercury in solid or semisolid waste (manual cold vapour technique). **b. Technique:** Cold-vapor atomic absorption spectrophotometer. **c. Test procedure:** USEPA SW-846 Method 7471B Mercury in solid or semisolid waste (manual cold vapour technique),or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** Less than 20% of the stated absolute maximum concentration in Column 3 of Table 2 (i.e. < 0.20 mg/kg dry weight).	Report as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
2. Cadmium 3. Lead 4. Arsenic 5. Chromium (total) 6. Copper 7. Nickel 8. Zinc	**a. Sample preparation:** Sample preparation by digesting using USEPA SW-846, Method 3051A: Microwave assisted acid digestion of sediments, sludges, soils, and oil. **b. Technique:** Inductively coupled plasma - AES. **c. Test procedure:** USEPA SW-846 Method 6010D, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting** Less than 10% of the stated absolute maximum concentration in Column 3 of Table 2 (i.e. <15 mg/kg dry weight for lead).	Report chemicals 1 – 7 as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
9. Electrical conductivity ('EC') 10. pH	**a. Sample preparation:** Mixing 1 part **recovered soil** with 5 parts distilled water. **b. Technique:** Ion selective electrode. **c. Test procedure:** Section 6.2 (pH) and Section 6.3 (Electrical Conductivity) in Schedule B3: Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.001 **dS**/cm for EC 0.1 pH unit for pH	Report pH as pH units. Report EC as **dS**/cm. Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
11. Total Polycyclic Aromatic Hydrocarbons (PAHs)	**a. Sample preparation:** Solvent extraction or supercritical fluid extraction 3540 or 3550 of USEPA SW-846. **b. Technique:** Gas chromatography - MS.	Report total PAHs as mg/kg dry weight whereby the concentrations of the following individual PAHs are summed:

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
	c. Test procedure: USEPA SW-846 Method 8100 Polynuclear Aromatic Hydrocarbons, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.1 mg/kg for each of the following individual PAHs: Naphthalene, anthracene, bezo(k)fluoranthene, acenaphthylene, fluoranthene, be,zo(a)pyrene, acenaphthene, pyrene, dibenz(a,h)anthracene, fluorene, benzo(a)anthracene, benzo(g,h,i)perylene, phenanthrene, chrysene, indeno(1,2,3-cd)pyrene, benzo(b)fluoranthene.	Naphthalene, anthracene, benzo(k)fluoranthene, acenaphthylene, fluoranthene, benzo(a)pyrene, acenaphthene, pyrene, dibenz(a,h)anthracene, fluorene, benzo(a)anthracene, benzo(g,h,i)perylene, phenanthrene, chrysene, indeno(1,2,3-c,d)pyrene, benzo(b)fluoranthene. If an individual chemical reports less than the **limit of reporting**, the entire **limit of reporting** must be used in calculating total PAHs. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
12. Benzo(a)pyrene TEQ 13. Naphthalene	**a. Sample preparation:** Method 3540 or Method 3550 of USEPA SW-846. **b. Technique:** Gas chromatography - MS. **c. Test procedure:** USEPA SW-846 Method 8100 Polynuclear Aromatic Hydrocarbons, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting** 0.3 mg/kg for benzo(a)pyrene TEQ 0.1 mg/kg for naphthalene	Report benzo(a)pyrene and naphthalene as mg/kg dry weight. Report benzo(a)pyrene TEQ as mg/kg, whereby Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b+j)fluoranthene, Benzo(k)fluoranthene, Benzo(g,h,i)perylene, Chrysene, Dibenz(a,h)anthracene, and Indeno(1,2,3-c,d)pyrene are multiplied by their toxicity equivalence factor (potency relative to B(a)P) in Schedule B1 of NEPM 1999 (April 2013), and summing these concentrations to give benzo(a)pyrene TEQ. If an individual chemical reports less than the **limit of reporting**, the entire **limit of reporting** must be used in the calculation of benzo(a)pyrene TEQ. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
14. Benzene	**a. Sample preparation:** Method 5035 or Method 5030B of USEPA SW-846.	Report individual benzene, toluene, ethyl-benzene, and

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
15. Toluene 16. Ethyl-benzene 17. Xylenes	**b. Technique:** Gas chromatography - MS. **c. Test procedure:** USEPA SW-846 Method 8260B Volatile organic compounds by gas chromatography/mass spectrometry (GC/MS), or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** Benzene: 0.1 mg/kg Toluene: 0.1 mg/kg Ethyl-benzene: 0.1 mg/kg Xylenes: 0.3 mg/kg	xylenes compounds as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
18. TRH F1	**a. Sample preparation:** Method 5035 of US EPA SW-846. **b. Technique:** Gas chromatography – MS/FID. **c. Test procedure:** Method A1 in Section 13.2 in Schedule B3: Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 25 mg/kg for C_6-C_{10}	Report F1 as mg/kg dry weight. To obtain F1, C_6-C_{10} fraction minus the sum of BTEX concentrations. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
19. TRH F2 20. TRHs F3 (>C_{16}-C_{34}) 21. TRHs F4 (>C_{34}-C_{40})	**a. Sample preparation:** Method 3540C and Method 3550C and Method 3545A of US EPA SW-846. **b. Technique:** Gas chromatography – MS/FID. **c. Test procedure:** Method A2 in Section 13.3 in Schedule B3: Guideline on Laboratory Analysis of Potentially Contaminated Soils, National Environment Protection (Assessment of Site Contamination) Measure 1999 (April 2013), or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 25 mg/kg for >C_{10}-C_{16} 100 mg/kg for F3 120 mg/kg for F4	Report F2, F3, and F4 as mg/kg dry weight. To obtain F2, >C_{10}-C_{16} fraction minus the concentration of naphthalene. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
22. Asbestos fines / fibrous asbestos	**a. Sample preparation:** As per *AS 4964-2004, Method for the qualitative identification of asbestos in bulk samples*. **b. Technique:** Polarised light microscopy technique	Report: a. Description and weight of samples received by the laboratory.

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
	c. Testing procedure: • Analysis must include qualitative and quantitative analysis of **asbestos** using Australian Standard *AS4964-2004, Method for the qualitative identification of asbestos in bulk samples* that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. • The weight of the sample must be recorded prior to analysis. • A minimum of 1 kilogram of **recovered soil** must be analysed. • Analysis must comply with the Australian Standard AS4964-2004, Method for the qualitative identification of **asbestos** in bulk samples, Standards Australia, with the exception of sieve size, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. • Analysis must gravimetrically determine the mass of **bonded ACM** retained on a 7mm sieve and assumes 15% of ACM as **asbestos**. • Analysis must gravimetrically determine the mass of asbestos fines ('AF') and fibrous asbestos ('FA') retained on and passing a 2mm sieve post 7mm sieving. Assumes AF and FA are 100% **asbestos** containing. **Asbestos** retained must be calculated as a percentage of the total sample weight. • Qualitative analysis must be undertaken by using phase-contrast microscopy (PCM) or polarised - light microscopy (PLM) as **asbestos** identification. **d. Limit of reporting:** 0.1 g/kg	b. Description of the **asbestos** type, fibre, weight and dimensions, if **asbestos** is evident. c. The statement 'No asbestos present', if no **asbestos** (including trace asbestos) has been detected. d. Where an **accredited laboratory** has observed or measured **asbestos** below the **limit of reporting**, the laboratory must still report that **asbestos** was observed.
23. Rubber, paper and cardboard, asphalt, cloth, paint	**a. Sample preparation:** As per NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete. **b. Technique:** Sieving and visual inspection using a 2.36 mm sieve. **c. Test procedure:** NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.05% w/w for rubber, paper and cardboard, asphalt, cloth, paint.	Report as percent weight by weight. Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
24. Hard plastic 25. Light plastic	**a. Sample preparation:**	Report as percent weight by weight.

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
	As per NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete. **b. Technique:** Sieving and visual inspection using a 2.36 mm sieve. **c. Test procedure:** NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.01% w/w.	Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
26. Glass	**a. Sample preparation:** As per NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete. **b. Technique:** Sieving and visual inspection using a 2.36 mm sieve. **c. Test procedure:** NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.05% w/w.	Report as percent weight by weight. Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
27. Metal	**a. Sample preparation:** As per NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete. **b. Technique:** Sieving and visual inspection using a 2.36 mm sieve. **c. Test procedure:** NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.05% w/w.	Report as percent weight by weight. Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
28. Wood	**a. Sample preparation:** As per NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed Concrete. **b. Technique:** Sieving and visual inspection using a 2.36 mm sieve. **c. Test procedure:** NSW Roads & Traffic Authority Test Method T276 Foreign Materials Content of Recycled Crushed	Report as percent weight by weight. Where a result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
	Concrete, or any other test procedure, that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.05% w/w.	
29. **PCBs**	**a. Sample preparation:** Method 3540C, or 3550C of US EPA SW-846. **b. Technique:** Gas chromatography – ECD/ MS. **c. Test procedure:** Any of the following methods that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**: • 8081B of US EPA SW-846 • 8082A of US EPA SW-846 • 8270D of US EPA SW-846. **d. Limit of reporting:** 0.2 mg/kg for individual chemicals Aroclors 1016, 1221, 1232, 1242, 1248, 1254 and 1260.	Report Aroclors 1016, 1221, 1232, 1242, 1248, 1254 and 1260 as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
30. **OCPs**	**a. Sample preparation:** Method 3540C, or 3550C of US EPA SW-846. **b. Technique:** Gas chromatography – ECD/ MS. **c. Test procedure:** Any of the following methods that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**: • 8081B of US EPA SW-846 • 8082A of US EPA SW-846 • 8270D of US EPA SW-846. **d. Limit of reporting:** 0.1 mg/kg for individual chemicals aldrin, chlordane, DDT, DDD, DDE, dieldrin, endosulfan, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorophene, isodrin, methoxychlor, Mirex pentachloronitrobenzene, pentachlorophenol and 2,4,5-T toxaphene.	Report aldrin, chlordane, DDT, DDD, DDE, dieldrin, endosulfan, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorophene, isodrin, methoxychlor, Mirex pentachloronitrobenzene, pentachlorophenol and 2,4,5-T toxaphene as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
31. **PFAS**	**a. Sample preparation:** US EPA Draft Method 1633, ASTM method D7968 or an equivalent ISO/IEC 17025 accredited method **b. Technique:** Liquid chromatography – MS/MS **c. Test procedure:** Any of the following methods that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**: • US EPA Draft Method 1633	Report the sum of the concentrations of PFOS + PFHxS as µg/kg dry weight. Report PFOA as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.

Column 1	Column 2	Colum 3
Chemicals & Attributes	**Sample preparation, technique, test procedure and limit of reporting**	**Reporting**
	• ASTM method D7968, or • an equivalent method **d. Limit of reporting:** 5 µg/kg for PFOS + PFHxS. 5 µg/kg for PFOA.	
32. **Chlorinated hydrocarbons**	**a. Sample preparation:** Method 5035 or 5030B of US EPA SW-846. **b. Technique:** Gas chromatography – ELCD/ MS. **c. Test procedure:** 8260B of US EPA SW-846 that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in **recovered soil**. **d. Limit of reporting:** 0.1 mg/kg for individual chemicals TCE, PCE, cis and trans DCE, and vinyl chloride.	Report TCE, PCE, cis and trans DCE, and vinyl chloride as mg/kg dry weight. Where a chemical result has a decimal place, it must not be rounded down or up to avoid exceeding, or not meeting, a relevant limit or requirement.
33. Asbestos – **bonded ACM**	**Sample preparation:** As per *AS 4964-2004, Method for the qualitative identification of asbestos in bulk samples*. **b. Technique:** Polarised light microscopy technique **c. Testing procedure:** Analysis must include qualitative and quantitative analysis of **asbestos** using Australian Standard *AS4964-2004, Method for the qualitative identification of asbestos in bulk samples* that **NATA** has accredited that laboratory under *ISO/IEC17025 – Testing and calibration* to use to test for that chemical or attribute in the **recovered soil**. **d. Reporting**: 0.1 g/kg	Report: a. Description and weight of samples received by the laboratory. b. Description of the **asbestos** type, fibre, weight and dimensions, if **asbestos** is evident. c. The statement 'No asbestos present', if no **asbestos** (including trace asbestos) has been detected. d. Where an **accredited laboratory** has observed or measured **asbestos** below the **limit of reporting**, the laboratory must still report that **asbestos** was observed.

Retesting of samples

4.4 A **generator** (including any **certified environmental practitioner** engaged by the **generator**) must not retest, or request or require the retesting of, any sample of **recovered soil**.

4.5 Retesting of a sample is only permitted when an **accredited laboratory** issues a laboratory report which demonstrates an error occurred during the analysis of the sample and states the test result(s) cannot be relied upon and the **accredited laboratory** determines to retest that sample. The laboratory report must also state the nature of the error and the reasons why the test results cannot be relied upon. For the purposes of this clause, **sample heterogeneity** does not constitute an error.

4.6 A **generator** must provide the EPA, on request, with a copy of the laboratory report referred to in clause 4.5.

Screening

4.7 A **generator** may only screen a **batch of waste** to remove **physical contaminants**. A **generator** cannot screen a **batch of waste** for the purposes of clause 4.1.10(c) if clause 4.1.10(b) applies to any other chemical or value. If a **generator** screens a **batch of waste**, the **generator** must assign the screened **batch of waste** a new unique batch identifier that links to the previous batch identifier in the **generator**'s recording system (for traceability purposes).

4.8 A **generator** must then repeat the requirements of this order for the screened **batch of waste**, as set out in clauses 4.1.4 and 4.1.8 to 4.3 above. For any testing and sampling requirements in clauses 4.1.8 to 4.3, the **generator** is only required to collect and test samples in respect of **physical contaminants** only. For the purposes of Table 1, this means only Columns 1 and 3 will be relevant.

4.9 A **generator** must not screen or otherwise process a **batch of waste** that contains, or that the **generator** suspects or ought reasonably to suspect contains, **asbestos**.

Segregation of **stockpiled material**

4.10 A **generator** must only segregate non-compliant material from a **batch of waste** under this order if each of the following is satisfied:

4.10.1 The test results from the **accredited laboratory** shows:

a. clause 4.1.10(a)(i)-(ii) applies to the **batch of waste**, with the exception of only one sample collected under clause 4.1.8 that does not comply with the absolute maximum concentration or value listed in Column 3 of Table 2 for one or more chemicals or attributes (excluding **asbestos**); and

b. no sample collected from the **batch of waste** under clause 4.1.8 is more than two times the absolute maximum concentration or value listed in Column 3 of Table 2 for a chemical or attribute;

4.10.2 The **generator** stores the non-compliant **batch of waste** separately;

4.10.3 The **generator** must do each of the following things, in the order set out in this clause. The **generator** must ensure that paragraph (a), (b), (c) and (e) is done by a **certified environmental practitioner** engaged by the **generator**.

a. assign a unique batch identifier to the non-compliant **batch of waste** that is linked to the previous unique batch identifier in the **generator's** recording system (for traceability purposes);

b. undertake sampling of the non-compliant **batch of waste** in accordance with clause 4.1.8 but at different locations to where sampling was previously undertaken under that clause;

c. send all samples collected under clause 4.10.3(b) to an **accredited laboratory** for testing in accordance with clauses 4.2 and 4.3, but only for the chemical(s) or attribute(s) that the non-compliant sample in clause 4.10.1 did not comply with in relation to the absolute maximum concentration or value listed in Column 3 of Table 2 for that chemical or attribute;

d. ensure that the **batch of waste** remains on the **premises** while the **generator** is awaiting the test results for that **batch of waste**; and

e. assess the test results from all samples collected and tested under clause 4.10.3 as set out in clause 4.1.10 and confirm in writing that clause 4.1.10(a) applies to the test results.

f. If clause 4.1.10(b) applies to the test result for samples collected and tested under clause 4.10.3(c) at any time – comply with clause 4.1.10(c) in respect of the **batch of waste** but must not segregate non-compliant material from the **batch of waste** at any time.

TABLE 4 – SEGREGATION OF STOCKPILED MATERIAL

Column 1	Column 2
Quantity (tonnes)	**Minimum segregation quantity (tonnes)**
<250	15
250 – 500	20
500 – 1,000	35
1,000 – 1,500	50
1,500 – 2,000	60

4.11 If all of clause 4.10 is met, a **generator** may segregate non-compliant material from the **batch of waste** and supply the remaining **batch of waste** in accordance with this clause. The **generator** must:

4.11.1 segregate the location of the non-compliant sample referred to in clause 4.10.1 from the **batch of waste** by excavating in all directions from that location as equally as reasonably practicable until the segregated quantity in Column 2 of Table 4 with respect to the quantity of the **batch of waste** listed in Column 1 of Table 4 is reached; and

4.11.2 label the segregated quantity of material as non-compliant segregated material and store it separately from the **batch of waste**; and

4.11.3 if the **generator** is:

a. a **scheduled waste facility** – either (i) screen the non-compliant segregated material in accordance with clauses 4.7 and 4.8 but only if the non-compliance is in respect of **physical contaminants** only or (ii) dispose of it by taking it to a **waste facility** that can lawfully accept that material. The **generator** must record whether the non-compliant segregated material was screened or disposed of (and if so, where and when);

b. not a **scheduled waste facility** – either (i) screen the non-compliant segregated material in accordance with clauses 4.7 and 4.8 but only if the non-compliance is in respect of **physical contaminants** only or (ii) ensure that it is kept on the **premises** and not supplied or (iii) dispose of it by taking it to a **waste facility** that can lawfully accept that material. The **generator** must record whether the non-compliant segregated material was screened, kept on the **premises** or disposed of (and if so, where and when); and

4.11.4 engage a **certified environmental practitioner** to:

a. confirm that the **generator** has complied with clauses 4.11.1 and 4.11.2 by:

i. taking a digital photograph of the **batch of waste** before segregation commences under clause 4.11.1 that includes the location of the non-compliant sample referred to in clause 4.10.1;

ii. taking digital photographs of the **batch of waste** during segregation to demonstrate that it has been segregated in accordance with clause 4.11.1;

iii. taking a digital photograph of the **batch of waste** after segregation is carried out under clause 4.11.1 that includes the former location of the non-compliant sample referred to in clause 4.10.1;

iv. taking a digital photograph of the segregated quantity of material stored separately under clause 4.11.2;

v. providing the **generator** with a statement that the segregated quantity listed in Column 2 of Table 4 with respect to the quantity of the **batch of waste** listed in Column 1 of Table 4 has been complied with in respect of that **batch of waste**; and

vi. providing the **generator** with a copy of the photographs referred to in clause 4.11.4 (a).

b. collect 3 samples representatively from the remaining **batch of waste** within the area from which material was segregated under clause 4.11.1 and test each sample in accordance with clauses 4.2 and 4.3 for each chemical or attribute in Column 3 of Table 2 that the non-compliant sample in clause 4.10.1 did not comply with in relation to the absolute maximum concentration or value listed in Column 3 of Table 2 for that chemical or attribute. A digital photograph must be taken showing the sampling locations; and

c. assess the test results from all samples collected and tested under clause 4.11.4(b) as set out in clause 4.1.10 and confirm in writing that clause 4.1.10(a) applies to those test results;

4.11.5 ensure that the remaining **batch of waste** remains on the **premises** while it is awaiting the test results for that **batch of waste**;

4.11.6 not **supply** the remaining **batch of waste** to any person under this order unless:

a. clauses 4.11.1 to 4.11.5 are complied with;

b. a **certified environmental practitioner** provides confirmation in accordance with clause 4.11.4(a) and (c); and

c. the labelling and storage requirements within clause 4.1.10(a) have been complied with for the remaining **batch of waste** following the confirmation from the **certified environmental practitioner**; and

4.11.7 if clause 4.1.10(b) applies to the test results for the samples collected and tested under clause 4.11.4(b) – comply with clause 4.1.10(c) in respect of the remaining **batch of waste** but must not segregate non-compliant material from the remaining **batch of waste** again.

Information to be supplied

4.12 On or before each **transaction**, a **generator** must provide the following to each person to whom the **generator** supplies **recovered soil** from a **batch of waste**:

4.12.1 a written **statement of compliance** that contains the unique batch identifier for that **batch of waste**;

4.12.2 a copy of the *The recovered soil exemption March 2022* as in force at the time of supply or a link to the EPA website where that exemption can be found;

4.12.3 a copy of this order or a link to the EPA website where that order can be found; and

4.12.4 a copy of all **sampling plans** that apply to the **batch of waste**;

4.12.5 a copy of all tests results from the sampling of that **batch of waste**;

4.12.6 a copy of all laboratory reports including laboratory quality assurance and quality control performance records, laboratory chain of custody documentation, and laboratory sample receipts in relation to that **batch of waste.**

4.12.7 a written instruction that the documents in clauses 4.12.1 to 4.12.6 must be provided by that person to each person to whom the **recovered soil** is supplied to on or before that supply.

4.13 A **generator** must provide any person, on request, with all tests results from the sampling of the **batch of waste** of **recovered soil** intended to be supplied to the person.

4.14 A **generator** must provide the EPA, on request, with details of any test results from the sampling of a **batch of waste** of **recovered soil**.

Information to be recorded and kept

4.15 At the time of supplying **recovered soil** from a **batch of waste**, a **generator** must record:

4.15.1 the date the **recovered soil** was supplied;

4.15.2 the name of each person (and A.C.N. if a corporation) the **recovered soil** was supplied to;

4.15.3 the address of each **premises** the **recovered soil** was supplied to;

4.15.4 the quantity of **recovered soil** (expressed in tonnes) supplied to each person at each **premises**;

4.15.5 the batch identifier(s) for that **batch of waste**;

4.15.6 the sample identifiers for that **batch of waste**;

4.15.7 the name and contact details of each person that transported the **recovered soil**, including the registration of the vehicle it was transported in; and

4.15.8 any instructions provided as required by clause 4.12.7

4.16 A **generator** must keep a written record of the following documents for at least six years:

4.16.1 all notifications required to be made by the **generator** to the EPA under clauses 3.1, 3.5, 4.1.7(h)(iv) and 4.1.10(c)(v) of this order and the EPA's confirmation of receipt of those notifications;

4.16.2 the documents required by clauses 4.1.4, 4.1.6, 4.1.7, 4.1.8, 4.1.10(c)(iv), and 4.15 of this order,

4.16.3 all **sampling plans**;

4.16.4 all tests results from the sampling of each **batch of waste**;

4.16.5 all laboratory reports including laboratory quality assurance and quality control performance records, laboratory chain of custody documentation, and laboratory sample receipts in relation to each **batch of waste**;

4.16.6 all photographs, statements, written confirmation and other documents required by clauses 4.10.3(b) and (e), 4.11.3, 4.11.4(a) to (c).

4.17 A **generator** must also make and keep a written record of the following information, for a period of six years:

4.17.1 all batch identifiers for each **batch of waste**;

4.17.2 all sample identifiers for each **batch of waste**;

5. ADDITIONAL REQUIREMENTS FOR PROCESSORS

Blending

5.1 A **processor** must not blend **recovered soil** other than in the circumstances set out in this clause 5.

5.2 A **processor** may blend **recovered soil** with any of the following:

5.2.1 **virgin excavated natural material**,

5.2.2 compost as defined in *The compost order 2016* and *The compost exemption 2016*,

5.2.3 pasteurised garden organics as defined in *The pasteurised garden organics order 2016* and *The pasteurised garden organics exemption 2016*;

5.2.4 mulch as defined in *The mulch order 2016* and *The mulch exemption 2016*,

to make **blended recovered soil** only if:

5.2.5 the **recovered soil** complies with the requirements of this order;

5.2.6 each **supplier** has complied with the requirements of this order, and each respective **resource recovery order**, except for a requirement to supply, record or keep information other than a requirement to keep test results; and

5.2.7 the **processor** has obtained a waste classification report from the **supplier** of the **virgin excavated natural material** that states the material supplied meets the definition of **virgin excavated natural material** in the **POEO Act** (if **virgin excavated natural material** is to be blended); and

5.2.8 the **processor** has obtained a **statement of compliance** from the **supplier** of the **recovered soil** (if the **generator** is different to the **processor**), compost,

pasteurised garden organics or mulch that it is to be blended with that includes, if required, the unique batch identifier for the **batch of waste**, that is compliant with their own respective **resource recovery orders**.

5.3 Prior to supplying any **batch of waste** that is **blended recovered soil**, a **processor** must assign it a unique batch identifier and link that unique batch identifier in the **processor**'s recording system with each unique batch identifier provided in each **statement of compliance** obtained under clause 5.2.8.

5.4 A **processor** must not supply any **blended recovered soil** if any concentration of any chemical or value of any attribute in the **blended recovered soil** is more than the absolute maximum concentration or value that is the highest in the **resource recovery orders** referred to in clause 5.2 regardless of whether the test results from any samples collected and tested show otherwise.

Screening a batch of waste

5.5 A **processor** may only screen a **batch of waste** to remove **physical contaminants**. If a **processor** screens a **batch of waste**, the **processor** must assign the screened **batch of waste** with a new unique batch identifier that links back to the previous batch identifier in the **processor**'s recording system (for traceability purposes).

5.6 The **processor** must not screen or otherwise process a **batch of waste** that contains, or that the **processor** suspects or ought reasonably to suspect contains, **asbestos**.

Information to be supplied

5.7 On or before each **transaction**, a **processor** must provide the following to each person to whom the **processor** supplies the **blended recovered soil** from a **batch of waste**:

5.7.1 a written **statement of compliance** that includes the unique batch identifier for that **batch of waste**;

5.7.2 a copy of the relevant **resource recovery exemptions** referred to in clause 5.2**,** or a link to the EPA website where those exemptions can be found, and

5.7.3 a copy of this order and the relevant **resource recovery orders** referred to in clause 5.2, or a link to the EPA website where these orders can be found.

5.7.4 a copy of the corresponding **virgin excavated natural material** waste classification report referred to in clause 5.2.7.

5.7.5 a written instruction that the documents in clauses 5.7.1 to 5.7.4 must be provided by that person to each person to whom the **recovered soil** is supplied to on or before that supply.

5.8 A **processor** must provide any person, on request, with any test results from any **supplier** relating to the **blended recovered soil** that is supplied, or intended to be supplied, to the person.

Information to be recorded and kept

5.9 At the time of supplying **blended recovered soil** from a **batch of waste**, a **processor** must record:

5.9.1 the date the **blended recovered soil** was supplied;

5.9.2 the name of each person (and A.C.N. if a corporation) the **blended recovered soil** was supplied to;

5.9.3 the address of each **premises** the **blended recovered soil** was supplied to;

5.9.4 the amount of **blended recovered soil** supplied to each person;

5.9.5 the batch identifier(s) for the **blended recovered soil**;

5.9.6 the name and contact details of each person that transported the **blended recovered soil**, including the registration of the vehicle it was transported in;

5.9.7 any instructions provided as required by clause 5.7.5.

5.10 A **processor** must keep a written record of the following documents for at least six years:

5.10.1 all notifications required to be made by the **processor** to the EPA under clauses 3.1 and 3.5 of this order and the EPA's confirmation of receipt of those notifications; and

5.10.2 each document required by clauses 5.2.7, 5.2.8, 5.7.1 and 5.9 of this order

5.10.3 all tests results obtained in relation to:

a) **recovered soil**;

b) **blended recovered soil**; and

c) each waste referred to in clause 5.2 that forms part of that waste.

5.11 A **processor** must also make and keep a written record of the following information, for at least six years:

5.11.1 all batch identifiers for each **batch of waste**.

6. DURATION

6.1 This order commences on [date]. The EPA may vary or revoke this order by notice published in the Gazette.

7. DEFINITIONS AND INTERPRETATION

7.1 In this order:

accredited laboratory means an analytical laboratory that holds a current accreditation issued by National Association of Testing Authorities under *ISO/IEC17025 – Testing and calibration laboratories* to test samples for the chemicals and attributes using the techniques set out in Table 2.

acid sulfate soil includes potential **acid sulfate soil** and means naturally occurring sediments and soils which contain sulfides such as iron sulfide and iron disulfide or their precursors, as evidenced by:

(a) If sampling and testing is undertaken for **acid sulfate soil** using a **NATA** accredited chromium reducible sulfur test method – a net acidity greater than 18 mol H^+/tonne; or
(b) If sampling and testing is not undertaken for **acid sulfate soil** – a low or high probability of presence of acid sulfate soil at the **premises** based on the applicable Acid Sulfate Soil Risk Maps (published by the former Department of Land and Water Conservation and available

at: https://www.environment.nsw.gov.au/topics/land-and-soil/soil-degradation/acid-sulfate-soils).

applied to land means:

(a) by spraying, spreading or depositing it on the land; or
(b) by ploughing, injecting or mixing it into the land or
(c) by filling, raising, reclaiming or contouring the land.

asbestos has the same meaning as in Schedule 1 to the **POEO Act**.

assessment means a **certified environmental practitioner** has either:

(a) sampled and tested for **acid sulfate soil** in accordance with the *National Acid Sulfate Soils Guidance, National acid sulfate soils sampling and identification methods manual,* Australian Government Department of Agriculture and Water Resources, June 2018, and the *National Acid Sulfate Soils Guidance, National acid sulfate soils identification and laboratory methods manual,* Australian Government Department of Agriculture and Water Resources, June 2018; or

(b) undertaken a review of the applicable Acid Sulfate Soil Risk Maps (published by the former Department of Land and Water Conservation and available at: https://www.environment.nsw.gov.au/topics/land-and-soil/soil-degradation/acid-sulfate-soils)

batch of waste means a segregated stockpile of 2,000 tonnes or less of **recovered soil** or **blended recovered soil.**

blended recovered soil means the waste described in clause 1.2.2 of this order.

bonded ACM means materials (such as cement or resin) that contain **asbestos** and cannot pass a 7mm x 7mm sieve.

certified environmental practitioner means a person that meets all of the following criteria:

(a) must be an independent professional environmental practitioner with appropriate qualifications, training and proven experience in soil sampling and waste classification in NSW

(b) must have comprehensive knowledge of sampling principles for soil and waste-derived materials

(c) must not be the **supplier** or the user of the waste or an employee of that person; and

(d) must hold current certification from either of the following schemes:

i. Environmental Institute of Australia and New Zealand – Certified Environmental Practitioner (Site Contamination) (CENVP (SC)); or
ii. Soil Science Australia – Certified Professional Soil Scientist Contaminated Site Assessment and Management (CPSS CSAM).

chlorinated hydrocarbons means the following chemicals: trichloroethylene (TCE), tetrachloroethene (PCE), cis and trans dichloroethane (DCE) and vinyl chloride. Each individual chemical must comply with the AMC of 0.1 mg/kg in Table 2.

construction and demolition waste means waste that is generated from construction and demolition works.

discrete sample means a sample collected from a single point for analysis.

dS means decisiemens

environment protection licence has the same meaning as in the **POEO Act**.

generator means a person who generates or recovers **recovered soil** and then supplies, or intends to supply, it. It also includes a person that screens **recovered soil** as set out in clause 4 of this order

or mechanically sieves or screens to remove **physical contaminants** and **building and demolition waste** from the excavated soil as set out in clause 1.2.1 of this order.

recovered soil means the waste described in clause 1.2.1 of this order.

limit of reporting means the lowest concentration of an analyte that can be determined with acceptable precision (repeatability) and accuracy under the stated conditions of a test.

material log means a document that includes the following information:

(a) project name;
(b) address of the **premises**;
(c) sampling method;
(d) sampling date;
(e) name of person creating the **material log** and the name of the entity that they represent;
(f) description of the material encountered with respect to each sample in accordance with Australian Standard AS 1726-1993 *Geotechnical site investigations*;
(g) any other relevant observations in relation to the sample.

NATA means the National Association of Testing Authorities, Australia.

NEPM 1999 means *National Environment Protection (Assessment of Site Contamination) Measure 1999* (Amended April 2013).

OCPs means organochlorine pesticides and includes the following chemicals: aldrin, chlordane, DDT, DDD, DDE, dieldrin, endosulfan, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, hexachlorobenzene, hexachlorophene, isodrin, methoxychlor, Mirex pentachloronitrobenzene, pentachlorophenol and 2,4,5-T toxaphene. Each individual chemical must comply with the AMC of 0.2 mg/kg in Table 2.

PCBs means polychlorinated bi-phenyls and includes the following chemicals: Aroclors 1016, 1221, 1232, 1242, 1248, 1254 and 1260. Each individual chemical must comply with the AMC of 0.1 mg/kg in Table 2.

PFAS means per- and polyfluoroalkyl substances specifically related to perfluorooctaine sulfonate ('PFOS'), perfluorooctanoic acid ('PFOA'), and perfluorohexane sulfonate ('PFHxS'). The sum of the concentrations of PFOS + PFHxS must comply with the AMC of 5 µg/kg in Table 2. PFOA must comply with the AMC of 5 µg/kg in Table 2.

physical contaminants means an attribute listed in Column 1, Row 23 to 28 of Table 2.

POEO Act means the *Protection of the Environment Operations Act 1997.*

POEO Waste Regulation means the *Protection of the Environment Operations (Waste) Regulation 2014.*

premises has the same meaning as in the **POEO Act**.

processor means a person who processes, including by screening, **blended recovered soil**. It also includes a person who processes substances into **blended recovered soil** by blending, mixing or otherwise incorporating **recovered soil** with other substances to make **blended recovered soil**.

resource recovery exemption means an exemption granted by the EPA under clause 91 of the **POEO Waste Regulation**, that is authorised to be granted by clause 92 of that Regulation.

resource recovery order means an order made by the EPA under clause 93 of the **POEO Waste Regulation**, imposing requirements on persons in relation to the supply of waste to which a **resource recovery exemption** applies.

resource recovery waste has the same meaning as in clause 93(1) of the **POEO Waste Regulation**.

sample heterogeneity means chemical or attribute variation within the sample.

sampling plan means a written procedure applicable to a **premises** that is consistently followed when sampling each **batch of waste**. The **sampling plan** must:

(a) identify the position(s) responsible for implementing and overseeing sampling;

(b) require the sampling and testing requirements in this order to be undertaken without contradiction;

(c) list the chemicals and attributes to be tested, the corresponding laboratory testing methods to be employed, the appropriate sample containers and the holding times for those chemicals and attributes;

(d) identify the sampling equipment required including decontamination equipment and personal protective equipment to ensure a representative sample is collected with negligible cross-contamination that produces reliable results;

(e) describe the sampling methods employed for each chemical or attribute (as set out in clauses 4.2, 4.3 and Table 3 above), including the volume and quantity of each sample to be collected and the type of sample to be collected;

(f) outline the sampling pattern and sampling location(s) selected to ensure the samples collected are representative of the **batch of waste**, using appropriate illustrations;

(g) describe the procedures for photographing and labelling each sample, using a unique sample identifier consisting of, but not limited to: the name of the **resource recovery waste**; the source of the **resource recovery waste**; the date the sample was collected; the batch identifier the sample was taken from, references to other samples and the details of the sampler;

(h) describe procedures for handling, containment and transport of samples to ensure samples are delivered to the laboratory in good condition and within the timeframes required to maintain the quality of the sample for each chemical or attribute to ensure the quality of the testing. This includes:

i. procedures necessary to ensure chain-of-custody for each sample, which detail the name of the sampler, collection date, testing to be performed, sample preservation method, departure time and condition of samples at dispatch;

ii. sample preservation and storage; and

iii. decontamination of sampling equipment.

scheduled waste facility has the same meaning as in the **POEO Waste Regulation**.

statement of compliance is the document that includes:

(a) the **supplier's** name (and A.C.N if a corporation);
(b) the **supplier's** address and contact details;
(c) unique batch identifier for the **batch of waste**;
(d) a statement from the **supplier** certifying that the **recovered soil** or **blended recovered soil** meets the requirements of this order.
(e) a statement from a **certified environmental practitioner** certifying that the **recovered soil** or **blended recovered soil** meets the requirements in this order that must be done, or confirmed, by a **certified environmental practitioner**.

stockpiled material means material that is stored on the ground.

supplier includes a **generator** or **processor** of **recovered soil** or **blended recovered soil**.

transaction means the first supply of **recovered soil** or **blended recovered soil** from a **batch of waste** to each person.

virgin excavated natural material has the same meaning as in Schedule 1 to the **POEO Act**.

waste facility has the same meaning as in the **POEO Act**.

7.1 In this order, except where the contrary intention is expressed, another grammatical form of a defined word or expression has a corresponding meaning.

7.2 In this order, words and expressions have the same meaning as in the **POEO Act** unless otherwise specified.

8. Power under which this instrument is made

This instrument is made under clause 93 of the **POEO Waste Regulation**.

[Title of sub-delegate]
Environment Protection Authority
(by sub-delegation)

[date]