Amendment Report

Application for Licence Amendment

Part V Division 3 of the Environmental Protection Act 1986

Licence Number L9367/2022/1

Licence Holder City of Albany

File Number DER2022/000634~1

Premises Bakers Junction Waste Management Facility

1206 Chester Pass Road

KALGAN WA 6030

Legal description -

Reserve 31472

Lot 7190 on Deposited Plan 175897

(As depicted in Figure 1)

Date of Report 16 November 2023

Decision Revised licence granted

Adam Green A/MANAGER WASTE INDUSTRIES REGULATORY SERVICES

an officer delegated under section 20 of the Environmental Protection Act 1986 (WA)

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1. Decision summary

Licence L9367/2022/1 is held by the City of Albany (Licence Holder) for the Bakers Junction Waste Management Facility (the Premises), located at 1206 Chester Pass Road in Kalgan.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9367/2022/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary

On 30 June 2023, the Licence Holder submitted an application to the department to amend Licence L9367/2022/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

 Addition of Category 61A to facilitate the ongoing receipt and processing of food organics and garden organics (FOGO) waste collected as part of the City of Albany's kerbside waste collection service.

On 23 July 2021, Works Approval W6565/2021/1 was issued to the Licence Holder to facilitate the construction of a Category 62 waste storage depot at the Premises for the receipt, decontamination, and temporary storage of FOGO waste. The depot (referred to herein as the transfer station) comprises a gravel vehicle manoeuvring hardstand and impermeable, sloping asphalt hardstand; with an open swale draining to a dedicated detention basin designed to contain contaminated runoff from a 24-hour, rainfall event with an annual exceedance probability of 5%.

On 8 December 2022, and amendment to Works Approval W6565/2021/1 was granted to incorporate the use of a high-performance mobile shredder/grinder to shred decontaminated FOGO waste prior to being conveyed directly to a sealed truck for transportation offsite for further processing. The addition of an on-site shredder for onsite processing of FOGO waste resulted in a change from premised Category 62 to 61A. W6565/2021/1 facilitated the receipt and processing of up to 4, 500 tonnes of FOGO waste per annum. However, as part of the amendment process the Licence Holder has also requested an increase of up to 5, 000 tonnes of FOGO waste per annum to be handled through the transfer station.

This amendment is limited only to the addition of Category 61A activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 64 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed throughput capacity changes.

Category	Current throughput capacity	Proposed throughput capacity	Description of proposed amendment
61A	N/A	5, 000 tonnes per annual period	Inclusion of FOGO waste acceptance and processing activities approved through Works Approval time-limited operations within Premises Licence.
64	50, 000 tonnes per annual period.	50, 000 tonnes per annual period.	No change proposed.

The average number of weekly FOGO loads is 15 (approximately 90 tonnes of FOGO waste per week). The Licence Holder previously advised that shredding of the FOGO waste will occur two to three times per week, with the shredding process taking approximately 30 minutes each time.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway, and impact to receptors in accordance with the *Guideline: Risk* assessments (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary. The location of the identified recept9ors relative to the premises boundary (depicted in pink) are illustrated in Figure 1 and Figure 2 below.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust (including	Vehicle movements. Truck unloading and	Air/windborne pathway	Onsite water trucks used for dust suppression if required.
bioaerosols)	sorting of FOGO waste materials.		FOGO stockpile moisture content is to be maintained at 25% or higher.
Noise	Vehicle movements. Truck unloading of	Air/windborne pathway	Physical separation from sensitive receptors.
	FOGO waste.		Limited hours of operation.
			Maintenance of equipment/machinery to optimize performance and reduce noise emissions
Odour	Truck unloading, handling/sorting, and	Air/windborne pathway	Physical separation from sensitive receptors.
	storage of FOGO waste material.		All FOGO waste to be transported in enclosed compactor trucks.
			FOGO Waste will be held onsite no longer than 72-hours prior to being moved offsite for processing.
			A wire-sided, roofed structure is to be constructed over the FOGO hardstand to protect FOGO from rain.
Smoke from fire	Storage of FOGO waste materials.	Air/windborne pathway	FOGO Waste will be held onsite no longer than 72-hours prior to being moved offsite for processing.
			FOGO Waste stockpiles to be no greater than 5m high, 50m long and 10m wide, and 2.5m away from the hardstand boundary.
			FOGO stockpile moisture content is to be maintained at 25% or higher.
Weed seed and plant	Storage of FOGO waste materials.	Air/windborne pathway	All FOGO waste to be delivered and confined to the proposed hardstand area.
pathogen spread			Shredded FOGO waste is to be fed by conveyor directly into sealed trucks for transportation off site.
			Shredded and unshredded FOGO shall be damped down or covered during dry, windy conditions.
			A wire-sided, roofed structure is to be constructed over the FOGO hardstand to protect FOGO from rain and reduce leachate generation.

Emission	Sources	Potential pathways	Proposed controls
Windblown waste	Truck unloading, handling/sorting, and	Air/windborne pathway	Site personnel to collect any windblown waste.
	storage of FOGO waste materials.		Waste facility is fenced to mitigate windblown waste leaving the site.
			A wire-sided, roofed structure is to be constructed over the FOGO hardstand.
Leachate	Storage of FOGO waste materials	Seepage to soils and groundwater	All FOGO waste materials to be unloaded onto the concrete hardstand area for sorting (decontamination).
			Installation of bunding on the hardstand to direct leachate into the leachate management system.
			Limiting the length of time FOGO waste is stored on the site (not more than 30-hours for FOGO waste received Monday – Thursday and 72-hours for FOGO waste received Friday).
			A wire-sided, roofed structure is to be constructed over the FOGO hardstand to protect FOGO from rain and reduce leachate generation.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors, and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted because of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Receptor ID	Human receptors	Distance from prescribed activity		
H1	Albany Clay Target Club, Simpson Road, Napier	Approximately 700 m north-west of northern premises boundary.		
H2	Rural residence, Simpson Road, Approximately 750 m north-west northern premises boundary.			
Н3	Rural residence and olive plantation, 1053 Chester Pass Road, King River	Approximately 1.5km south-west of southern premises boundary.		
Receptor ID	Environmental receptors	Distance from prescribed activity		

E1	Johnston Creek (South Coast Significant Wetland – Conservation Class)	Premises situated within mapped extent of wetland.
E2	Kalgan, and King Rivers, Oyster Harbour	Premises situated within hydrographic catchments (King River tributary emanates from southern portion of the premises).
E3	Waterways Conservation Area	Located within the Albany Waterways Management Area.
E4	Groundwater	Monitoring bore standing water levels reported to range from 8 – 11 mbgl. Hydraulic gradient reported to run north to south. Salinity mapped at 125 and TDS at 500-1000.
E5	WA Bush fire Prone Areas	Premises within mapped extent.
E6	Bakers Junction Nature Reserve	Immediately adjacent to premises boundary (surrounding entire premises). *Reserve supports western ring-tailed possums, black cockatoos and quenda
E7	Banksia coccinea hrubland/Eucalyptus staeri/Sheoak Open Woodland Threatened Ecological Community (TEC)	Approximately 190 m south of southern premises boundary.

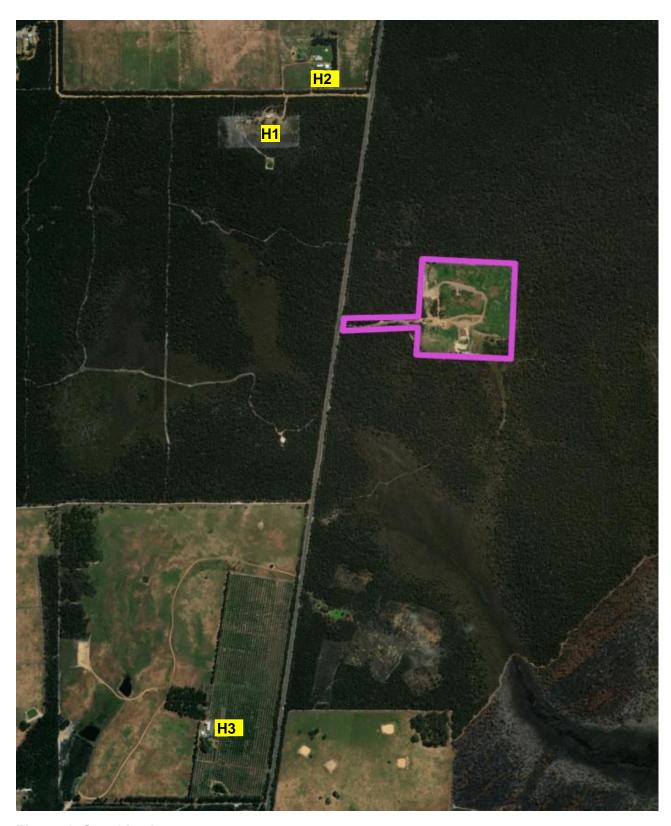


Figure 1: Sensitive human receptors.

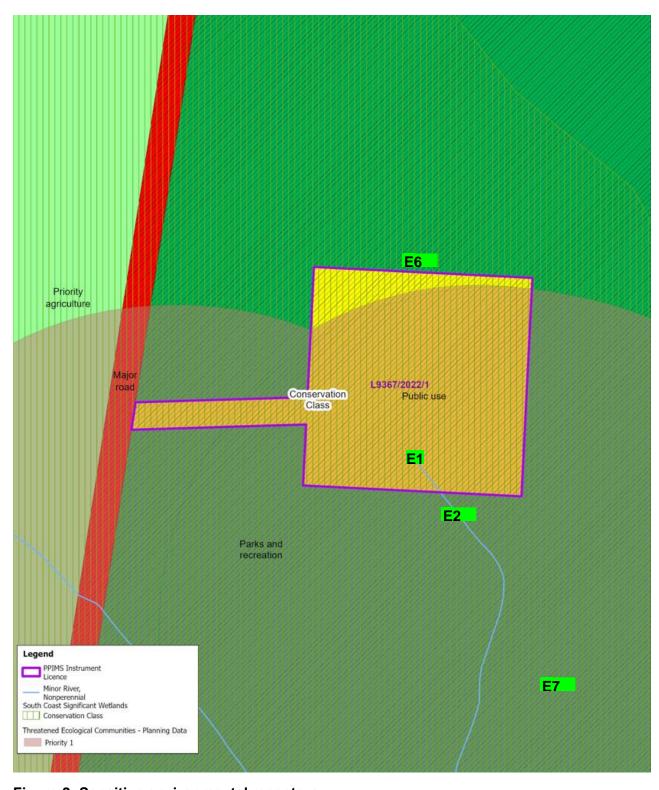


Figure 2: Sensitive environmental receptors.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and considers potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4.

The Revised Licence L9367/2022/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e., putrescible waste landfilling and organic waste handling.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹	Licence		Justification for	
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls	
Operation									
	Wind-blown wastes	Wind dispersal and dispersal by scavenging avifauna resulting in amenity impacts and environmental degradation	Rural properties	Refer to section 3.1.1	C = Minor L = Likely Medium Risk	Y	Conditions 10, 15 and 16	N/A	
Truck unloading, handling/sorting, processing, and storage of FOGO waste materials	Weed-seed and plant pathogen spread	Air/windborne pathway, rainwater overland flow dispersal, avian scavengers, and insect vectors resulting in impacts on agricultural areas and remnant native vegetation communities.	Rural properties Bakers Junction Nature Reserve TEC	Refer to section 3.1.1	C = Major L = Possible High Risk	Y	Conditions 8 and 10	N/A	
	Odour	Air/windborne pathway causing impacts to health and amenity.	Rural residences Albany Clay Target Club	Rural residences Albany Clay Target Club	Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 8, 9 and 10	N/A
	Noise associated with machinery operation	The prevailing wind direction at the nearest weather station (Albany Airport) is generally north-			Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 8 and 10	N/A

Risk Event	Risk Event					Licence		Justification for
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls	C = consequence L = likelihood	Holder's controls sufficient?	Conditions ² of licence	additional regulatory controls
	Dust (including bioaerosols)	westerly in the morning and south-westerly in the afternoon.		Refer to section 3.1.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 8 and 10	N/A
	Smoke from accidental and uncontrolled fire			Refer to section 3.1.1	C = Minor L = Possible Medium Risk	Υ	Conditions 8, 9 and 10	N/A
	Fire debris and washwaters from firefighting activities	Overland runoff potentially causing ecosystem disturbance or via seepage (infiltration) impacting underlying groundwater.	Beneficial users of groundwater Bakers Junction Nature Reserve and TEC Johnston Creek and King River	Refer to section 3.1.1	C = Moderate L = Unlikely Medium Risk	Υ	Conditions 8 and 10	N/A
	Leachate	Seepage though soil profile causing impacts to groundwater quality	Beneficial users of groundwater	Refer to section 3.1.1	C = Moderate L = Unlikely Medium Risk	Υ	Conditions 8 and 10	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the Guideline: Risk assessments (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Department of Primary Industry and Regional Development (DPIRD) advised of proposal (Date)	DPIRD replied on 31 July 2023 stating that: "DPIRD does not object to the inclusion of FOGO waste storage and processing activities into the existing Category 64 putrescible landfill licence" but "The FOGO waste storage and processing activities area must be completely separated from the area where quarantine waste is received and buried as to avoid any possibility of cross contamination"	Noted. Approved FOGO infrastructure is separate to historic landfilling activities onsite.
Department of Biodiversity, Conservation, and Attractions (DBCA) advised of proposal (Date)	"DBCA has undertaken a review of the relevant documentation and noting the capacity for the Department of Water and Environmental Regulation to apply appropriate regulatory measures for environmental management of the prescribed premises under Part V of the EP Act, DBCA has no comments on the application."	Noted.
Works Approval/Licence Holder was provided with draft amendment on (22/08/2023)	The applicant responded on 05/10/2023 (Refer to Appendix 1)	Refer to Appendix 1

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
-	Category 61A: Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land added to licence with an assessed design capacity of 5, 000 tonnes per annual period.
8	New condition added detailing FOGO waste transfer station infrastructure and equipment requirements, including provision for construction of expanded hardstand and covered FOGO shelter.
9	New FOGO waste acceptance condition inserted.
10	New FOGO waste processing condition inserted.
11	New non-conforming FOGO waste rejection condition inserted.
12	New non-conforming FOGO waste disposal condition inserted.
23	New complaint record condition inserted.
27	New FOGO waste acceptance and export monitoring condition inserted.
28 &29	New retention of records conditions inserted.
Table 6, Definitions	Definition of FOGO waste inserted
Schedule 1, Figure 2	New FOGO waste processing infrastructure layout figure inserted.
Schedule 1, Fig 3	New figure inserted: FOGO hardstand improvements.

References

- 1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
- 2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
- 3. DWER 2020, Guideline: Risk Assessments, Perth, Western Australia.

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
10 – Table 3: FOGO	Requested modification:	Requested amendment will not alter risk profile.
waste processing	Shredded FOGO waste is to be transferred to sealed trucks within 12 hours after shredding. Movement of shredded waste around the pad is to be minimised.	
	Reasoning:	
	Temporary placement of shredded FOGO onto the pad rather than directly into sealed trucks would have only a negligible increased risk of odour emissions or spreading of weed seeds.	
	Attachment 6B Odour emissions – Screening analysis has been updated accordingly.	
	In addition to limiting shredding to suitable wind conditions, increased controls to further reduce weed spread through windblown waste will include dampening down or covering FOGO waste if noticeably dry and the proposed construction of a roof over the FOGO sorting pad with wire surrounds (see below).	
8	The City requests permission to extend the sealed FOGO hardstand from 20m x 30m to 30m x 30m and to construct a roofed structure over the hardstand with wire surrounds. Target outcomes of this construction will be to:	Noted. Requested improvements to FOGO processing infrastructure incorporated through amendment of Table 2 and insertion of Figure 3
	Reduce leachate emissions from the FOGO hardstand by minimising interaction between rainwater and FOGO waste to mitigate the risk of eutrophication and odour;	3
	Reduce risk of high liquid content in FOGO and associated odour from rotting organics;	
	Reduce windblown litter and distribution of materials and weed seeds; and	
	Provide safer and more protected working conditions for sorting staff, to maximise resource recovery and support employee retention.	
	Stormwater from the structure will be diverted into the existing stormwater basin.	

Appendix 2: Application validation summary

SECTION 1: APPLICATION SUMMARY						
Application type						
Works approval						
		Relevant works approval number:		None	-	
		Has the works approvith?	oval been complied	Yes □	-No □-	
Licence		Has time limited ope works approval dem acceptable operatio	nonstrated	Yes □	No □ N/A □	
		Environmental Com Critical Containmen Report submitted?		Yes □	– No □	
		Date Report receive	ed:			
Renewal	-	Current licence- number:				
Amendment to works approval	-	Current works- approval number:				
Amandment to license	\boxtimes	Current licence number:	L9367/2022/1			
Amendment to licence		Relevant works approval number:	W6565/2021/1	N/A		
Registration-		Current works- approval number:		None	-	
Date application received		30/06/2023				
Applicant and Premises details						
Applicant name/s (full legal name/s)		Shire of Albany				
Premises name		Bakers Junction Waste Management Facility				
Premises location		1206 Chester Pass Road KALGAN WA 6330				
Local Government Authority		Shire of Albany				
Application documents						
HPCM file reference number:		DER2022/000634~1				
Key application documents (addition application form):	 Application form Occupier status Premises map Crambo 6000 brochure Site layout plan detail as constructed. Sound emissions (cat 930H loader and Crambo 6200) Odour screening analysis 			rambo 6200)		
Scope of application/assessment						

Summary of proposed activities or changes to existing operations. Licence amendment Amendment of licence to incorporate the operation of FOGO transfer station approved under previous works approval.

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 61A: Solid waste facility: premises (other than premises within category 67A) on which solid waste produced on other premises is stored, reprocessed, treated, or discharged onto land.	-	5, 000 tonnes per annual period
Category 64: Class II or III putrescible landfill site: premises on which waste (as determined by reference to the waste type set out in the document entitled "Landfill Waste Classification and Waste Definitions 1996" published by the Chief Executive Officer and as amended from time to time) is accepted for burial.	50, 000 tonnes per annual period	-

Legislative context and other approvals

Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes □ No ⊠	Referral decision No: Managed under Part V Assessed under Part IV
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes □ No ⊠	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes □ No ⊠	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ⊠ No □	Certificate of title □ General lease □ Expiry: Mining lease / tenement □ Expiry: Other evidence □ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes □ No □ N/A ⊠	Approval: Expiry date: If N/A explain why? Historic LGA operated premises
Has the applicant applied for, or have an	Yes □ No ⊠	No clearing is proposed.

existing EP Act clearing permit in relation to this proposal?		
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes □ No ⊠	No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes □ No ⊠	Licence / permit not required.
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes □ No ⊠	N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes □ No ⊠	N/A
Is the Premises subject to any other Acts or subsidiary regulations	Yes ⊠ No □	Controlled waste facility for special wastes
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ⊠ No □	Located within the Albany Waterways Management Area
Is the Premises subject to any EPP requirements?	Yes □ No ⊠	N/A
Is the Premises a known or suspected contaminated site under the Contaminated Sites Act 2003?	Yes ⊠ No □	Classification: possibly contaminated – investigation required (PC–IR) Date of classification: 03/03/2023