



Thomas C. Jorling  
Commissioner

December 13, 1990

MEMORANDUM

TO: Regional Water Engineers, Bureau Directors, Section Chiefs

SUBJECT: Division of Water Technical and Operational Guidance  
Series (3.1.2), DAM SAFETY INSPECTION AND REMEDIATION PROCEDURES  
(Originator: Mr. Kelley)

I. PURPOSE

The purpose of this guidance is to clarify procedures, roles and responsibilities of Central and Regional staff involving:

1. the inspection and remediation of high hazard (Class C) dams;
2. the inspection and remediation of moderate hazard (Class B) dams which are at least 6 feet high and store more than 50 acre feet or are at least 25 feet high and store more than 15 acre feet (major size dams) and the inspection of major size, primary source water supply dams in the low hazard category;
3. the treatment of illegal dams.

II. DISCUSSION

Field inspections and engineering analysis by the Central Office Dam Safety Section (DSS) reveals that a number of high hazard dams require additional study and remedial work. Where owners are cooperative, the DSS will initiate follow up remedial actions with the dam owner as needed, keeping regions informed. In cases where owners are uncooperative, the Regional offices with support from the DSS, will take action as required to bring the high hazard facility into compliance. The high hazard (Class C) dams will receive the highest priority because of the potential impact that a dam failure will have on the safety of the downstream residents.

III. GUIDANCE

1. Inspection and Remediation - of High Hazard Dams

The DSS is responsible for:

- the planned inspection and evaluation of dams on a Statewide basis; (This will include technical judgments and determinations, communicating with owners regarding deficiencies; reviewing and approving engineering reports and plans.)
- providing Region with referral package where enforcement is contemplated;
- keeping regions informed regarding actions within the Region;
- providing expert testimony at hearings.

The Regions are responsible for:

- determining and integrating regional concerns;
- reviewing referral packages and scheduling for docketing sessions;
- determining the method of enforcement;
- negotiating compliance with owners;
- issuing notices and conducting hearings;
- compliance follow-up.

Appendix I, Dam Safety Referral Procedures for High Hazard (Class C) Dams, describes, in detail, the roles and responsibilities of the DSS and the Regions where enforcement action is deemed necessary.

2. Inspection and Remediation of Moderate Hazard Major Size Dams and Primary Source Water Supply Dams (Major Size) in Low Hazard Category

The DSS is responsible for:

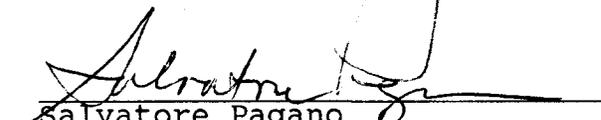
- planned inspections and evaluations of dams on Statewide basis;
- communicating with owners regarding deficiencies;
- keeping Regions informed regarding actions within the Region;
- reviewing and approving engineering reports and plans;
- advising the NYSDOH when deficiencies are discovered in the water supply dams.

The regions are not routinely involved with dams in this category.

Any Class B dams assessed by the DSS as being unsafe and in imminent danger of failure will be evaluated on a case by case basis. This may lead to delegation to the Region for enforcement with DSS support.

3. Illegal Dams

Illegal dams will be addressed according to the procedures outlined in Appendix II. The Regions will determine the follow up action that is required. The DSS will provide assistance for structures in the high and moderate hazard category.

  
Salvatore Pagano  
Director  
Division of Water

cc: Dr. Banks  
Mr. Campbell  
Ms. Chrimes  
Mr. Bruening  
Regional Engineers for Environmental Quality

## APPENDIX I

### DAM SAFETY REFERRAL PROCEDURES FOR HIGH HAZARD (CLASS C) DAMS

1. When the investigation by the Dam Safety Section (DSS) reveals that the dam requires additional study and remedial work, the DSS will initiate follow up remedial actions with the dam owner.
2. Where owners are uncooperative, the dams will be referred to the Region for enforcement action.
3. For each dam, a referral package will be prepared by the DSS and transmitted to the Region. This package will contain descriptive material needed to facilitate Regional review, supporting information regarding the unsafe condition of the dam and the reason why enforcement action is necessary. When public water supply dams are involved, the Department of Health as well as the Bureau of Water Resources of the Division of Water will be notified.
4. The Region will review the referral package and take appropriate action.
5. The DSS engineer responsible for the referral structure will attend Regional docketing sessions at the request of the Region.
6. If a hearing is required, the DSS staff will provide draft prefiled testimony for review by the Region.
7. The Region will conduct and DSS staff will provide expert testimony at enforcement hearings.
8. After issuance of a Commissioner's Order, the Region will manage the order on compliance in accordance with Department policy. DSS will provide technical support as requested.

## APPENDIX II

### ILLEGAL DAMS

#### BACKGROUND

The Dam Safety Unit in the Central Office has been advised on numerous occasions of the existence of illegal dams and requested to make investigations of the structures.

An illegal dam is a structure that is built without benefit of an Article 15, Title 5 permit. As a result, the Department would not have had the opportunity to review the structure's impact on the stream environment or the safety of the downstream residents.

The illegal structures normally are small earth embankments built by an individual or his contractor without benefit of design drawings prepared by a professional engineer as required. Most of the dams are in the low hazard category (Class A), located in rural or agricultural areas where dam failure generally does not cause any serious damage to the downstream area.

The dam inspection program is a central office function. Currently, inspections are limited to high hazard structures (Class C) where dam failure could cause loss of life and moderate hazard structures (Class B) where dam failure could cause serious economic losses. There are approximately 1100 dams in these categories statewide.

#### PROCEDURE

Inquires relative to the existence of an illegal dam are to be referred to the Regional Water Engineer for his coordination activities among the various program interests. The regional office should screen each illegal dam and make a preliminary evaluation of the potential hazard to the downstream area. If it is found that a potential hazard exists which could cause loss of life or serious property damage, Dam Safety staff are available for a safety inspection.

After the dam has been screened, the Region should determine if follow up action is warranted. If the Region decides to proceed with enforcement action, Dam Safety staff will be available to provide technical advice and testimony.