



# Flood Risk Assessment (FRA) Checklist

(ES-NFR-F-001 - Version 10 - Last updated 17/2/14)

**This document should be attached within the front cover of any flood risk assessments issued to Local Planning Authorities (LPA) in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist SEPA in reviewing FRAs, when consulted by LPAs. This document should not be a substitute for a FRA.**

Development Proposal	
Site Name	Barr Killoch Energy Recovery Park
Grid Reference	Easting: 247871 Northing: 620321
Local Authority	East Ayrshire Council
Planning Reference number (if known)	
Nature of the development	Commercial If residential, state type: <input type="text"/>
Size of the development site	3.6 Ha
Identified Flood Risk	Source: Other Source name: None
Supporting Information	
Have clear maps / plans been provided within the FRA (including topographic and flood inundation plans)	Yes
Has a historic flood search been undertaken?	Yes
Is a formal flood prevention scheme present?	No If known, state the standard of protection offered <input type="text"/>
Current / historical site use	Mixed brownfield
Hydrology	
Area of catchment	N/A km <sup>2</sup>
Qmed estimate	<input type="text"/> m <sup>3</sup> /s Method: <input type="text" value="Select from List"/>
Estimate of 200 year design flood flow	<input type="text"/> m <sup>3</sup> /s
Estimation method(s) used *	<input type="text" value="Select from List"/> If other (please specify methodology used): <input type="text"/> If Pooled analysis have group details been included <input type="text" value="Select from List"/>
Hydraulics	
Hydraulic modelling method	<input type="text" value="Select from List"/> Software used: <input type="text" value="Select from List"/>
If other please specify	N/A
Modelled reach length	<input type="text"/> m
Any structures within the modelled length?	<input type="text" value="Select from List"/> Specify, if combination <input type="text"/>
Brief summary of sensitivity tests, and range:	
variation on flow (%)	<input type="text"/> %
variation on channel roughness	<input type="text"/> %
blockage of structure (range of % blocked)	<input type="text"/> % <a href="#">Reference CIRIA culvert design guide R168, section 8.4</a>
boundary conditions:	
(1) type	<b>Upstream</b> <input type="text" value="Flow"/> <b>Downstream</b> <input type="text" value="Select from List"/>
(2) does it influence water levels at the site?	Specify if other <input type="text" value="Select from List"/> Specify if other <input type="text" value="Select from List"/>
Has model been calibrated (gauge data / flood records)?	<input type="text" value="Select from List"/>
Is the hydraulic model available to SEPA?	<input type="text" value="Select from List"/>
Design flood levels	200 year <input type="text"/> m AOD 200 year plus climate change <input type="text"/> m AOD

Coastal	
Estimate of 200 year design flood level	N/A m AOD
Estimation method(s) used	Select from List If other (please specify methodology used): <input type="text"/>
Allowance for climate change (m)	m
Allowance for wave action etc (m)	m
Overall design flood level	m AOD
Development	
Is any of the site within the functional floodplain? (refer to SPP para 203)	No If yes, what is the net loss of storage <input type="text"/> m <sup>3</sup>
Is the site brownfield or greenfield	Brownfield
Freeboard on design water level (m)	m
Is the development for essential civil infrastructure or vulnerable groups?	No If yes, has consideration been given to 1000 year design flood? Select from List
Is safe / dry access and egress available?	Vehicular and Pedestrian Min access/egress level <input type="text"/> m AOD
If there is no dry access, what return period is dry access available?	>1/200 years
If there is no dry access, what is the impact on the access routes?	Max Flood Depth @ 200 year event: N/A m Max Flood Velocity: <input type="text"/> m/s
Design levels	Ground level N/A m AOD Min FFL: <input type="text"/> mAOD
Mitigation	
Can development be designed to avoid all areas at risk of flooding?	Yes
Is mitigation proposed?	Yes
If yes, is compensatory storage necessary?	No
Demonstration of compensatory storage on a "like for like" basis?	No
Should water resistant materials and forms of construction be used?	No
Comments	
Any additional comments:	The proposal is for a new a new MRF and EfW plant on the Barr Killoch site in East Ayrshire. The site is not considered to be affected by tidal, fluvial, pluvial or sewer flood risk. See Flood Risk supporting chapter.
Approved by:	Julian Symmons
Organisation:	Wardell Armstrong
Date:	

21/04/2015

Note: Further details and guidance is provided in Technical Flood Risk Guidance for Stakeholders: [CLICK HERE](#)

\* ReFH not accepted by SEPA for flow estimates in Scotland. Any use of this method should be validated by the use of other, accepted methods.