

Wastewater - FIFM Initial Assessment Sheet

WASTEWATER Assessment Sheet to determine whether works can proceed via SWMS incorporating the use of confined spaces procedure HSP0001 or require a FIFM (either complex or routine)

Project Title / Name		MAXIMO number: _____	Case No:
PART 1 - Criteria for working in wastewater manholes, chambers or shafts when a SWMS (incorporating confined spaces) can be used instead of FIFM. If the below criteria are satisfied, relevant to the work, then work can proceed using a SWMS (incorporating confined space procedure with flow monitoring), otherwise the FIFM procedure is required.			Comments
For developer jobs, please ensure before assessing Form A, the design has been approved in SW Connect/E-developer via Operational Review Report. If design has not been approved, it cannot be assessed.			
1. Is manned entry into live hydraulic asset required?	Select		
2a. For working Above the flow :	Select		
Will the flow be monitored and the work site evacuated should flows reach a pre-determined level			
2b. For working In the flow (are all of the following met)	Select		
- Can the recommended working limit for trained adults, as per the Appropriate safety criteria for people (Engineers Australia report 2010) can be met (see below) - Work is not in a receiving manhole for pumped flow or within 2 km of the rising main receiving MH - Flow management is not specified as part of the works (eg plug or weir board)			
3. Is there any trade waste discharging upstream of work location? If YES, Specialist Gas Tester is required.	Select		
If 2a. or 2b. is Yes then works can be performed under SWMS, if 2a or 2b is No then <u>FIFM is required</u> as per criteria 4 to 11			

Form A2 response for projects that can be performed under SWMS		
1. Does the project involve work above the flow in manholes, chambers or shafts and has been identified as being able to performed under SWMS?	Select	If yes, specify on Form A2 return that project can be carried out via a confined space SWMS that includes: a) flow monitoring as a control b) how the flow will be monitored c) project specific emergency response plan (ERP) with evacuation trigger levels To confirm this, the field plan coordinator needs to: 1. submit a copy of the SWMS for the work, approved and signed off by the person responsible for the works, to Sydney Water prior to works commencing that demonstrates the requirements in the above criteria are satisfied
2. Does the project involve work in the flow in manholes, chambers or shafts and has been identified as being able to performed under SWMS?	Select	If yes, specify on Form A2 return that project can potentially be carried out via a confined space SWMS that includes: a) flow monitoring as a control b) how the flow will be monitored c) project specific emergency response plan (ERP) with evacuation trigger levels To confirm this, the field plan coordinator needs to: 1. complete and submit field investigations, specifically flow depths levels for the time period the work is proposed, and 2. submit a full scope of work with timeframes 3. submit a copy of the SWMS for the work, approved and signed off by the person responsible for the works, to Sydney Water prior to works commencing that demonstrates the requirements in the above criteria are satisfied
Verify that nominated FIFM Plan coordinator is trained and certified		Comments
Is the FIFM Plan coordinator nominated on Form A assessed as "Cert2 – FIFM coordination"	Select	
PART 2 - Criteria for determining whether work will proceed via routine or complex FIFM		
4. Work requires flow control / bypasses in gravity sewer a. 600mm and greater (FIFM plan - complex) b. Less than 600mm (FIFM – routine)	Select	
5. Multiple simultaneous bypasses >1	Select	
6. Traverse inspections on live assets	Select	
7. Isolation of feeder SPS's to downstream Wastewater Treatment Plants or single station flow 200L or greater	Select	
8. FIFM's that require isolation of multiple (> 2) SPS's	Select	
9. FIFM's related to combined sewer / stormwater systems (e.g. Bondi)	Select	
10. Isolation of SPS's with < 4 hours detention time	Select	
11. Any work on pressure sewer, including rising mains, pressure and vacuum sewers	Select	

If any of 4 to 11 above is yes, forward Form A, plans & scope to the relevant Area Team SDO, then discuss & agree with that SDO whether the work needs be completed via FIFM plan and if so, agree whether the FIFM is routine or complex. For complex, Area Teams to complete Form A2 return to Operational Services who then return to the Person Requesting FIFM

Comments:

Assessed as:		Select	FIFM to be approved by:	Select
1. Is FIFM assessed as routine and involves a SPS location?	Select		If yes, specify on Form A2 that a FIFM planning kick off meeting is required	
2. Is FIFM assessed as complex	Select		If yes, specify on Form A2 that FIFM coordinator is to organise a FIFM HIDRA meeting and who will attend from the relevant Network Area team	
Assessed by:		Date:		

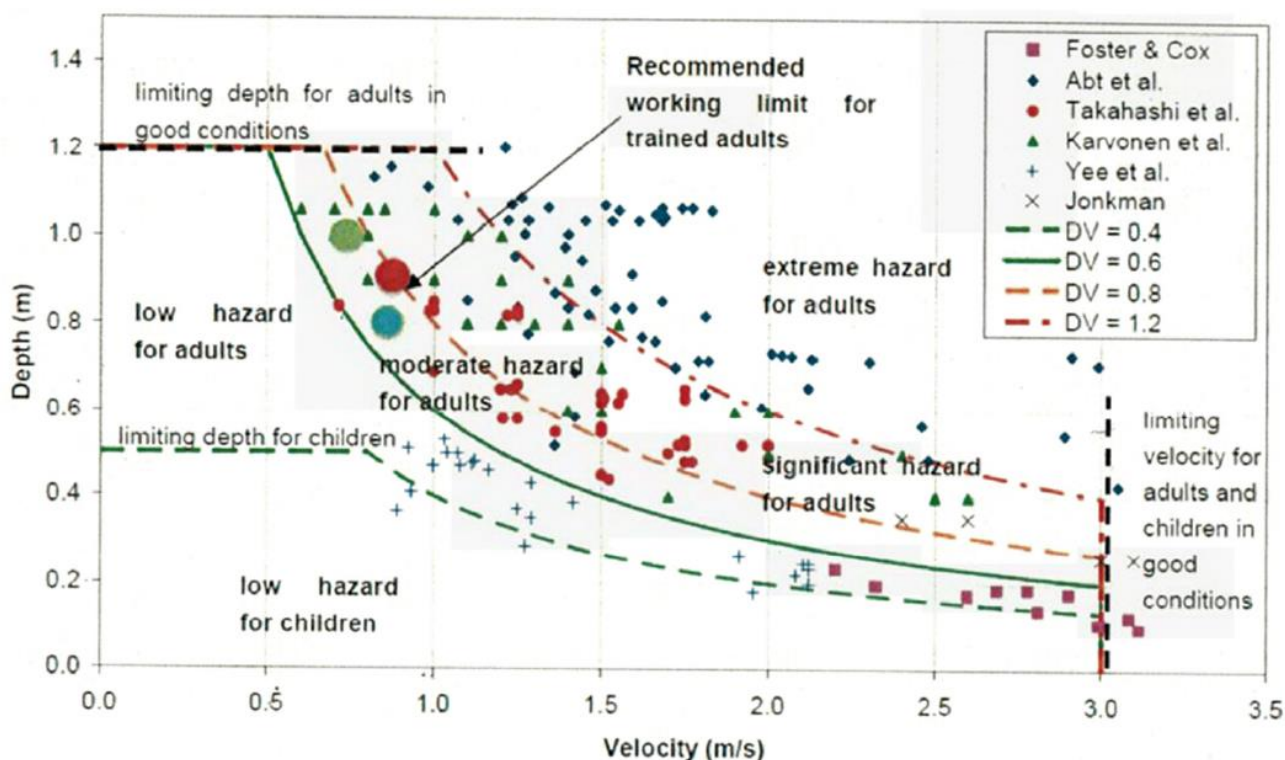


Figure 1: Appropriate safety criteria for people (Engineers Australia report 2010)

Appendix 1: Wastewater Workflow Checklist/Work Instruction

Task	Sub task	Checks/ Tools required	Checked
Receive form A and review	Check form A for completion including clarity of scope of work	Check asset details, location etc using MXES, sewer UBD, HYDRA and WAE as required	
	Verify that nominated FIFM Plan coordinator is trained and certified	Check FIFM training records supplied by TP3 \\Ads.swc\data\HBNA\DATA1\Asset Solutions\Rhodes Network Alliance 1\Shared\CivilMaint\NWA 2\FIFM Training Records If not trained, contract nominated FIFM coordinator and request scanned copy of FIFM card and confirm with TP3	
	Register form A	FIFM register	
Is FIFM required?	Check whether there is a risk of engulfment and assess customer and environmental impacts a FIFM is required, or	Check whether the work: - requires confined space entry as defined in HSP0001 - manned entry into live hydraulic asset, - has any site specific hydraulic engulfment hazards present (ie is there potential to be drowned) and proposed controls - has high system / customer / environmental risks For work above the flow in manholes, chambers or shafts that are identified as being able to performed under SWMS, return the Form A Section 2 specifying that: - project can be carried out via a confined space SWMS that includes: a. flow monitoring as a control b. how the flow will be monitored - a project specific emergency response plan (ERP) with excavation trigger levels, or For work in the flow in manholes, chambers or shafts that are identified as being able to performed under SWMS, return the Form A Section 2 specifying that: - project can potentially be carried out via a confined space SWMS as per item 2, however, to confirm this, the field plan coordinator needs to: a. complete and submit field investigations, specifically flow depths levels for the time period the work is proposed, and b. submit a full scope of work with timeframes (what the	

		work is and how you are going to do it) Based on items a and b, we will then confirm that the project can be carried out via confined spaces SWMS or whether a formal FIFM plan is required If the work is assessed as not requiring a FIFM, a copy of the SWMS for the work, approved and signed off by the person responsible for the works, must be submitted to Sydney Water prior to works commencing that demonstrates the requirements in the above criteria are satisfied For all other projects, return the Form A Section 2 specifying that a FIFM plan is required	
Assess whether FIFM is complex	Check flow, need for multiple bypasses	MVR- Mouse Viewer to attain quick estimates of flows in sewers or	
		HYDSTRA gauge data from Monitoring services or	
		Trunk Models from EES (Trunk model results are also available in MVR) or	
		Engage internal or external gauging contractor	
	Check for any upstream downstream SPSSs	Check sewer UBD, IICATS and HYDRA trace out	
	Check for upstream trade waste discharge	HYDRA sewer tradewaste plot theme and Dr Nobi Spreadsheet	
	Check whether sewer is part of a combined system (e.g.: Bondi system)	Use HIDRA and local knowledge from Area Team if not certain	
	Check detention time	Check detention times in MXES data and whether SPS is subject to saltwater ingress during high tides (Check with Area Teams for local	
		knowledge of any SPSSs near major waterways with evidence of saltwater ingress issues Can also use spread sheet for incident management (MXES downloaded data with all SPSSs) N:\Asset Mgmt\AMD\Incident Management\Wastewater\SPS Contingency Data for Incidents\Contingency Data Summary Sheet-MASTER.xls	
	Check whether the proposed work directly or indirectly affects pressure or vacuum systems or involves rising mains	Check using HYDRA and MXES, E-Plan room work as executed drawings and local knowledge from Area Teams	

Task	Sub task	Checks/ Tools required	Checked
Complete for a non-complex FIFM	Check weather	Refer BOM site to find weather and provide criteria for determining wet weather	
	Trade waste category of SPS & operating parameters	Use MXES, IICATS to find TW category and indicate if significant	
	Internal / external property surcharge risk	Use HYDRA and indicate if risks present	
	What pumps are available	Use MXES, IICATS to find out how many and what type of pumps are available and indicate any specific issues, risks present with them	
	Potential impacts on OCU and CDU from the assets being isolated or vice versa	Use MXES, IICATS to determine	
	Temporary configurations are taking place, What other planned work is taking place	MXES, IICATS / OCRs. Check with Area Teams for other planned work	
	Check whether there are any designed overflow points upstream of isolation and whether those have been considered	HYDRA , WAES	
	Check whether there are any upstream or downstream isolations in progress/planned	FIFM Register	

Wastewater – Checklist to be assessed by SDO before sending complex works to Area Team

	Project Title / Name: Case No.	MAXIMO number:		
1.	Is the scope of the work defined in the accompanying documents with Form A? e.g. the background information/works surrounding the isolation of a pumping station	Yes	No	
2.	Does the FIFM have plans included? E.g. what valves/pumping units etc. are to be isolated	Yes	No	
3.	If a pre-meeting has occurred in relation to Form A, have the minutes been attached to the FIFM plan?	Yes	No	
4.	Is the list of steps outlined in Form H logical and clear?	Yes	No	
		Yes	No	
	Comments:			
		Yes	No	
		Yes	No	
	Assessed by: Print Name Date:	Signature:		

Is FIFM acceptable	Check following for adequacy of FIFM		
	Roles and responsibilities correctly identified and communicated	Form B	
	HIDRA held with key stakeholders and risk and control measures adequately identified	Check Form C for adequacy of risks identification and attendance of relevant stake holders including maintenance provider for the asset	
	Ensure all key stakeholders have been identified and included in FIFM	Form D	
	Trial isolation details given clearly	Form E	
	All valves to be used for FIFM activity identified and included in operational status assessment with the correct	Form F, Schematic Plan	

	valve positions (closed /open) and identified on Drawings / Schematic Plan attached to FIFM Plan		
	Provide log for monitoring data to be captured at appropriate intervals	Form G1	
	Ensured the pumps used for the isolation/or the functioning the of isolated asset are identified for checking their condition\ operational status	Form G2	
	Clearly itemised tasks involved in isolation methodology in proper sequence	Form H	
	Monitoring requirements, frequencies and locations correctly identified	Form I	
	Recommissioning (Have all downstream impacts and controlled measures identified)	Form J	
	Ensure all relevant forms have been used and activities relevant for FIFM considered by using Form K	Form K – Checklist	
Approval of FIFM	Approve if non-complex	Use FIFM complex criteria	
	Seek Area Team approval if complex	Use FIFM complex criteria	
Release FIFM	Check document for completion of planning stage	Check document for completion of planning stage including all relevant signatures and approval by Responsible manager	
Field / Desktop audit	Check whether area team has requested for a field audit on FIFM	Schedule audit date in FIFM register and notify Area Team with an automated reminder sent closer to the date	
	Check whether area team has requested for a completed desk top audit on FIFM	Monitor progress and arrange for timely return of completed FIFM from the initiator to Area Team	