

# DETERMINING IMPACTS AND RISK

**Information requirements of the  
pollution regulators**

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**ENVIRONMENT  
AGENCY**

# Introduction

- New obligations for SEPA and the Environment Agency
  - IPPC and the Habitats Regulations
- New approach to assessments
- National risk assessment of power stations
- Summary

# Habitats Regulations 1994

Provisions for the protection of European Sites

- Assessment of new 'plans or projects':
  - Determine '*likely significant effect*'
  - Appropriate Assessment
  - Conservation Objectives
  - Consultation with conservation agencies
  - Precautionary approach required

- Plan or Project' includes new PPC application, substantial variation, existing processes regulated under IPC and brought in under prescribed date.
- Habitats Regulations require:-
  - Review of existing permissions when SACs/ SPAs become fully designated
  - the 'REVIEW OF CONSENTS'

# Basis of Review of Consents

Competent Authorities must:

- As soon as reasonably practicable after SACs/ SPAs designated...
- Making use of existing review procedures...
- Review effects of existing permissions...
- ... alone & in combination with other permissions
- In light of conservation objectives for SACs/SPAs
- Depending on likely effect the permission is having...
- ... **confirm, amend or revoke the permission**

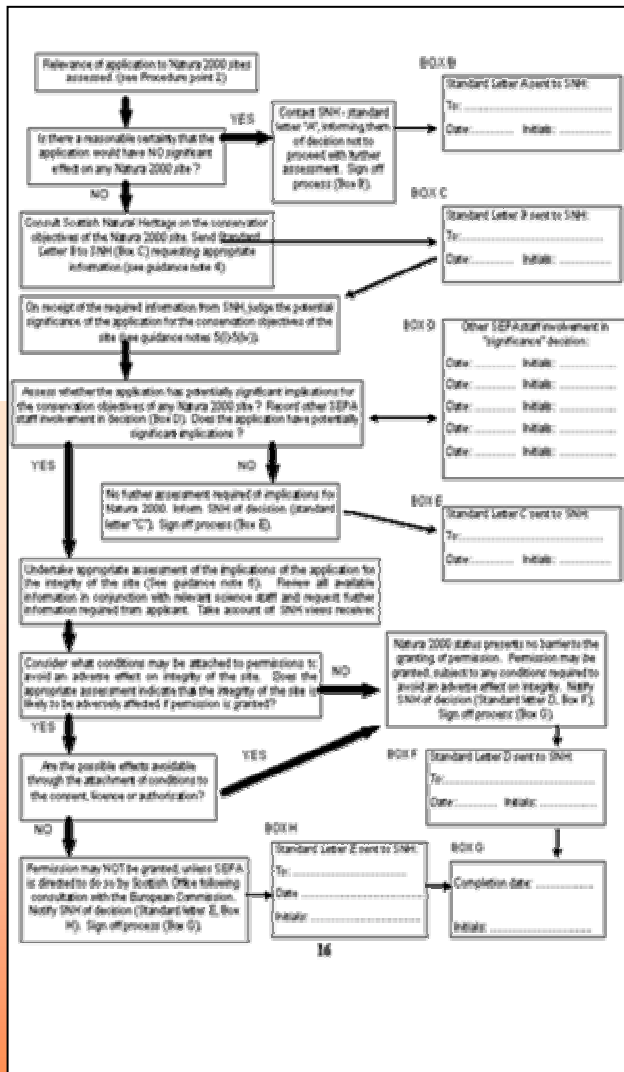
# General approach for new permissions and review

- Risk assessment principles
- Staged approach
- Increasing level of detail depending on risk

# SEPA Natura 2000 protocol

## SEPA's draft process for appropriate assessments:

- preliminary assessment of need
- SEPA liaison with SNH over what AA should contain or consider
- internal SEPA liaison - Ecology, modellers etc
- make appropriate assessment
- consideration of conditions



**AND – the Natura Review of Consents process**

# Stage 1 – Relevance

- Identify ‘relevant’ installations
- Coarse filter
- Identify all SAC/SPAs potentially within the footprint of the installation
- For LCPs, emissions to air have long & short range effects



## Stage 2 - Likely Significant Effects

- likely significant effect alone/in-combination
- trigger for more detailed appropriate assessment
- Conservation agency staff should check designated sites and their features are correct
- Regulators will prioritise sites according to potential risk of acidification or eutrophication

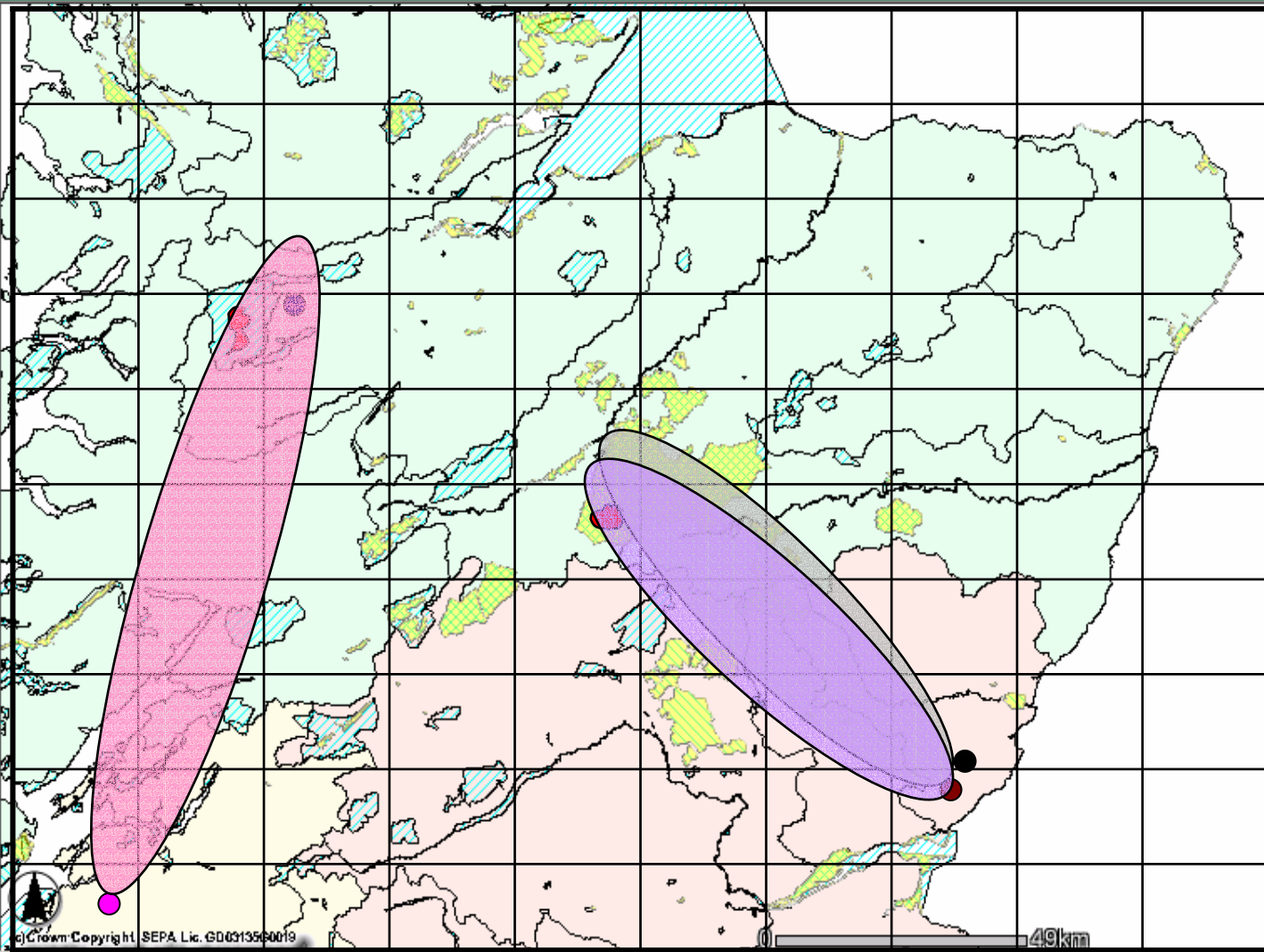
# SEPA Interactive Map

Select Rectangle

- Zoom In
- Zoom Out
- Zoom Last
- Pan
- Identify
- Find
- Select
- Unselect
- Print
- Help
- Zoom To :
- \* Select one \*
- Overview?

**Designations**

- Selected Features
- SPA
- SAC



2	Wester Ross Lochs	03ng97wr	1980.98	Thu, 7 Dec 2000 00:00:00	Highland		UK900
3	Dornoch Firth and Loch Fleet	03nh78df	7898.88	Mon, 24 Mar 1997 00:00:00	Highland	0	UK900

# Stage 2 - Likely Significant Effects

- Details of the predicted process contribution to pollutant concentrations and deposition at the European site(s)
- Details of background pollutant concentration and deposition at the European site(s)
- Predicted environmental concentration and deposition at the European site(s)
- Comparison with appropriate environmental benchmarks
- Judgement of likely significant effect, alone and in combination

# Stage 3 - Appropriate Assessment

- Habitats Regulations do not specify how to do an Appropriate Assessment. However;
  - we must consult the statutory conservation agencies e.g. scope, content, features etc.
  - should not be influenced by wider planning/economic issues.
  - inform judgement of no adverse effect on integrity
  - precautionary principle applied
- This is an iterative process. There is not a 'fit-all' model.

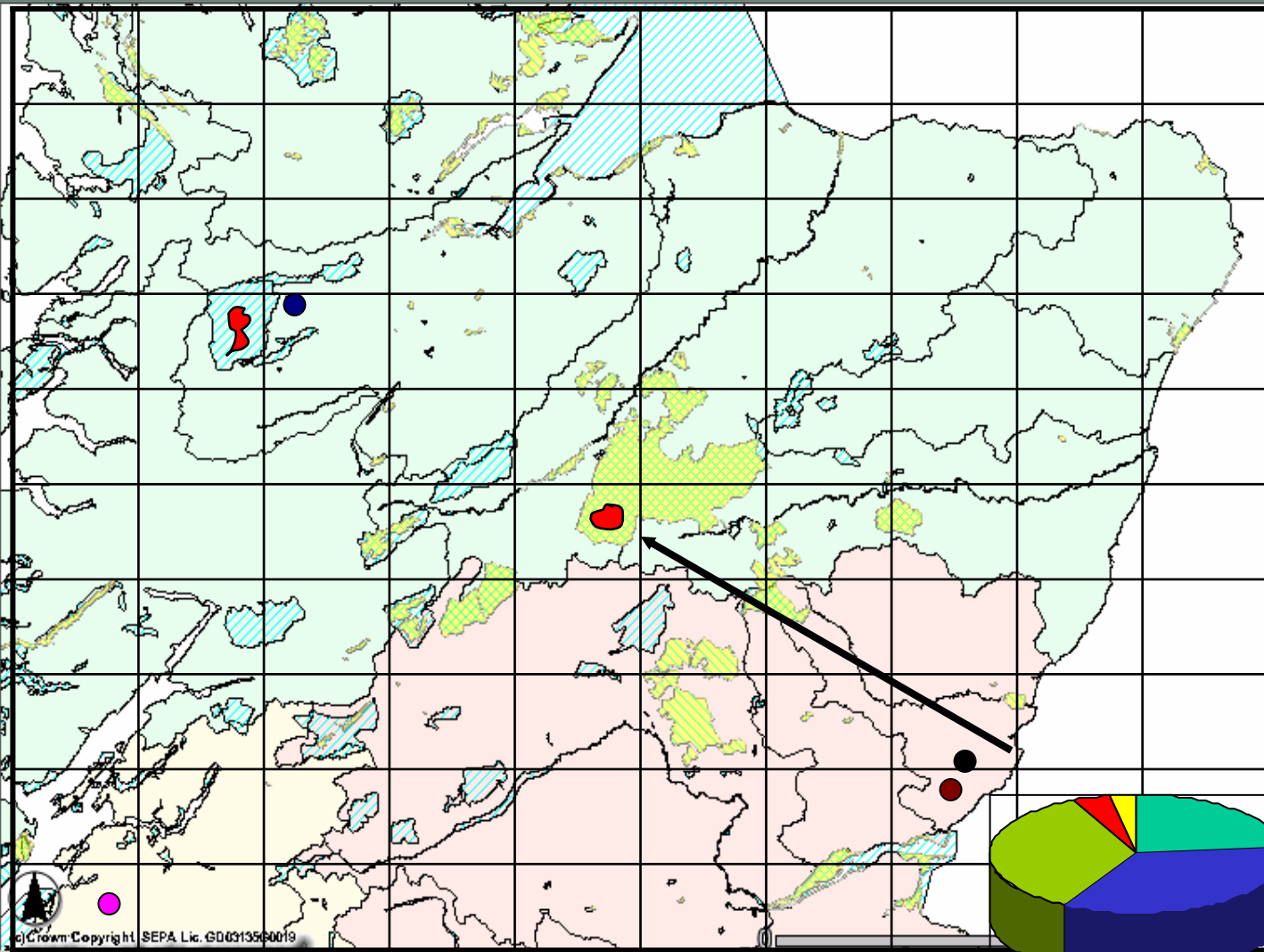
# Stage 3 - Appropriate Assessment

- Confidence & how representative is work?
  - Ground truth assessment & location of features
  - Refine information in relation to C.Load/Levels & detailed modelling
  - Can we measure an adverse effect?
  - How is the site managed?
  - What other modifying factors are there (e.g. slope, altitude, rainfall)?
  - Are there any synergistic effects of pollutants or biotic/abiotic factors

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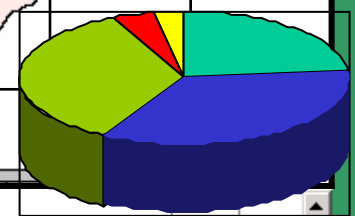
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# Stage 4 – Decision Time

- Policy options – mechanisms to reduce total background
- Affirm, modify or revoke authorisations
- Operator can appeal
- Secretary of state

# Regulators' approach for LCPs

- National risk assessment for review of consents
- For assessment of likely significant effect:-
  - Compare the proportion of deposition derived
    - from regulated sources
    - other regulated/non-regulated sources
  - Against the acidity and nutrient nitrogen critical load for each sensitive SPA/SAC site.
- Where significant contribution undertake appropriate assessment (integrated with local assessment)



# Challenges

- Many!
- Uncertainties in modelling
- Information on features – digital geographic information often not available
- Sensitivity of features/sites to air pollutants
- Understanding potential impacts in the context other influences on site (hydrology, climate etc)
- Lack of information on air pollution impacts (historic or present) on site condition
- **Need strong science to support decisions**

# Summary & Conclusions

- The regulators have fundamentally reassessed the way they assess permits
- Challenging
- The conservation agencies must give more consideration to current site management.
- Public registers – Aarhus
- Co-operation between regulator and adviser