

Checklist A	WA or UWI#	Depth(m)	
		Yes	No
<p>Were there other drilling waste disposal events on the site (e.g. wellbore re-entry or another well drilled, using fluids containing drilling fluid additives)?</p> <p>If yes, were the disposal areas separate from one another?</p>		<p>Drilling waste information must be evaluated for each disposal.</p>	<p>Drilling waste information must be evaluated by combining the drilling fluid additives and well depths. If drilling waste information is missing or incomplete for one or both wells, intrusive sampling is required.</p>
<p>Was a remote site used?</p> <p>If, Yes, is the remote site included in this assessment application?</p> <p>If not included, is the remote site a multiwell disposal location?</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> <p>In Comments section, indicate which well the remote site will be tied to for the purposes of restoration</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> <p>Single well remote disposal site must be included with COR application</p>
<p>Were cuttings or solids disposed of on-site that were associated with off-site waste disposed by LWD or landspraying?</p> <p>If Yes, is separate analytical information or unique notification available?</p> <p>If separate information or notification is not available, is information available to show that the volume of waste disposed of on-site was 50 m3 or less?</p> <p>If the volume of waste disposed of on-site is unknown, is the estimated volume of waste disposed on site 50 m3 or less?</p> <p>Volume of cuttings or solids disposed of onsite may be estimated by:  <math>VC = VT - VOFF</math>            Where:            VC = Volume of cuttings or solids (m3)            VOFF = Volume of waste disposed of off-site            VT = Total volume of waste (m3) and:  <math>VT = 1.2 \times WDP \times 3.14 \times 2000 \times WDM^2</math>            Where:            WDM = Well diameter (mm)            WDP = Well Depth (m)</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> <p>Enter data below:</p> <p>VC = _____(m)            VT = _____(m)            VOFF= _____(m3)            WDM= _____(mm)            WDP = _____(m)</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/> <p>Stage 2 PSI required</p>	

<p>Was the drilling fluid described as an advanced gel chemical system such as the following: <i>potassium sulphate, potassium silicate, sodium silicate, or potassium formate</i>?</p> <p>If Yes, were all or part of the wastes disposed of on-site?</p> <p>If wastes were disposed of on-site, was the disposal done in compliance with an approval from the BCER?</p>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/>   <input type="checkbox"/> Stage 2 PSI required
<p>Is a mud list available and can all the additives on the mud list be identified and described?</p> <p>Record the additives and their description (e.g., chrome-free lignosulfonate, aldehyde-based bactericide) on the attached form.</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>For mix-bury-cover disposal, was calculated or measured post-disposal chloride concentration 700 mg/kg or less?</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Were hydrocarbon-based drilling fluids used or were hydrocarbons added to the drilling fluid or was the well a horizontal oil well?</p> <p>If Yes, is documentation available showing that the wastes were disposed of in a manner consistent with Guide 50 (1996) or, if applicable, the Hazardous Waste Regulation?</p>	<input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/> Stage 2 PSI required
<p>If hydrocarbon was present, is the predicted post-disposal hydrocarbon concentration at or below the appropriate guideline? (subsoil: 0.1%, topsoil: 0.5%)?</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Was a luminescent bacteria (Microtox) test required as indicated on the disposal notification form?</p> <p>If Yes, did the waste pass the toxicity test requirements as outlined in <i>Guide 50</i> (waste must pass either the original or charcoal toxicity test)?</p>	<input type="checkbox"/>   <input type="checkbox"/>	<input type="checkbox"/>   <input type="checkbox"/> Stage 2 PSI required
<p>If the waste failed the toxicity test (i.e., EC50 (15) original and EC50 (15) charcoal treated, reading at 15 minutes &lt; 75%) is there evidence that demonstrates the waste was treated to remove toxicity and retested or disposed of at an approved waste management facility)?</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Was barite added to the drilling fluid?</p> <p>If Yes, did it meet the requirements specified in the attached metal calculation table? Multiwell sumps must include data from all contributing wells</p>	<input type="checkbox"/>   <input type="checkbox"/> Show calculation on attached form	<input type="checkbox"/>   <input type="checkbox"/> Stage 2 PSI required

<p>Was zinc carbonate added to the drilling fluid?</p> <p>If Yes, did it meet the requirements specified in the attached metal calculation table? Multiwell sumps must include data from all contributing wells</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> Show calculation on attached form</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> Stage 2 PSI required including cadmium analysis</p>
<p>Were chrome-based thinners added to the drilling fluid?</p> <p>If Yes, did it meet the requirements specified in the attached metal calculation table? Multiwell sumps must include data from all contributing wells</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> Show calculation on attached form</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> Stage 2 PSI required</p>
<p>Were any other metals added that triggered testing required by <i>Guide 50</i>?</p> <p>If Yes, are waste analytical data and application rate (landspreading) or maximum application (mix-bury-cover) available?</p> <p>If above data is available, did the application rate or maximum application meet <i>Guide 50</i> requirements?</p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/> Stage 2 PSI required</p> <p><input type="checkbox"/> Stage 2 PSI required</p>



Checklist B	WA or UWI#	Depth(m)	
		Yes	No
<p>Were there other drilling waste disposal events on the site (e.g. wellbore re-entry or another well drilled, using fluids containing drilling fluid additives)?</p> <p>If yes, were the disposal areas separate from one another?</p>		Drilling waste information must be evaluated for each disposal.	Drilling waste information must be evaluated by combining the drilling fluid additives and well depths. If drilling waste information is missing or incomplete for one or both wells, intrusive sampling is required.
Has the well operator reviewed the Daily Drilling Records and other available drilling documentation?	<input type="checkbox"/>		<input type="checkbox"/> Stage 2 PSI required
Can it be determined from the available records what type of drilling fluid system was used?	<input type="checkbox"/>		<input type="checkbox"/> Stage 2 PSI required
<p>Were water-based drilling fluids used for all sections (i.e., gel chemical drilling fluid systems)?</p> <p>If No, is there evidence that demonstrates the non water-based wastes were disposed of in a manner consistent with <i>Guide 50</i> or, if applicable, the Hazardous Waste Regulation (i.e. at an approved waste management facility)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Is a mud list available?</p> <p>If Yes, can all the additives on the mud list be identified and described?</p> <p>Record the additives and their description (e.g., chrome-free lignosulfonate, aldehyde-based bactericide) on the attached form. Multiwell sumps must include data from all contributing wells</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required  <input type="checkbox"/> Stage 2 PSI required
<p>Was the well a horizontal oil well?</p> <p>If Yes, is there evidence that wastes were disposed of in a manner consistent with <i>Guide 50</i> or, if applicable, the Hazardous Waste Regulation (i.e., approved waste management facility)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Was the well drilled using under-balanced techniques?</p> <p>If Yes, is there information/documentation available to demonstrate that the drilling wastes were disposed of in a manner consistent with <i>Guide 50</i> or, if applicable, the Hazardous Waste Regulation (i.e., approved waste management facility)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required







Checklist C	WA or UWI#	Depth(m)	
		Yes	No
<p>Were there other drilling waste disposal events on the site (e.g. wellbore re-entry or another well drilled, using fluids containing drilling fluid additives)?</p> <p>If yes, were the disposal areas separate from one another?</p>		Drilling waste information must be evaluated for each disposal.	Drilling waste information must be evaluated by combining the drilling fluid additives and well depths. If drilling waste information is missing or incomplete for one or both wells, intrusive sampling is required.
<p>Was a remote site used?</p> <p>If, Yes, is the remote site included in this assessment application?</p> <p>If not included, is the remote site a multiwell disposal location?</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<p>In Comments section, indicate which well the remote site will be tied to for the purposes of restoration</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  Single well remote disposal site must be included with assessment application
<p>Were water-based drilling fluids used?</p> <p>If Yes, were all or part of the wastes disposed of on-site?</p>	<input type="checkbox"/>  <input type="checkbox"/>		<input type="checkbox"/>  <input type="checkbox"/>
<p>Were cuttings or solids disposed of on-site that were associated with off-site waste disposed by LWD or landspraying?</p> <p>If Yes, is separate analytical information or unique notification available?</p> <p>If separate information or notification is not available, is information available to show that the volume of waste disposed of on-site was 50 m<sup>3</sup> or less?</p> <p>If the volume of waste disposed of on-site is unknown, is the estimated volume of waste disposed on site 50 m<sup>3</sup> or less?</p> <p>Volume of cuttings or solids disposed of onsite may be estimated by:  <math>VC = VT - VOFF</math>            Where:            VC = Volume of cuttings or solids (m<sup>3</sup>)            VOFF = Volume of waste disposed of off-site            VT = Total volume of waste (m<sup>3</sup>) and:  <math>VT = 1.2 \times WDp \times 3.14 \times 2000 \times WDM</math>            Where:            WDM = Well diameter (mm)            WDP = Well Depth (m)</p>	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>	<p>Enter data below:</p> VC = _____(m) VT = _____(m) VOFF= _____(m <sup>3</sup> ) WDM= _____(mm) WDP = _____(m)	<input type="checkbox"/>  <input type="checkbox"/>  <input type="checkbox"/>  Stage 2 PSI required

<p>Is a mud list available and can all the additives on the mud list be identified and described?</p> <p>Record the additives and their description (e.g., chrome-free lignosulfonate, aldehyde-based bactericide) on the attached form.</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Were hydrocarbon-based drilling fluids used or were hydrocarbons added to the drilling fluid or was the well a horizontal oil well?</p> <p>If Yes, is documentation available showing that the wastes were disposed of in a manner consistent with the Handbook and, if applicable, the Hazardous Waste Regulation?</p>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> Stage 2 PSI required
<p>If hydrocarbon was present, is the predicted post-disposal hydrocarbon concentration at or below the appropriate CSR standards? (VPH, BTEX, LEPH, HEPH)</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>According to the Handbook, was a toxicity test required for the disposal?</p> <p>If Yes, did the waste pass the toxicity requirements as outlined in the Handbook? (waste must pass either the original or charcoal toxicity test)?</p>	<input type="checkbox"/>  <input type="checkbox"/>	<input type="checkbox"/>  <input type="checkbox"/> Stage 2 PSI required
<p>If the waste failed the toxicity test (i.e., EC50 (15) original and EC50 (15) charcoal treated, reading at 15 minutes &lt; 75%) is there evidence that demonstrates the waste was treated to remove toxicity and retested or disposed of at an approved waste management facility)?</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>The drilling waste disposal conforms to the salinity criteria of the BC Oil and Gas Handbook.</p>	<input type="checkbox"/>	<input type="checkbox"/> Stage 2 PSI required
<p>Was any metal listed on Schedule 3.1 of the Contaminated Sites Regulation added to the drilling fluid?</p> <p>If Yes, can the post-disposal concentration of each metal that was added to the drilling fluid be shown to comply with the appropriate CSR standard?</p>	<input type="checkbox"/>  <input type="checkbox"/> Attach supporting information	<input type="checkbox"/>  <input type="checkbox"/> Stage 2 PSI required

