



# Connecticut Department of Energy and Environmental Protection



Connecticut Department of  
**ENERGY &  
ENVIRONMENTAL  
PROTECTION**

- Proposed –  
3 New General Permits  
for Dam Safety

**Dam Safety Informational Meeting**

DEEP Phoenix or Holcomb

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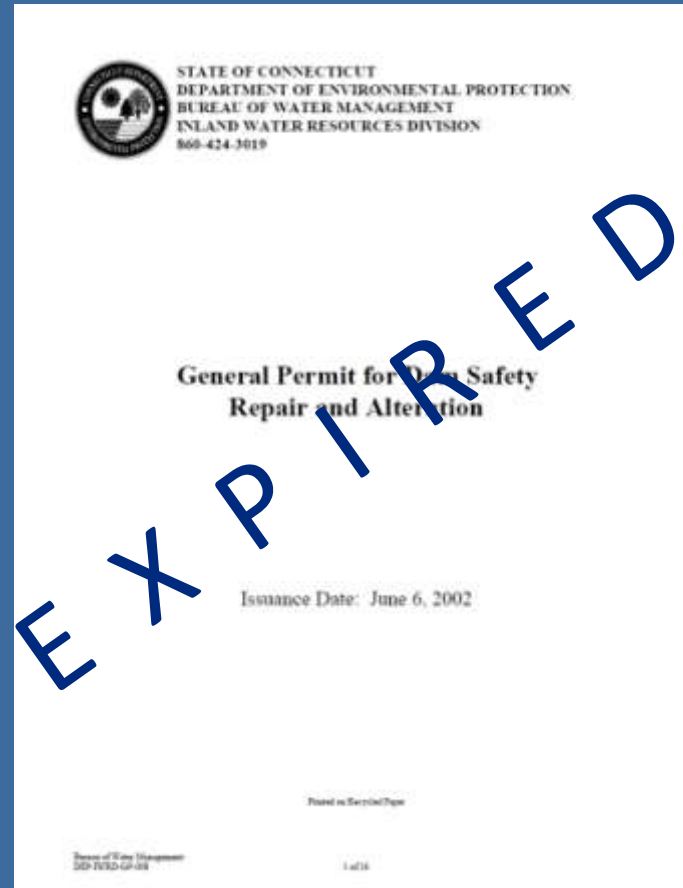
May 1, 2014



Connecticut Department of Energy and Environmental Protection

# Proposed General Permits for Dam Safety

The previous Dam Safety General Permit was issued on 6/6/2002 and expired on 6/6/2012.



# Proposed General Permits for Dam Safety

## Authority - Section 22a-411(a):

- “The Commissioner may issue a general permit for any minor activity regulated under sections 22a-401 to 22a-410.”
- “The activity may cause only minimal environmental effects when conducted separately and would cause only minimal cumulative environmental effects.”
- “Such activities may include routine maintenance and routine repair of any dam, dike, reservoir or other similar structure.”



# Proposed General Permits for Dam Safety

## Do you need a permit? Maintenance Vs. Repairs?

- In General,  
No Dam Safety Permit is required for Maintenance Work on Dams.
- Dam Safety Permits are Required for “Substantially ” Repairing a dam.

*“22a-403(a): Before any person constructs, alters, rebuilds, substantially repairs, adds to, replaces or removes any such structure, such person shall apply to the commissioner for a permit to undertake such work.”*

Can substantially repairing a dam be a minor activity?



# Proposed General Permits for Dam Safety

## What is a General Permit?

- A General Permit is “issued” by the Commissioner to the general public.
- Provides “pre-“ authorization for certain regulated activities.
- Activities must be minor and have minimal effect on the environment.
- Before a general permit is issued:
  - Public input and comment are received and incorporated.
  - Draft Permits are made available during Public Notice.
  - Public Hearing is Held.



# Proposed General Permits for Dam Safety

## What is a General Permit? (continued)

- **What is a “minor” dam repair activity?**
  - Small Scope?
  - Small Scale of project?
  - Small relative to what?
  - Less technical, risky?
  - None of the above?



# Proposed General Permits for Dam Safety

## What is a General Permit? (continued)

- **The environmental effects must remain “minimal”**
  - Wetland impacts? - eligible for ACOE Category 1 coverage.
  - Endangered Species? Know about them and address issues.
  - Fisheries interests? Stream flow issues? – address those.
  - Drawdowns? Not authorized by these permits.
  - Exemptions exist for drawdowns for dam repairs (notices & BMPs).





# Proposed General Permits for Dam Safety

## Advantages of General Permits

- No newspaper notices, no public comment periods.
- Instant authorization or quick approval process.
- Public Act 13-197 has eliminated the 60 day waiting period.
- A notice to the municipality may be required.
- Environmental effects are minimal and resolutions built-in.
- Dam owners are quickly authorized to complete maintenance and minor repairs.
- More safe dams: More maintenance and repairs to dams will occur with less delays caused by permitting.



# Proposed General Permits for Dam Safety

## What is a General Permit? (continued)

- There are three categories of General Permits which authorize different levels of activities.

**Categories increase in complexity and scope**

Non-Filing

Filing-Only

Approval of Filing Required



# Proposed General Permits for Dam Safety

Three categories of General Permits are planned to be issued in 2014:

- **Non-Filing Category** – authorized once permit is issued.
- **Filing-Only Category** – not authorized until filing is made.
- **Approval of Filing Required Category** – not authorized until the applicant receives approval of the filing.



# Proposed General Permits for Dam Safety

## CATEGORY: Non-filing

No filing fee. Authorization active once permit is issued.

We propose this category will authorize the following:

### Maintenance

- Cutting and removing trees.
- Maintaining / Restoring grass cover.
- Replacing missing and scoured riprap.
- Exercising / Maintaining gates and valves.
- Repairing or installing seepage monitoring equipment.
- Replacing weir boards.
- Removing debris & sediment from spillways & intakes (no wetlands impacts or filling).



# Proposed General Permits for Dam Safety

## CATEGORY: Non-filing

**Municipal Wetlands permitting exemption for routine maintenance at a dam:**

22a-403(b) says: *“..An applicant for a permit issued under this section to alter, rebuild, repair or remove an existing dam shall not be required to obtain a permit under sections 22a-28 to 22a-45a, inclusive..”*

*(The Inland Wetlands and Watercourses Act)*

This will allow dam owners to conduct these routine maintenance activities without coming before a municipal wetlands agency for a permit.



# Proposed General Permits for Dam Safety

## CATEGORY: Non-filing



Restoring grass cover



# Proposed General Permits for Dam Safety

## CATEGORY: Non-filing

We propose this category will authorize the following repairs:

### Repairs

- Surface patching to limits specified.
- Concrete repairs done by hand to limits specified.
- Repointing masonry to a maximum volume of mortar specified.
- Filling animal burrows by hand to limited quantity of burrows.





# Proposed General Permits for Dam Safety

**CATEGORY: Non-filing**



Small Scale Surface Patching





# Proposed General Permits for Dam Safety

## CATEGORY: Filing-Only

Filing fee may be required.

Authorization to conduct activities is not active until filing is made.

- Two levels of activities based size of dam.
- Formulas use dam height and impoundment storage capacity.



# Proposed General Permits for Dam Safety

## CATEGORY: Filing-Only (continued)

- Smaller Dams: (dam height and storage limited).
  - Filing includes photos and descriptions of the proposed repairs.
  - Work may be done without P.E. oversight.
  - Photo report documenting work must be submitted.
- Larger dams
  - Filing includes photos and descriptions of the proposed repairs.
  - Work must be done with P.E. oversight.
  - P.E. must submit as-built drawing or report.



# Proposed General Permits for Dam Safety

## **CATEGORY: Filing-Only** (continued)

This permit is anticipated to authorize the following repairs:

- Concrete patching and repair – areas and volume limits.
- Masonry Repointing – maximum volume of mortar specified.
- Gravity and Pressure Grouting.
- Filling animal burrows – maximum quantities specified.
- Restoring slopes and top of dam to original design – fill volume limits.
- Sliplining outlet pipes.
- Installing toe drains, trash racks, security and safety fencing.
- Repairs to low level outlet structures that can be done with minimal excavation.



# Proposed General Permits for Dam Safety

## CATEGORY: Filing-Only (continued)



Re-pointing  
Masonry

Possible fit for  
small dam, no  
engineer level.



# Proposed General Permits for Dam Safety

## CATEGORY: Filing-Only (continued)



Concrete  
Repair on  
Larger dam.

PE oversight  
required?



# Proposed General Permits for Dam Safety

## CATEGORY: Approval of Filing Required

Filing fee required – 50% municipal discount.

Authorization not active until complete filing has been reviewed / approved.

- Limits on scope of work based on formulas to keep projects “minor”.
- Professional engineer must supply plans and provide construction oversight.
- Professional engineer must submit an as-built once complete.





# Proposed General Permits for Dam Safety

## **CATEGORY: Approval of Filing Required** (continued)

This permit is anticipated to authorize:

- Repairs covered in the Non-Filing and Filing-Only categories – more scope.
- Concrete repairs requiring formwork and reinforcing steel.
- Restoring and grading of embankment crests and slopes – increased limits.
- Placing new or restoring riprap erosion protection.
- Dam removals and fish passage projects:
  - Negligible hazard class (AA) dams may be removed without a Dam Safety permit, but other authorizations may be required.



# Proposed General Permits for Dam Safety

**CATEGORY: Approval of Filing Required** (continued)



Larger Scale  
Concrete patching  
and Restoration.



Connecticut Department of Energy and Environmental Protection



# Proposed General Permits for Dam Safety

**Comments and suggestions regarding these categories and activities are welcomed.**

**More information will be available on the  
Dam Safety Website:**

**[www.ct.gov/deep/dams](http://www.ct.gov/deep/dams)**



# Questions?



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