DIVISION 1100 - ENVIRONMENTAL

1100.10 INTRODUCTION

This Division is provided for information only. It gives you an understanding of the complex laws and regulations that affect environmental issues. You need to be aware of these laws and regulations but you should not advise or direct the contractor regarding "Environmental Issues." However, reporting and recording in the field book all contractor activities is essential.

The phrase Environmental Issues can literally include almost anything from anthropological bones to endangered species, from land use to land disposal, from wetlands to storm water runoff, from wild flowers to underground tanks. For the purposes of this chapter, inferences will be limited to only those issues identified in each section. For this reason, much of the following information contains both general background and specifics. Probably the most important aspects of any environmental issue are:

- Environmental "issues" are to be taken very seriously. Inappropriate action can result in personal fines "and/or" jail. This is not intended as idle gossip or scare tactics. As a user of this chapter, it is important to know the facts of life.

- Contact the Construction Division or Project Development with questions, concerns, and observations. If there is a question about whether or not to notify, always make a notification.

  "IT IS FAR BETTER TO BE SAFE THAN SORRY!"

  Remember, individuals can be held personally liable for not reporting an environmental incident. Through notifying the next higher level, your liability is significantly reduced. While the Construction Division and Project Development may need to refer questions to others, it is important to notify the Construction Division and Project Development so issues can be responded to and tracked.

- ALL contacts with DEQ, OSHA, and/or EPA shall be made by, or through, the Construction Division. The only exceptions will be when some other office is better able to address the issues. For example: On legal issues, the Attorney General is better suited for a response. The inspector's responsibility is to contact the Project Manager and make a diary entry, the Project Manager is to contact the Construction Division, and the Construction Division will in turn contact the most appropriate office for response. **Remember: Timeliness in responses to a regulatory agency is of the utmost importance.**

- When the contractor causes an environmental incident, then he/she is responsible to take the appropriate notification and remediation actions. Our inspectors and Project Managers should notify the appropriate people through our chain of command and document the contractor's actions in the field book.

Normal notification chain of command:

- The Inspector notifies the Project Manager.
- The Project Manager notifies the District Construction Engineer (DCE)
- The DCE notifies the District Engineer and the HQ Construction Division.
- The Construction Division notifies the EPA, DEQ, Attorney General and all other affected agencies.

Emergency notification:

- First person to see/become aware of an environmental incident should take actions to notify the agency that can contain and mitigate the hazard.
- Simultaneously as notification is occurring, actions need to be taken to keep workers and public safe.

1100.11 ENVIRONMENTAL REGULATIONS

Environmental Protection Agency (EPA) is a Federal agency with environmental protection regulatory and enforcement authority. EPA administers such Acts as the Clean Air Act (CAA), Clean Water Act (CWA), Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Toxic Substance Control Act (TSCA), and other federal environmental laws. EPA was created by Congress in 1970. In this landmark legislation the lawmakers established a preamble for the EPA. The preamble states:

> *"Pollution prevention is based on the idea that it makes economic as well as environmental sense to stop producing hazardous waste, rather than attempting to clean-up hazardous substances after they have become released."*

U.S. EPA has, for the most part, delegated authority to the states for management of ongoing environmental functions. All actions and requests must be made to U.S. EPA, Region VII, Kansas City, Kansas, however, Nebraska DEQ does have specific regulatory authorities in Nebraska. Some instances are:

FIRST, DEQ has signoff responsibility for RCRA and CERCLA actions in Nebraska. This means before those actions can become final, DEQ must approve certain aspects of most actions.

SECOND, very often DEQ is asked to be the regulatory agency's on site coordinator. This means that an action and resolution may be developed with U.S. EPA. Once a cleanup action is initiated at a site, DEQ would provide site compliance inspection.

THIRD, and again very often, DEQ will choose to request U.S. EPA's permission to be the lead agency in a particular action. In this case, all direction will be from DEQ, with EPA assuming a secondary "review" role.

A large portion of "who's in charge" confusion can be attributed to the complex nature of environmental laws. This confusion can be, and is, further compounded by the mixture of regulating authorities in charge of enforcing these laws. The laws require action depending on the chemical(s) present and have significantly different action levels depending on how much of any one constituent is found. The final blow often comes when conversation is composed mostly of acronyms.

1100.12 REGULATORY AUTHORITIES

EPA

In Nebraska, U.S. EPA is responsible for CERCLA and RCRA programs. These are administrated by EPA's Region VII in Kansas City, Kansas.

OSHA

In Nebraska, OSHA is administrated by Nebraska Department of Labor. Enforcement of OSHA is the responsibility of the federal Occupational Safety and Health Administration. All complaints regarding maritime operations should be referred to the Federal Office in Kansas City, MO, except those involving State or local governmental employees which continue to be covered by the Nebraska Department of Labor.

Nebraska Department of Environmental Quality (DEQ)

DEQ is responsible for specific environmental regulatory functions. Most of DEQ's environmental authority and powers are listed in its legislated guidance. "Generally" this authority includes:

- Air Quality

  Clean Air Act and Clean Air Act Amendments, plus additional regulations codified by Nebraska legislature.

- Land Quality

  Nonhazardous waste disposal.
  All underground storage tanks.

- Water Quality

  Storm water pollution
  Water pollution
  Wetlands
  Public and private wells

- Waste Reduction

- Compliance and Enforcement

1100.13 ENVIRONMENTAL LAWS

Principle legislative acts which govern most of DEQ's work.

AHERA Asbestos Hazardous Emergency Response Act: Federal law codified in 1986. This act promulgates regulations which require inspection of buildings for materials which contain asbestos. If the material is found, it must be removed prior to demolition for health and environmental protection reasons. NDR has chosen to prepare and let a separate contract for removing asbestos. However, asbestos could be removed in conjunction with demolition.

CAAA Clean Air Act Amendments: Federal law codified in 1990 and regulates air quality issues.

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act: Federal law codified in 1980, sometimes referred to as "Superfund." CERCLA gives the federal government the power to respond to releases, or threatened releases, of any hazardous substance into the environment as well as a substantial danger to public health or welfare.

CERCLA is a remedial statute designed to deal with problems of past mismanagement of hazardous waste. Under CERCLA, the government created a process for identifying liable parties and ordering them to take responsibility for cleanup operations.

CWA Clean Water Act: Federal law codified in 1977. The objective is to restore and maintain the chemical, physical, and biological integrity of the Nations waters.

NPDES National Pollutant Discharge Elimination System: Federal law codified through publication in 55 FR 47990 (November 16, 1990) and 57 FR 11394 (April 2, 1992). In a simple "nutshell", this is the Storm Water Pollution program.

OSHA Occupational Safety and Health Act: Federal law codified in 1968. Established for the regulation of site safety procedures, worker training, and worker safety and health standards.

Health related requirements of OSHA typically key on the presence of "TOTAL" amounts of listed elemental constituents. Be careful when considering constituents because OSHA often considers elements according to valence charges. For example; Trivalent chromium Cr^{+3} has one action level, while hexavalant chromium Cr^{+6} has another, and chromium (metal) has still another. Most of OSHA's regulations are found in *Title 29 Code of Federal Regulations (CFR) Sections 1910 and 1926*. A specific listing of chemicals is found in *Table Z, 29 CFR 1910.1000*.

RCRA Resource Conservation and Recovery Act: Federal law codified in 1976 which provided for the development of federal and state programs for the regulation of land disposal of waste materials and the recovery of materials and energy resources. The act regulates not only the generation,

transportation, treatment, storage, and disposal of hazardous wastes, but also municipal solid waste disposal facilities. Several amendments to RCRA have imposed a series of even more stringent requirements than the original law.

RCRA is a federal statute enacted to ensure that wastes are managed in an environmentally sound manner, and to protect human health and the environment from the potential hazards of waste disposal. Whereas CERCLA focuses on the cleanup of uncontrolled or abandoned sites, RCRA seeks to better manage active hazardous waste treatment, storage, and disposal facilities so new superfund sites will not be created in the future.

SARA Superfund Amendments and Reauthorization Act: A federal law codified in 1986. Amended CERCLA and introduced more stringent and detailed guidelines for cleanups. Also established regulations for industries using chemicals and releasing pollutants into the environment.

TITLE III of SARA requires that communities and the public be supplied with information on chemical inventories, release reporting, accidents/spills. TITLE III also provides for full public participation in planning and preparing for chemical emergencies arising from local industries.

SDWA Safe Drinking Water Act: Federal law codified in 1974. This law is intended to protect drinking water resources at the tap. Establishes control of contaminants in public drinking water and sets baseline national drinking water standards.

TSCA Toxic Substance Control Act: Federal law codified in 1976. Established for the regulation of toxic substances.

1100.14 WETLANDS

Special Environmental Conditions

New procedures have been established to bring specific attention to those environmental issues or documents directly (or indirectly) affecting our construction projects.

Reference is made to the attached Project Development Summary Sheets. These summary sheets will normally be two pages or less in length and pertain to such things as wetlands, waterway permits, historic bridges, and other environmental issues. These sheets will be sent to the districts, and the information shown thereon must be carefully compared to the provisions of the actual permits issued for the work involved.

Additional information will also be shown in the plans. Project Development will be preparing one or more "2W" sheets for inclusion in the plans. The "2W" sheets will provide delineation of wetland areas (on and off the project) and notes pertaining to special conditions or environmental issues. These plan sheets, also, should be checked against the provisions of actual permits issued for the work involved.

In order to insure that all parties involved are aware of the environmental issues affecting a project, please see that the following procedures are followed:

- Thoroughly review the plans and special provisions for environmental issues.

- Discuss all environmental issues at the pre-construction conference.
- Provide the contractor a copy of the environmental conditions summary.
- Invite Project Development to the pre-construction conference (when appropriate).

Protection of the environment has become a very important issue of public concern, and we must consider it to be a very important issue in the performance of our required duties. Please make every effort to see that we and our contractors fully comply with all environmental provisions of the plans and specifications.

Project No.:
Control No.:
Location:

PROJECT DEVELOPMENT SUMMARY SHEET

WATERWAY PERMITS

Type of Permit	Location	Permit Number

Special Plans (to be included in final plan package):

2WA Sheets	Yes____ No____
Mitigation Plan	Yes____ No____
Special Cross Sections	Yes____ No____
Others	Yes____ No____

Description:

Special notes on plans:

Special provisions (see attached):

Special conditions (see attached):

Additional comments:

_____
Wetlands Engineer (Signature & Date)

HISTORIC SITES

Historic Bridges Yes____ No____

Special Provisions (see attached):

Additional comments:

_____
Environmental Engineer (Signature and Date)

OTHER ENVIRONMENT ISSUES

Special conditions:

Special notes on plans:

Additional comments:

_____
Environmental Engineer (Signature and Date)

Army Corps 404 Permits

Over the past year there has been some new developments relative to the Army Corps 404 Permit process.

The General Permit 77-2 requires notifying the District Engineer of the Corps of Engineers of the date that work will commence, suspension of work if for more than one week, resumption of work and its completion. This same requirement exists under the Individual 404 permit which has been the responsibility of the Department's District Engineer and accordingly will be his/her responsibility under the General Permit. Notification is not required under the nationwide permit.

This Section lists the various permits required to construct roads and bridges across streams, wetlands, and flood plains and outlines the procedures to be employed in obtaining them.

Army Corps 404 Permits

The Army Corps 404 Permit process exists in three forms. They are:

1. Nationwide Permit
2. State General Permit (GP77-2)
3. Individual 404 Permit

PMS Activity 340 - Waterway Permits Review is scheduled at a point in time when the designer (Bridge Division or Roadway Design Division whichever is responsible for the project) should be sure that the project concept is firm. The activity requires the designer to contact the Project Development Division for a determination if any of the above listed permits are needed and if they have been acquired.

Permit Determination and Acquisition

On projects that the Nationwide Permit is applicable, no further notice to the Army Corps of Engineers is required. The Project Development Division will prepare a letter to that effect for the project files. If the State General Permit is in effect, or if an Individual 404 Permit is required, the Project Development Division will prepare the necessary applications. When these permits become available, they will be forwarded to the designer. These permits will also become part of the project files and need to be part of the PS&E package. Spaces are provided on the PS&E required sheet so that the designer can identify the type of permit required and, also, if it is included in the package. A flow chart of the 404 Permit Determination Process is attached.

Note on Title Sheet of Plans

The Contract Lettings and Communication Division will place a note on the title sheet of plans for projects requiring a 404 Permit (The Local Liaison Division will place such note for projects developed by that Division). The note will identify the kind of permit in use and the identification number (if applicable). Each of the three types of 404 permits require different special provisions. The Contracts Section is responsible for placing the correct set of special provisions in the contract.

(DEQ) Water Quality Certifications

This is a permit acquired from the State Department of Environmental Quality and is part of the 404 Permit process requirements. The Project Development Division will acquire the certification in conjunction with 404 Permits and retain the original in the project files. No copies will be forwarded to other Divisions unless requested to do so.

Dept. of Water Resources Flood Plain Permits

Flood Plain Permits are required by State Statute. As a general statement, they are required whenever a 404 Permit is necessary. Copies are forwarded to the Roadway Design and Bridge Divisions for the project files. No other copies are distributed unless requests are received. The original is retained by the Project Development Division.

404 Determination Checklist

Any temporary or permanent fill involvement in a stream — No → No 404 involvement

Yes

Is it in the Corps Regulatory Jurisdiction? (Check maps - 1/2" county maps available or letter stating limits) — No → No 404 involvement unless someone(agency) is requesting an individual 404 permit. Note: all streams are in the Corps Limits regardless of flow.

Yes

Does the Nationwide Permit apply?
1. Minor road crossing (total temporary and permanent fill less than 250 yd^3 (200 m^3). Some wetlands are allowed (100 ft (30 m) from each bank)
2. Backfill for utility lines.
3. Bank stabilization 500 ft (150 m) averaging (1.2 yd^3/ft (3 m^3/m))

@ Yes → No further work necessary.

No

@ Must make up an individual 404 permit application.

Send notice to Corps (by Project Development Division)
1. Vicinity map
2. Legal Description
3. Purpose
4. Typical temporary causeway section
5. Individual 404 permit application

@

@ Receive Letter of Authorization under State General Permit Individual 404 Application
1. Authorization to be forwarded to Construction Division when contract is awarded.
2. Construction Division to forward authorization to NDOR District Engineer
3. NDOR District Engineer to notify Army Corps of Engineers before construction starts and when construction is completed.

I. Corps of Engineers (C.O.E.) Wetland Regulatory Authority

A. Rivers and Harbors Act - 1890 - Navigable Waters

B. Federal Water Pollution Control Act - 1972

1. Section 404 Permits - Regulate discharge of dredged or fill material from or into waters of the United States.

2. Act amended in 1977 and given common name "Clean Water Act" (C.W.A.).

3. Wetlands are under the jurisdiction of Clean Water Act through 1985 court case. Those wetlands covered by the Clean Water Act are called jurisdictional wetlands.

II. C.O.E. Changes Jurisdictional Wetland Policy

A. Regulatory Guidance Letter - November, 1995 - in some cases, wetlands are no longer under the jurisdiction of the C.W.A. - no Corps regulation.

1. Former Policy - Wetlands in roadside ditches were under the jurisdiction of the Clean Water Act, thus regulated by C.O.E. - possible mitigation.

2. Current Policy

(a) Wetlands occurring in typical ditches, in upland areas are nonjurisdictional. Therefore, not under the jurisdiction of C.W.A. No Corps authority. No mitigation for impacts.

(b) If ditch was constructed in a wetland, then the ditch would be under the jurisdiction of C.W.A. Corps has regulatory authority. Possible mitigation for impacts.

(c) Borrow pits which exhibit wetland characteristics are under the jurisdiction of the C.W.A. Corps has regulatory authority. Possible mitigation for impacts.

B. Overall mitigation requirements will lessen which will result in lower costs.

III. C.O.E. Concerns

A. C.O.E. perceives there to be a problem with:

1. Disposal of road materials in waterways and wetlands.

(a) Section 404 of the Clean Water Act

(1) Dredge and fill activities require permit from C.O.E.

(b) Violation of Section 404 - Work done without a permit. Up to $25,000 fine per day that the violation is in place. Examples - filling wetland or dumping old bridge in waterway.

(c) Noncompliance with Section 404 - Not following permit conditions. Up to $10,000 per violation plus remedial costs. Examples - using asphalt or allowing concrete with exposed rebar for bank stabilization.

2. Impacting wetlands not cross hatched on plans. Examples - storing equipment in wetland areas or rock in ditched jurisdictional wetland to prevent the accumulation of mud on the road.

3. Failure to utilize silt fences.

The wetlands point of contact is:

Wetlands Program Manager
Project Development Division
(402) 479-4418

1100.15 WASTED GENERATED

"Solid Waste" means garbage, refuse, rubbish, and other similar discarded solid or semisolid materials, including but not limited to such materials resulting from industrial, commercial, agricultural, and domestic activities. This shall not prohibit the use of dirt, stone, brick, or similar inorganic material for fill, landscaping, excavation, or grading at places other than a sanitary disposal site. It shall be unlawful for any private or public agency to dump or dispose or permit the dumping or depositing of any solid waste at any place other than an approved sanitary landfill.

"Open Dumping" means the depositing of solid wastes on the surface of the ground or into a stream or body of water.

"Toxic and Hazardous Wastes" means waste materials including, but not limited to poisons, pesticides, herbicides, acids, caustics, pathological wastes, flammable or explosive materials, and similar harmful wastes which require special handling. These items must be disposed of in such a manner as to conserve the environment and be protective of public health and safety.

"Free Liquids" or wastes containing free liquids shall not be disposed of in a sanitary landfill. This includes industrial sludge and toxic or hazardous wastes.

1100.16 WATER WELLS

Occasionally contractors request permission to drill water wells on state property in order to secure water to use in the construction of a project. A written agreement should be executed between the state (DEQ) and any contractor who wants to develop a well on state property in order to assure that the contractor assumes responsibility and liability for use of the well.

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1100.17 ARCHEOLOGICAL AND PALENTOLOGICAL DISCOVERIES

If Indian relics, fossils, meteorites or other articles of historical or geological interest are encountered in highway excavation operations, such operations shall be suspended in the area involved "until such times as arrangements are made for their removal and preservation".

Under present procedures, the department is cooperating with the Nebraska State Historical Society and the University of Nebraska State Museum. Preliminary plans for highway improvements are made available to these agencies as far in advance of construction as practical. Their archeologists examine the plan locations and correlate any findings with their records and information. If any known historical relics or Indian habitations or relics are involved with the construction, arrangements are then made cooperatively with the department to remove and preserve such items in advance of the construction of the project.

It is expected that only rarely will such items be encountered during construction. However, if such articles are encountered, the Project Manager will have work suspended in the area involved, and immediately notify the Construction Division. Arrangements will then be made from that office for the removal and preservation of the articles.

Project Managers or their representatives should make a periodic inspection of the work site or sites on all archeological or paleontological work. This inspection is to determine that the work called for in the agreement is being performed. This periodic inspection should be made at least once a week. The Project Manager should keep himself advised of the progress so that no unnecessary delays to the contractor will occur. Confirmation that the contractor can resume work at the site will come from the Construction Division.