Appendix E — Building Codes, Permitting and Enforcement

A. BUILDING CODES:

The most cost effective way to reduce damages from natural disasters is to incorporate preventive measures into site planning, design and construction of buildings. For flooding, these measures can be applied to land use planning, land development ordinances, or a building code adopted and enforced at the local level. There are three national building code organizations:

BOCA – Building Officials and Code Administrators International, Inc., developed the National Building Code adopted by New England and upper Midwest states.
SBCCI – Southern Building Code Congress International, Inc. developed the Standard Building Code adopted by southern states.
ICBO – International Conference of Building Officials developed the Uniform Building Code adopted by western states.

During 1999, the three national organizations banded together to form the International Code Council (ICC). The ICC has developed a series of international building codes, including an International Residential Code (IRC), designed to lessen property damage and save lives during natural disasters, including floods. The Federal Emergency Management Agency (FEMA) and the three national councils have urged states and communities to adopt and enforce the new International Codes. The 1995 CABO Building Code will no longer be updated. There are some differences in the 1995 CABO Building Code and the new 2000 IRC that apply to one and two-family dwellings. The major differences that apply to flood protection are identified in Table E-1.

Table E-1

Differences Relating to Flooding and the 1995 Council of American Building Officials One- and Two-Family Dwelling Code and the 2000 International Building Code

1995 CABO	2000 IRC	Significant Differences
-----	R105.3	The IRC addresses the application for a permit and the information required on a permit.
-----	R106.1.3	The IRC addresses information required for buildings and structures in flood hazard areas.
113	R109	Floodplain inspection and fire-resistance-rated construction inspection have been added.
301	R301	Added requirements for floodplain construction.
301.2	Table R301.2(1)	Added Flood Hazards to this table.
-----	R301.2.4	The IRC addresses prescriptive requirements for floodplain construction.
-----	R309.5	The IRC provides a new section for garages for buildings located in flood hazard areas.
-----	R327	The IRC addresses requirements for flood-resistant construction.

Other International Codes that contain provisions for flood protection include:

- The 2000 International Plumbing Code
- The 2000 International Mechanical Code
- The 2000 International Fuel Gas Code
- The 2000 International Private Sewage- Disposal Code.

These codes are not automatically adopted along with the International Building Code and would have to be adopted individually. To have a comprehensive code system that addresses all phases of construction, the Task Force recommends that all of the International Codes listed above be adopted by West Virginia for use in the regulated floodplain.

The Task Force recommends that the West Virginia Development Office prepare and disseminate to counties and municipalities a model sub-division regulation that contains a requirement that every residential, commercial or industrial lot include a portion of developable land that is out of the floodway for construction of a structure.

The Task Force recommends that the State require that all structure renovation valued at $10,000 or more, and **all** new structures obtain a permit document from the appropriate city or county floodplain manager legally certifying whether their site is in or out of the floodplain. All permits identifying a site as being in or out of the floodplain should allow for on site inspection of construction activities. Construction, installation, or renovation of a structure within the floodplain without a permit would be punishable by a fine of not less than $5,000 and removal of the structure. A copy of this permit must be provided to the utility company before the utility is connected. All utility companies must receive and keep a copy of the approved permit before to connecting utility. If a permit is not obtained before construction, the builder, homeowner, utility company, and property

owner should all be held liable. Where local communities have adopted combined building code and floodplain ordinance enforcement and permitting, the local code enforcement office may provide such certification if he or she holds the CFM designation and appropriate CABO and/or ICBO certification through the local permitting processes.

A major threat during flooding is floating debris. A recurring problem with floating debris involves improperly anchored manufactured housing. During flood events, improperly anchored manufactured houses frequently float downstream and lodge under the next bridge or other choke point. Figure E-1 shows a manufactured home creating a blockage at a stream crossing.

Figure E-1. Manufactured Home Blocking a Stream Crossing

These blockages create temporary dams artificially raising the height of water behind them and increasing the flood damages immediately upstream of the blockage. When the blockage breaks loose, high velocity, debris-filled floodwaters rush downstream. The cycle resumes when the remnants become lodged at the next bridge or choke point. This deadly sequence was observed quite painfully during the July 2001 flood events in the southern portions of the state. Manufactured houses account for 17% of all housing units in the State according to 2000 Census data.

In West Virginia, the Division of Labor (DOL) is responsible for ensuring that manufactured homes are properly installed under 42CSR19. Section 10A.1.(a) of this regulation requires that all manufactured homes be installed in accordance with the manufacturer's instructions, and that a competent design be certified in writing by a registered professional engineer or architect or otherwise be consistent with the recommendations in the American National Standards Institute, A225.1 *Installation Standard for Manufactured Homes*. DOL has recently started inspecting some buildings for compliance with the State building code.

Since different soils require different anchors, it is unlikely that any one design will be acceptable everywhere across West Virginia. Some manufactured homes in West Virginia might be one or two feet off the ground. Others may be much higher. Due to extreme slopes, some may be only a few feet from the ground on one end and twelve to fifteen feet off the ground on the other end. These extremes in elevation require different methods of supporting and anchoring the home. Until recently, DOL had only one inspector statewide inspecting manufactured home installations. Three additional manufactured home inspectors have begun working since the July 2001 floods. Four inspectors simply cannot adequately cover the entire State.

The Task Force recommends that the Division of Labor be provided the necessary funds and be authorized to employ field inspectors with appropriate supervisory and support staff to address this issue. An alternative recommendation would be to eliminate the Manufactured Housing Section and reorganize it into the new Building Codes Division.

In addition, the Task Force recommends that the Department of Labor require appropriate staff to become conversant with floodplain management issues and incorporate the use of Flood Insurance Rate Maps in inspection procedures.

B. PERMITTING PROCESS:

The Department of the Army regulatory program is one of the oldest in the Federal Government. Its purpose is to protect and maintain the navigable capacity of the nation's waters. The legislative origins of the program are the Rivers and Harbors Acts of 1890 (superseded) and 1899 (33 U.S.C. 401, et seq.). Various sections establish permit requirements to prevent unauthorized obstruction or alteration of any navigable water of the United States. The most frequently exercised authority is contained in Section 10 (33 U.S.C. 403), which covers construction, excavation, or deposition of materials in, over, or under such waters, or any work which would affect the course, location, condition, or capacity of those waters. The authority is granted to the Secretary of the Army.

In 1972, amendments to the Federal Water Pollution Control Act added what is commonly called Section 404 authority (33 U.S.C. 1344) to the program. The Secretary of the Army, acting through the Chief of Engineers, is authorized to issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into waters of the United States at specified disposal sites. Selection of such sites must be in accordance with guidelines developed by the Environmental Protection Agency (EPA) in conjunction with the Secretary of the Army; these guidelines are known as the 404(b)(1) Guidelines. The Federal Water Pollution Control Act was further amended in 1977 and given the common name of "Clean Water Act" and was again amended in 1987 to modify criminal and civil penalty provisions and to add an administrative penalty provision.

The geographic jurisdiction of the Rivers and Harbors Act of 1899 includes all navigable waters of the United States which are defined in 33 CFR Part 329 as, "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce."

Activities requiring Section 10 permits include structures (e.g., piers, wharfs, breakwaters, bulkheads, jetties, weirs, transmission lines) and work such as dredging or disposal of dredged material, or excavation, filling, or other modifications to the navigable waters of the United States.

The Clean Water Act uses the term "navigable waters" which is defined (Section 502(7)) as "waters of the United States, including the territorial seas". Thus, Section 404 jurisdiction is defined as encompassing Section 10 waters plus their tributaries and adjacent wetlands and isolated waters where the use, degradation or destruction of such waters could affect interstate or foreign commerce.

Activities, requiring Section 404 permits are limited to discharges of dredged or fill materials into the waters of the United States. These discharges include return water from dredged material disposed of on the upland and generally any fill material (e.g., rock, sand, dirt) used to construct sites for development, roadways, erosion protection, or other uses.

Most of these permit authorities have been delegated by the Secretary of the Army to the Chief of Engineers and his authorized representatives (usually District Engineers at the Corps of Engineers districts). Section 10 authority was formally delegated on May 24, 1971, with Section 404 authority delegated on March 12, 1973. Those exercising these authorities are directed to evaluate the impact of the proposed work on the public interest

The basic form of authorization used by districts is the individual permit. Before issuing an individual permit the Corps must evaluate the individual application for each project through three steps: pre-application consultation (primarily for major projects), formal project review, and decision-making.

The Corps participates in a strong, partnership with West Virginia’s Department of Environmental Protection and Division of Natural Resources in regulating water resource developments. This is achieved with joint permit processing procedures (e.g., joint public notices and hearings), programmatic general permits founded on effective State programs, transfer of the Section 404 program in non-navigable waters, joint environmental impact statements, special area management planning, and regional conditioning of nationwide permits.

A general permit is one founded on an existing State, local or other Federal agency program and designed to avoid duplication with that program. Nationwide general permits are issued by the Chief of Engineers through the Federal Register rulemaking process. Information about nationwide general permits can be found at 33 CFR Part 330, Appendix A.

Public involvement plays a central role in the Corps' administration of its regulatory program. The major tools used to interact with the public are the public notice and public hearing. The public notice is the primary method of advising all interested parties of a

proposed activity for which a permit is sought and of soliciting comments and information necessary to evaluate the probable beneficial and detrimental impacts on the public interest. Public notices on proposed projects always contain a statement that anyone commenting may request a public hearing. Public hearings are held if comments raise substantial issues that cannot be resolved informally and the Corps decision maker determines that information from such a hearing is needed to make a decision. Public notices are used to announce hearings. The public is also informed by notice on a monthly basis of permit decisions.

Individual State permitting and water quality certification requirements provide an additional form of objective safeguard to the Corps regulatory program. Section 401 of the Clean Water Act requires State certification or waiver of certification prior to issuance of a Section 404 permit.

In addition to these requirements, the Corps' implementing regulations require that district engineers conduct additional evaluations on applications with potential for having an effect on a variety of special interests (e.g., Indian reservation lands, historic properties, endangered species, and wild and scenic rivers).

In addition to the Corps' regulatory program, the WV Division of Environmental Protection is responsible for issuing permits for discharges of stormwater from construction activities. This program is covered by the State's Water Pollution Control Act (WV Code Chapter 22 Article 11) and the Groundwater Protection Act (WV Code Chapter 22 Article 12). The purpose of the program is to provide expedited permit coverage and ensure proper management of stormwater quality discharged from construction activities.
Permits issued under this program are valid for five years and there are fees associated with the permit process. The permit must be applied for thirty days before the start of any construction (3 acres or larger) and a stormwater pollution prevention plan must be submitted that includes a BMP plan and groundwater protection plan.

All applicants must receive a Section 404 permit from the Corps of Engineers when applicable and a permit from the Public Lands Corporation of the Division of Natural Resources to work in a stream. During public workshops, it became apparent that many local officials and the public are not aware of the regulatory permitting requirements of the Federal and State agencies.

The Task Force recommends that the appropriate Corps of Engineer District offices and State offices involved in the issuance of regulatory permits in West Virginia waters under the Clean Water Act of 1970 (as amended) develop and deploy a public information and awareness program for local officials and private landowners. The purpose of the program will be to assure that Federal and State agencies, county and municipal officials, floodplain managers, building code officials, and the general public are fully aware of the requirements of the regulatory permitting process (including permissive acts under the Nationwide Permits) when conducting emergency recovery operations or normal construction within or along the State's waterways.

C. ENFORCEMENT:

Procedures for enforcing Corps permitting authorities are found at 33 CFR Part 326. Inspection and surveillance activities are carried out at the district engineer disposal. Corps of Engineers' employees are instructed on the observation and reporting of suspected unauthorized activities in waters of the United States and of violations of issued permits. The assistance of members of the public and other interested Federal, State and local agencies is encouraged.

When the district engineer becomes aware of any unauthorized activity still in progress, he must first issue a cease and desist order and then begin an investigation of the activity to ascertain facts concerning alleged violations. If the unauthorized activity has been completed, he will advise the responsible party of his discovery and begin an investigation. Following his evaluation, the district engineers may formulate recommendations on the appropriate administrative course or legal action to be taken. The district engineer's evaluation contains an initial determination of whether any significant adverse impacts are occurring which would require expeditious corrective measures to protect life, property, or a significant public resource.

Once that determination is made, such remedial measures can be administratively ordered and a decision can be made on whether legal action is necessary. In certain cases, district engineers, following the issuance of a cease and desist order, coordinate with State and Federal resource agencies in deciding what action is appropriate. Further evaluation of the violation takes into consideration voluntary compliance with a request for remedial action. A permit is not required for restoration or other remedial action.

For those cases that do not require legal action and for which complete restoration has not been ordered, the Department of the Army will accept applications for after-the- fact permits. The full public interest review is deferred during the early stages of the enforcement process. A complete public interest review is conducted only if and when the district engineer accepts an application for an after-the- fact permit.

The laws that serve as the basis for the Corps regulatory program contain several enforcement provisions that provide for criminal, civil, and administrative penalties. While the Corps is solely responsible for the initiation of appropriate legal actions pursuant to enforcement provisions relating to its Section 10 authority, the responsibility for implementing those enforcement provisions relating to Section 404 is jointly shared by the Corps and EPA. For this reason, the Corps has signed a Section 404 enforcement memorandum of agreement (MOA) with EPA to ensure that the most efficient use is made of available Federal resources. Pursuant to this MOA, the Corps generally assumes responsibility for enforcement actions with the exception of those relating to certain specified violations involving unauthorized activities.

If a legal action is instituted against the person responsible for an unauthorized activity, an application for an after-the- fact permit cannot be accepted until final disposition of all

judicial proceedings, including payment of all fees as well as completion of all work ordered by the court.