



Application for Works Approval

Part V Division 3 of the *Environmental Protection Act 1986*

Works Approval Number W6521/2021/1

Applicant Norton Gold Fields Pty Limited

ACN 112 287 797

File Number DER2021/000022

Premises Binduli North Project- Crushing and Screening plant
Mining tenement M26/446
BOULDER WA 6432

Date of Report 27 May 2021

Decision Works approval granted

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RESOURCE INDUSTRIES

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

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1. Decision summary

This Decision Report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the Premises. As a result of this assessment, Works Approval W6521/2021/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Decision 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 and overview of Premises

On 8 January 2021, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act). The application is to undertake construction works relating to the operation of a mobile crushing and screening plant for preliminary crushing and screening activities associated with the Binduli North Project (BNP). The Premises is approximately 2.2 km west of the town of Kalgoorlie-Boulder.

The BNP currently consists of three open mine pits (Janet Ivy, Fort William and Fort Scott), three Waste Rock Landforms (WRL) and associated infrastructure such as run off mine pads (ROM), roads and pipelines. The BNP has historically been mined for gold, however mining is not currently active at the site. The applicant is proposing future development at the Premises, consisting of the expansion of the existing open mine pits, the development of a new pit, a heap leach processing facility and the construction and installation of associated processing infrastructure. This application seeks to authorise the necessary crushing and screening activities required to develop the broader site prior to mining operations recommencing, with approval for all subsequent mining activities proposed for within the BNP Development Envelope to be sought under a separate application.

Crushed and screened material will be used for aggregate and roadbase across the Premises, with the raw material already stockpiled on site. Crushing and screening activities will be confined to a designated area within the Premises boundary as outlined in Figure 1. It is anticipated that 925,000 tonnes of material will need to be processed to achieve the desired quantity of crushed and screened product.

Operations are expected to occur for a period of 6 months only. Consequently, the applicant has requested that all crushing and screening operations be authorised under a time-limited operations period within the granted works approval, as these operations will not need to be carried onto a Licence for the site.

The Premises relates to the category and assessed design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in Works Approval W6521/2021/1. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guidance Statement: Risk Assessments* (DER 2017) are outlined in Works Approval W6521/2021/1.



Figure 1: Premises boundary and layout

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 *Guidance Statement: Risk Assessments* (DER 2017).

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 construction and operation which have been considered in this Decision Report are detailed in Table 1 below. Table 1 also details the proposed control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Placement of crushing and	Air/windborne pathway	Sprays and water carts will be utilised to suppression visible emissions of dust.

Emission	Sources	Potential pathways	Proposed controls
Noise	screening infrastructure and associated equipment. Vehicle movements.	causing impacts to health and amenity	Plant infrastructure will be constructed on compacted ground. Mobile equipment will be maintained with efficient mufflers and noise shielding. Mobile equipment without reversing alarms will be used if possible.
Time-limited operations			
Dust	Screening, crushing, unloading, loading and storage of material. Handling and compacting of crushed and screened product. Vehicle movements.	Air/windborne pathway causing impacts to health and amenity	Screening equipment will incorporate in-built water sprays to suppress dust emissions from crushing and screening points and conveyor discharge points and will be supplemented with external sprays when required. Sprays and water carts will be utilised to suppression visible emissions of dust. Material drop heights between loaders - trucks and trucks – stockpiles will be kept to a minimum practical height.
Noise			Operations will occur between 7 am to 7pm Monday – Saturday. Stockpiles of crushed and screened product will be positioned to provide a noise suppression buffer to the nearest residences. The location of the crushing and screening area has been designed to take advantage of the existing WRL material, which will provide a noise buffer for the nearest residences. Mobile equipment will be maintained with efficient mufflers and noise shielding. Mobile equipment without reversing alarms will be used if possible.
Sediment laden stormwater		Overland runoff potentially causing ecosystem disturbance	All potentially contaminated surface water runoff will be retained within localized bunding and/or catch pits if required. The location of the activities within the sites catchment will naturally retain water within the Premises boundary. Plant infrastructure will be constructed on compacted ground. All spills of environmentally hazardous material will be immediately contained and cleaned up.
Spills or leaks hydrocarbons			No bulk storage of hazardous substances will occur on site. Storage of minor quantities of hazardous substances will only occur in designated areas

Emission	Sources	Potential pathways	Proposed controls
			<p>which are appropriately signed, banded or contained.</p> <p>Waste oil will be collected and disposed of offsite by a licenced contractor.</p> <p>Soil contaminated with hydrocarbons will be segregated into designated sites for storage, then either remediated and buried within waste rock structures on site or removed from the site.</p> <p>All spills will be immediately contained and cleaned up.</p>

3.1.2 Receptors

In accordance with the Guidance Statement: Risk Assessment (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the applicant'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 2 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (Guidance Statement: Environmental Siting (DER 2016)).

Figure 2 shows the location of sensitive receptors in relation to the prescribed premises.

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Residential Premises	Approximately 2km south east of the premises
Environmental receptors	Distance from prescribed activity
Threatened/priority flora	<p>None within 3km of project area.</p> <p>Entire mining tenement M26/446 is approved for clearing of native vegetation under clearing permit 8950/1</p>
Threatened/ priority fauna	None sighted within 4km of project area.
Surface water	<p>No streams or drainage lines located within 5km of the project area.</p> <p>Salt Lake system is located approximately 2.7km north west of the project area.</p>

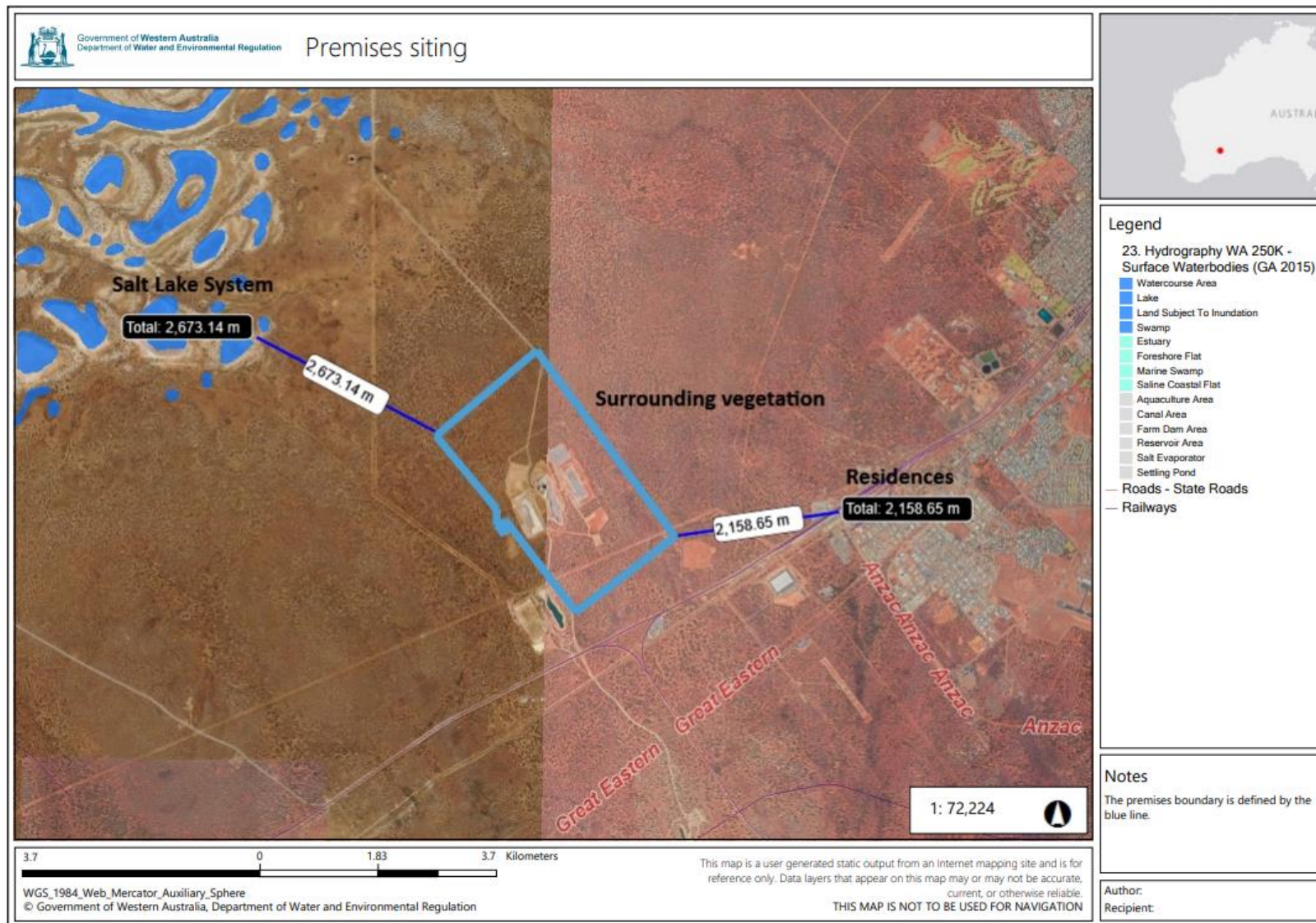


Figure 2: Distance to sensitive receptors.

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for each identified emission source and takes into account 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 applicant 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 applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works Approval W6521/2021/1 that accompanies this Decision Report authorises construction and time-limited operations. The conditions in the issued Works Approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

As all crushing and screening operations will not be required once the time-limited operations period of the works approval has ceased, a licence will not be required following the time-limited operational phase.

Table 3: Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Applicant controls sufficient?	Conditions ² of works approval	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Applicant controls				
Construction								
Placement of crushing and screening infrastructure and associated equipment	Dust	Air/windborne pathway causing impacts to health and amenity	Residences located 2km south east of the premises	Refer to Section 3.1	C = Slight L = Unlikely Low risk	Y	Emission will be regulated under the general provisions of the EP Act	N/A
Vehicle movements	Noise			Refer to Section 3.1	C = Slight L = Unlikely Low risk	Y	Emission will be regulated under the <i>Environmental Protection (Noise) Regulations 1997</i>	N/A
Time-limited operations								
Screening, crushing, unloading, loading and storage of material. Handling and compacting of crushed and screened product. Vehicle movements.	Dust	Air/windborne pathway causing impacts to health and amenity	Residences located 2km south east of the premises	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 1, 6, 7 and 13	N/A
	Noise			Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Conditions 1, 6 and 13 Emission will be regulated under the <i>Environmental Protection (Noise) Regulations 1997</i>	N/A
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance	Vegetation located approximately 500m to the east of the project area	Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 8, 9, and 10	N/A
	Spills or leaks hydrocarbons			Refer to Section 3.1	C = Minor L = Unlikely Medium Risk	Y	Conditions 9 and 10	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

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

4. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website 18 March 2021	None received.	N/A
Local Government Authority advised of proposal 18 March 2021	The City of Kalgoorlie-Boulder advised on 6 April 2021 that they had no objections to the works approval.	Noted – no action required.
Applicant provided with draft documents 12 April 2021	An updated infrastructure and equipment list has been provided for the crushing and screening plant. This does not fundamentally change the approach/outcomes or the nature of the operations.	The design and construction / infrastructure requirements for the crushing and screening plant will be updated to reflect the infrastructure and equipment list provided by the applicant.
	<p>The following change in wording of condition 3 in the works approval is requested:</p> <p>'The Environmental Compliance Report required by condition 2, must include as a minimum the following:</p> <ul style="list-style-type: none"> (a) Certification by a suitably qualified individual or organisation that the items of infrastructure or component(s) thereof, as specified in condition 1, are to the condition, security and suitability to allow the equipment to do the task/s required of it; (b) detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person <p>Whilst we recognise that the draft condition is a standard requirement, we suggest that the following wording better reflects that approach likely to be employed by Norton. Certification per the wording below will not detract from the requirements of the</p>	<p>The Delegated Officer considers that suggested changes to condition wording compromise the original intent of the conditions and makes the following comments.</p> <p>Part (a)</p> <p>The change in wording does not confirm assurance that the items of infrastructure / equipment have been constructed in accordance with the requirements of condition 1. As such, the original wording will be retained in the works approval.</p> <p>The requirement for certification by a competent, qualified civil or structural engineer will be changed to certification by a person authorised to represent the works approval holder to allow the applicant flexibility in completing Environmental Compliance Report.</p>

	condition but reflect the site's approach to sign-off.	
	Operations will also occur between 7am and 7pm on Saturdays.	Reference to operational hours within works approval conditions has been changed to incorporate operations on Saturdays.
	The addition of bioremediation has been requested as a treatment/disposal option for material used for the recovery, removal and/or disposal of environmentally hazardous material (condition 10 of the works approval).	<p>No information has previously been provided as a part of this application as to how bioremediation will be managed at the Premises and the quantities of material that will be processed.</p> <p>Due to the late stage of the application, the addition of bioremediation cannot be considered at this time.</p> <p>The Delegated Officer advises the applicant to include the request for bioremediation, including information surrounding the management of bioremediation activities and emission and discharge controls, in subsequent works approval / licence applications for the Premises.</p>
	<p>An increase in the crushing and screening area of the premises has been requested.</p> <p>An updated image has been provided for use within the instrument.</p>	<p>The Delegated Officer considers that the increase in crushing and screening area will not alter the risk profile of the premises on nearby receptors.</p> <p>The updated image will be incorporated into the final documents.</p>

5. Conclusion

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

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)		
Application type		
Works approval	<input checked="" type="checkbox"/>	
Date application received	8 January 2021	
Applicant and Premises details		
Applicant name/s (full legal name/s)	Norton Gold Fields Pty Limited	
Premises name	Binduli North Project – Crushing and Screening Plant	
Premises location	M26/446 – Great eastern HWY, Kalgoorlie-Boulder	
Local Government Authority	City of Kalgoorlie-Boulder	
Application documents		
HPCM file reference number:	DER2021/000022	
Key application documents (additional to application form):	Application form Supporting document	
Scope of application/assessment		
Summary of proposed activities or changes to existing operations.	<p><u>Works approval</u></p> <p>Construction and time limited operation of a mobile crushing and screening plant for the preliminary crushing and screening activities associated with the Binduli North Project (BNP).</p> <p>This application covers the necessary crushing and screening activities required to develop the broader site ahead of mining operations recommencing. This resultant material will be used for aggregate and road base. The subsequent mining operations will occur within the BNP Development Envelope (DE) and are the subject of a separate approvals process (including Mining Proposal, referral to the Environmental Protection Authority (EPA) and Application for Works Approval).</p> <p>Operation will be for 6 months only and applicant has requested that this occur under time limited operations under the works approval only. No licence required.</p> <p>Approximately 925,000 tonnes of material already on site needs to be processed over the 6-month period (7 days a week). The plant has a design capacity of 600 t/hr. This means the plant will need to operate for 8.5hrs a day. No mention of operating hours or if night-time operations will occur.</p> <p>Closest residences are approximately 2km south east of the crushing plant (residences of Kalgoorlie/boulder).</p> <p>Applicant is stating that this works approval is urgent and that it's required asap.</p>	

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

Table 1: Prescribed premises categories

Prescribed premises category and description	Proposed production or design capacity	
Category 12	925,000 tonnes per annum.	

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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input checked="" type="checkbox"/> Assessed under Part IV <input type="checkbox"/>	
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:	
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:	
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" type="checkbox"/> M26/446 expires 29/11/2036 Other evidence <input type="checkbox"/> Expiry:	
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date:	
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: 8950/1	
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.	
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Goldfields Groundwater Area Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: Goldfields	
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Classification: N/A Date of classification: N/A	