

The Water Environment (Controlled Activities) (Scotland) Regulations 2011

Licence Application Form E

To be completed for Engineering Activities

How we use your personal information

Under the Data Protection Act 2018 (DPA 2018), we must have a legal basis for processing your information – in this case, processing personal information is necessary to perform our statutory duties (**'Public Task'**).

Some of the ways in which we collect and use the information may be through:

- granting and administering of authorisations and maintaining registers
- investigating environmental complaints
- undertaking formal enforcement action
- maintaining our own accounts and records

The personal information we collect and use may include the following: name; address, including postcode; email address and telephone number. SEPA is required, by law, to organise and maintain public registers, and make these registers available for public inspection. We do this by collecting and using the personal information that applicants (or their agents) share in their applications for SEPA authorisations and SEPA permits. After the application form has been processed, some of the information from the form is added to the public register, and becomes available for public inspection. Signatures, personal email addresses, and telephone numbers are not published, unless publication is statutorily required.

There may be occasions when we are required by law to share your personal information with other organisations, e.g. for regulatory reasons, or because doing so is in the general public interest. Any sharing will be carried out lawfully and securely in accordance with the <u>SEPA Data Protection Policy</u>. For more information on how SEPA handles personal information, please refer to our general Privacy Policy at https://www.sepa.org.uk/help/privacy-policy/

If there is any information you wish to justify being kept from the public register on grounds of commercial confidentiality you should contact SEPA before submission of your application.

You should ensure that any persons named on this form are informed of the contents of this Data Protection Notice

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1: ASSOCIATED and DEPENDENT ENGINEERING ACTIVITIES (Please complete for all applications)

List all engineering activities which are being applied for under this application. Enter the number of each activity at each level of authorisation. Associated activities applied for under a single authorisation will be subject to reduced charges. Activities upon which another controlled activity depends (e.g. bed reinforcement associated with a bridge) are classed as dependent engineering activities and will not be subject to charges. All dependent and associated activities should be included below. Please complete a separate sheet E1-6 for each activity (including any dependent activities)

Activity Category	Activity Type	Registration	Simple Licence	Complex Licence	Dependent activity
SEDIMENT	Sediment removal				
MANAGEMENT See Sheet E1	Sediment addition / reintroduction				
BANK REINFORCEMENT, EMBANKMENTS,	Green bank reinforcement (soft)				
FLOODWALLS AND OTHER BANK	Grey bank reinforcement (hard)				
MODIFICATIONS See Sheet E2	Bank re-profiling				
See Sileet E2	Embankments /floodwalls				
	Removal of bank modifications				
BRIDGES AND OTHER	Bridges				
TYPES OF CROSSING STRUCTURES	Culverts				
See Sheet E3	Causeways				
	Fords				
	Pipeline/cable crossings				
	Removal of crossings				
IN-STREAM or IN-LOCH STRUCTURES	Jetties, platforms, marinas				
See Sheet E4	Boat slips				
	Boulder placements				
	Croys, groynes, flow deflectors				
	Bed reinforcement				
	Removal of structures				
CHANNEL MODIFICATIONS	Straightening and/or resectioning				
See Sheet E5	Realignment			X	
	Culverting for land gain				
	Removal of land gain culvert				
	Flood by-pass channel				
OTHER ENGINEERING ACTIVITIES See Sheet E6	Please see guidance for definition of other activities				

2: ENGINEERING ACTIVITIES - DETAILS

The following information is required for ALL activities listed in Section 1. If there is more than one engineering activity being applied for under this application, and the information in the relevant sections below varies between each activity, then the relevant sections must be copied and completed separately for each activity.

2.1 Best Practice

SEPA promotes general good practice for any works; however this specific test will only apply to licensed activities:

- which cause a failure of an environmental standard
- proposed on a water body already below Good Status or close to the lower class boundary.

This table provides evidence that you have considered Best Practice for the proposed activity. Guidance on Best Practice for a range of activities is available from your local SEPA office.

2.1.1 Justification for Activity.

Please indicate the reason the proposed activity is being undertaken. Also indicate where relevant the underlying nature or cause of the problem being addressed. As part of the proposals for the Earba Pumped Storage Hydroelectric Scheme the water level in Loch Earba will increase. This increase in water level at the lower reservoir (Loch Earba) will inundate the lower reaches of the Moy Burn.

The Moy burn currently meets Loch Earba (which is two lochs linked by a short channel) at the downstream end of the upper loch. Moy Burn is also referred to as Allt a' Mhaigh on some maps.

Mitigation of the negative effects on spawning and habitat loss within the Moy Burn watercourse (and the wider loch margins) would be provided by the introduction of a secondary channel which would create new spawning habitat. This habitat creation would involve the formation of a shallower-gradient secondary channel and pool within the promontory area which will be above the maximum inundation level of the lower reservoir and accessible to spawning fish. The new channel and pool will contain optimal spawning substrates to benefit both tributary spawning Arctic charr, if present, and Brown trout.

A low level weir will divert a proportion of flows along the secondary channel with the main, original channel, being retained for the majority of flows including flood flows.

It should be noted that the lower reaches of the Moy Burn have been altered at least two times since the 1980s. The Moy Burn currently takes the form of an engineered waterway with minimal substrate and as a consequence it is not considered optimal spawning ground.

A short section of the older Moy Burn channel will be utilised as the proposal includes that the Moy Burn is diverted into this older waterway to maximise the available area for the secondary channel works (refer to figure 2.44.1).

Please continue on separate sheet if required.

Document name/reference:

2.1.2 Alternative Approaches.

Please detail all the alternative approaches that have been considered to address the need identified in Section 2.1.1 above.

In response to the potential loss of habitat on the Moy Burn the following alternative approches were considered:

- · Do nothing and accept the habitat loss,
- Rely on other mitigation measures elsewhere on the site, such as the Pitridh aqueduct spawning areas, and
- Alternative secondary channel arrangements in the Moy Burn area.

Please continue on separate sheet if required.

Document name/reference:

2.1.3 Selected Approach.

Please state why your selected approach represents the best practical environmental option.

Please state why any alternatives given in section 2.1.2 above were rejected. Where cost is given as a reason, please provide details. It was not considered viable to accept habitat loss without mitigation particularly when relatively straightforward mitigation options where available. Furthermore it is a target of the project to maximise mitigation where it can be formed successfully. Therefore the option to do nothing was rejected.

Alternative channel arrangements were deemed to be too steep or be susceptible to channel erosion and therefore not taken forward.

The preferred approach and the associated proposed secondary channel and pool will be formed in an area of made ground, the promontories, so would not damage existing habitat out with the inundation area.

Creating optimum habitat will not only offset habitat loss but should improve the current spawning opportunities in the Moy burn which are limited due to the channel modification works that have previously been undertaken in this watercourse.

Please continue on separate sheet if required.

Document name/reference:

SHEET E1: SEDIMENT MANAGEMENT

Please complete Sheet E1 for all sediment management activities. A separate sheet should be used for each individual activity.

PART 1 – Please complete for	Sediment Manag	jement Activi	ities					
1. Type of Activity (please tick)	Sediment remo	val		Sedimer	nt addition	/ reintroductio	n	
2. Type of licence	Simple licence			Complex				
	Dependent acti	vity						
3. Type of surface water affected	River			Loch				
	Wetland			Canal/La	ade			
4. Name of surface water								
5. National grid reference of activity (MIDPOINT) (10 characters e.g. XY 1234 5678)								
If length of activity greater that	an 50m please als	o complete 6	& 7 belov	N				
6. National grid reference of activity (UPSTREAM EXTENT) (10 characters e.g. XY 1234 5678)								
7. National grid reference of activity (DOWNSTREAM EXTENT) (10 characters e.g. XY 1234 5678)								
8. Width of the surface water (m)? (at the point where the activity is to occur) As measured from the toe of one bank to the toe of the opposite bank								
9. Does the activity qualify as an environmental service? (please tick)	YES	YES						
10. If Yes, please provide justification on separate sheet	Document name/reference	: :						
PART 2 – please complete for	SEDIMENT REM	OVAL						
11. Maximum length of watercourse or Loch/Wetland affected (m) measured along the bed			of wate	al maximus rcourse or ad affected	Loch			
13. Will sediment be removed from >50% of the width of the watercourse	YES			NO				
14. Frequency of activity (please tick)	Single		Annual	ly		Other		
15. If Other, please provide further information on frequency and justification on a separate sheet	Document name/reference) :						
PART 3 – please complete for	SEDIMENT ADDI	TION / RE-IN	TRODUCT	ΓΙΟΝ				
16. Maximum length of watercourse or Loch/Wetland affected (m) measured along bed			of wate	al maximus rcourse or ad affected	Loch			
18. Frequency of activity (please tick)	Single		Annual	ly		Other		
19. If Other, please provide further information on frequency and justification on a separate sheet	Document name/reference) :						

SHEET E2: BANK REINFORCEMENT, EMBANKMENTS, FLOODWALLS AND OTHER BANK MODIFICATIONS

Please complete Sheet E2 for all bank modification activities. A separate sheet should be used for each individual activity.

each individual activity.							
PART 1 – Please complete for ba	nk modifications						
1. Type of activity (please tick)	Green bank reinforceme	ent [Emba	ankment			
	Grey bank reinforcemen	nt [Floor	Floodwall			
	Bank re-profiling		Remo	oval			
2. Type of licence (please tick)	Simple licence		Comp	Complex licence			
	Dependent activity						
3. Type of surface water affected (please tick)	River		Loch				
	Wetland		Cana	I/Lade			
4. Name of surface water							
5. National grid reference of activity (MIDPOINT) (10 characters e.g. XY 1234 5678)							
If length of activity greater than 5	0m please also complete	6 & 7 below					
6. National grid reference of activity (UPSTREAM EXTENT) (10 characters e.g. XY 1234 5678)							
7. National grid reference of activity (DOWNSTREAM EXTENT) (10 characters e.g. XY 1234 5678)							
8. Width of the surface water (m) As measured from the toe of one			cur)				
9. Does the activity qualify as an environmental service? (please tick)	YES	NO)				
10. If Yes, please provide justification on separate sheet	Document name/reference:						
PART 2 – please complete for GR	EEN AND GREY BANK RE	EINFORCEMEN	NT AND RE-	PROFILING			
11. Total maximum length of rein	forcement/reprofiling alon	g bank (m)					
12. Type of reinforcement (please tick)	Green (Soft)	13. Bank affo					
	Grey (Hard)	downstream tick)		Right			
PART 3 – please complete for EM	IBANKMENTS & FLOODW	ALLS					
14. Total maximum length of modification along the bank		15. Bank affo		Left			
(m)		downstream tick)	n) (please	Right			
16. Distance from bank top (m) (enter 0m if on bank top)		17. Raised h (above exist height)					
PART 4 – please complete for RE	MOVAL OF BANK MODIFI	CATIONS					
18. Type of structure removed							
19. Total length of modification removed (m)		20. Bank aff		Left			
(As measured along the bank)		downstream tick)		Right			

SHEET E3: BRIDGES AND OTHER TYPES OF CROSSING STRUCTURES

Please complete Sheet E3 for river and loch crossings. A separate sheet should be used for each individual activity

PART 1 – please complete	e for all river and loch	crossing act	tivities		
1. Type of activity (please tick)	Bridge		Ford		
(please tick)	Culvert		Pipeline/Cable		
	Causeway		Removal (pleas	e indicate which	
2. Type of licence (please tick)	Simple licence		Complex licence	·	
(picase tion)	Dependent activity				
3. Type of surface water affected (please	River		Loch		
tick)	Wetland		Canal/Lade		
4. Name of surface water					
5. National grid reference of activity (MIDPOINT) (10 characters e.g. XY 1234 5678)					
If length of activity greater	r than 50m please also	o complete 6	8 & 7 below		
6. National grid reference of activity (UPSTREAM EXTENT) (10 characters e.g. XY 1234 5678)					
7. National grid reference of activity (DOWNSTREAM EXTENT) (10 characters e.g. XY 1234 5678)	И				
8. Width of the surface wa As measured from the toe					
PART 2 – please complete	for BRIDGES				
9. Number of in-			imum length	Left	
channel supports (if none, please enter '0')		of abutments bank (m)	along each	Right	
11. Total maximum area of all in-channel		2. Minimum		Left	
supports (m²)		each bank to		Right	
13. Minimum distance abu from bank top on each ba	nk (m)	Left		Right	
PART 3 – please complete	for CULVERTS				
14. Maximum length of cu	Ivert along bed (m)		15. Diameter / dir	nensions of culvert	(m)
16. Type of culvert (please tick)	x	Pipe		Arch	
17. Is culvert to be laid be	low natural bed level	Yes		No	
PART 4 – please complete	for FORDS & CAUSE	WAYS			
18. Maximum length of be (m) (measured parallel to		19	9. Total maximum	area of bed affecte	ed (m²)
PART 5 – please complete	for PIPELINE/CABLE	CROSSING	S		
20. Diameter of pipeline/cable (m)		lumber of in-	channel supports	3	
22. Position of pipeline/cable (please tick	Below	On bed		Above channel	
23. If set below bed level p		num depth b	uried below bed (

SHEET E4: IN-STREAM OR IN-LOCH STRUCTURES

Please complete Sheet E4 for in-stream and loch structures. A separate sheet should be used for each individual activity.

cacif individual activity.											
PART 1 – please complete for	all in-stream a	nd loch stru	ctures								
1. Type of activity (please tick)	Jetties, platf marinas	orms,		(Croys, g	roynes	s, flow d	eflect	ors		
	Boat slips			E	Bed rein	forcen	nent				
	Boulder place	ements					se also i		te		
2. Type of licence (please tick)	Simple licen	ce		(Complex	(licen	ce				
	Dependent a	ctivity									
3. Type of surface water affected (please tick)	River			L	_och						
	Wetland			(Canal/La	ade					
4. Name of Surface Water											
5. National grid reference of activity (MIDPOINT) (10 characters e.g. XY 1234 5678)											
If length of activity greater that	n 50m please	also comple	te 6 & 7	7 below							
6. National grid reference of activity (UPSTREAM EXTENT) (10 characters e.g. XY 1234 5678)											
7. National grid reference of activity (DOWNSTREAM EXTENT) (10 characters e.g. XY 1234 5678)											
8. Width of the surface water (m)? (at the point where the activity is to occur) As measured from the toe of one bank to the toe of the opposite bank											
9. Does the activity qualify as	an environmer	ntal service?) (pleas	se tick)	YES	<u> </u>			NO		
10. If Yes, please provide			1	•					110		
justification on separate shee	Document name/refe	-									
PART 2 – please complete for	JETTIES, PLA	TFORMS, M.	ARINA	S AND	BOAT S	LIPS					
11.Total maximum length of bank/shore affected (m)			into		m lengtl water f i)						
13. Total maximum area of Loch/Wetland affected (m²)		14. Type o		cture	Solid			(Stilted		
PART 3 – please complete for	BOULDER PL	ACEMENTS									
15. Total maximum length of reach affected (m)					aximum ted (m²)						
PART 4 – please complete for	CROYS, GROY	YNES, FLOW	/ DEFL	ECTOR	S						
17. Maximum length of bank affected (m)			into		m lengtl water f i)						
19. Total maximum area of be	d affected (m²)										
PART 5 – please complete for	BED REINFOR	CEMENT									
20. Maximum length of bed re (measured parallel to banks) (tal maxi ffected (area of				
22. Position of bed reinforcem	ent (please tic	k)	Belov	v bed				On b	ed		
23. If set below bed level pleas depth bed reinforcement burie											

SHEET E5: CHANNEL MODIFICATIONS

Please complete Sheet E5 for all channel modification activities. A separate sheet should be used for each individual activity.

PART 1 – Please complete for all channel modifications														
1. Type of Activity				mounic	alions	Bama		of lane	ا مما		ulvant			
(please tick)		Straightening, resectioning				Kemo	moval of land gain culvert							
	R	ealignme	ent			Floor	od by-pass channel							
	C	ulverting	for lan	d gain										
2. Type of licence (please tick)	Si	imple lic	ence			Comp	plex	licenc	е					
,	D	ependen	t activit	ty										
3. Type of surface water affected	Ri	iver				Loch								
(please tick)	W	etland				Cana	I/Lad	de						
4. Name of surface war	ter	Moy	Burn			<u></u>								
5. National grid referer of activity (MIDPOINT) (10 characters e.g. XY 1234 5678)		N	N	4	8	6	3		8		3	2	8	
If length of activity gre	ater	than 50ı	n pleas	e also d	omplete 6 &	7 below	•							
6. National grid referer of activity (UPSTREAN EXTENT) (10 character e.g. XY 1234 5678)	1	N	N	4	8	9	4		8		3	2	4	
7. National grid referer of activity (DOWNSTREAM EXTENT) (10 character e.g. XY 1234 5678)		N	N	4	8	4	9	9 8 3 4 3			3			
8. Width of the surface As measured from the								ur)		ups	roxima tream		channel m wide point o	at the
9. Does the activity qu tick)	alify	as an er	nvironm	ental s	ervice? (plea	se Y	ES		X	N	Ю			
10. If Yes, please provi		neet	D	ocume	nt name/refe	ence:	P	Please	refe	r to	CAR Li	cence R	eport	
PART 2 – please comp			AIGHTE	NING, F	RESECTIONII	NG AND	REA	LIGNI	MEN ⁻	Т				
11. Maximum length of original channel affect		m) 35	50m		12. If releva		imun	n leng	th of	nev	N	102	20m	
13. Width of new channel (m) Nominally 1.2m at base of secondary channel with local widening 1.2m at														
PART 3 - please comp	lete	for CUL	VERTIN	G FOR	LAND GAIN (Refer to	SEF	PA Po	sitior	ո Sta	atemen	t <u>WAT-F</u>	PS-06-02)	
15. Maximum length of along bed (m)	f cul	vert			16. Diamete (m)	r/dimen	sions	s of cu	ılver	t				
17. Type of culvert (please tick)	БОХ													
(please tick)			al bed	evel	Yes]	No						
(please tick)	belo	ow natur				ed below] v sur		m)					
(please tick) 18. Is culvert to be laid 19. If set below bed lev	l belo	ow natur lease sti	pulate i	minimu	n depth burio	ed belov	y sur		m)					
(please tick) 18. Is culvert to be laid	l belo	ow natur lease sti	pulate i	PASS C	n depth burio	jth of			m)	0m				

22. Operational return period (e.g. 1 in 5 years)	Designed for flows up to Q1, original channel will take all residual flow including storm flows	23. Is catchment transfer involved? (please tick)	YES	NO	
24. If Yes to Q23, provide details	Document Ref :				

SHEET E6: OTHER ENGINEERING ACTIVITIES

Please complete Sheet E6 for other engineering activities (not defined above). A separate sheet should be used for each individual activity. Before completing this application, please check with your local SEPA office that an application is required. SEPA would normally only require an application for activities not defined elsewhere in the CAR practical guide, if a significant adverse impact was likely.

	•	ai guide, ii a sigriilicant adverse impact was ii	itory.
PART 1 – please complete for	all activities		
Type of activity (please provide full details of the type of activity being applied for).			
Continue on separate sheet if necessary	Document name/reference:		
2. Type of licence	Simple licence	Dependent activity	
3. Type of surface water affected (please tick)	River	Loch	
	Wetland	Canal/Lade	
4. Name of surface water			
5. National grid reference of activity (10 characters e.g. XY 1234 5678)			
6. Width of the surface water (m)? (at the point where the activity is to occur) As measured from the toe of one bank to the toe of the opposite bank			
7. Does the activity qualify as an environmental service? (please tick)	YES	NO	
8. If Yes, please provide justification on separate sheet.	Document name/reference:		

3: ADDITIONAL INFORMATION

In addition to completing the relevant sections above, the following information MUST be clearly referenced and submitted with this application.

Please provide the following	for all activities:	
1. Accurate SCALE DRAWINGS of any design structures or proposed modifications For further information on Large infrastructure design drawings please see SEPA guidance 'Principles of Engineering Drawings: Infrastructure Projects'	Document name(s)/reference(s):	Figure 2.44.1 Moy Burn Habitat Enhancement Works - Area Plan Figure 2.44.2 Moy Burn Habitat Enhancement Works - Weir Layout Plan Figure 2.45 Moy Burn Habitat Enhancement Works - Longitudinal Sections Figure 2.46 Moy Burn Habitat Enhancement Works - Cross sections and Details Figure 2.47 Moy Burn Habitat Enhancement Works - Weir GA
2. PHOTOGRAPHS of area where activity is to be carried out	Document name(s)/reference(s):	Photographs are included within within the CAR Licence Report, App D Hydromorphology Technical Appendix
3. METHOD STATEMENT detailing how each activity is to be carried out, any temporary construction works associated with controlled activities, details of any machinery to be used and a biosecurity plan to prevent the spread of invasive non-native species as a result of the activity ¹ . Please note that it is compulsory to submit this with the application if activities are within screening distance of a protected area	Document name(s)/reference(s):	On completion of the promontories then the secondary channel can be built in the dry. The lower stretch of the Moy burn would also be diverted towards its previous channel, refer to Figure 2.44.1. The Moy burn would be locally diverted around the weir structure so this can be built in the dry. On completion of the weir, the secondary channel can be opened to flow. The introduction of the new aqueduct into operation will not present an INNS risk. A full RAMS document of the Moy channel would be submitted as a pre-commencement condition.
4. Details of any other existing or past ENGINEERING WORKS, STRUCTURES OR OTHER MODIFICATIONS located within 250m upstream and downstream of the proposed works	Document name(s)/reference(s):	It is evident that the Moy burn has been diverted a number of times in the last century. It is understood that this work was part of the works to construct the dam that controls flow from the upper Loch Earba to the lower Loch Earba as part of the existing Ardverikie Hydro Scheme operation.

¹ For example the check, clean, dry procedure as outlined in the GB non-native species secretariat website (http://www.nonnativespecies.org/checkcleandry/biosecurity-for-everyone.cfm) and guidance set out in GPP5 (http://www.netregs.org.uk/media/1418/gpp-5-works-and-maintenance-in-or-near-water.pdf?utm_source=website&utm_medium=social&utm_campaign=GPP5%2027112017)

Biosecurity and management of invasive non-native species for construction sites and Controlled Activities

(https://www.sepa.org.uk/media/163480/biosecurity-and-management-of-invasive-non-native-species-construction-sites.pdf)

5. Any other information (if appropriate please provide detail of any other information submitted in support of the application e.g hydromorphology/ecology reports)	Document name(s)/reference(s):	Please refer to the CAR Licence Report, particualry the aquatic exology techincal appendix (Appendix J).

Please note, in particular circumstances SEPA may require further information on the justification for your proposals, their environmental impact and necessary mitigation measures. To avoid delays in processing your application, please discuss with your local SEPA office if your activity is likely to require these assessments.