
Environmental Regulations:
Practical Considerations and Tips
for
Design Professionals

Practicing Architecture in Texas

Arlington, Texas

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by:

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Overview

- Floodplains and Wetlands
- Storm Water Management
- Brownfield Redevelopment
- Waste Management
- Asbestos & Lead
- Endangered Species

Floodplains

- Land subject to inundation by the 100-year flood
- Designated by FEMA maps
- Regulated at local level

Wetlands

- Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions

Wetlands

- Clean Water Act - unlawful to discharge dredge or fill material into “navigable waters” without a permit (§ 404)
- Rivers and Harbors Act imposed permit requirement for construction, excavation, or deposition of materials in, over, or under “navigable waters,” or work that would affect the course, location, condition, or capacity of such waters (§ 10)

Wetlands

- “Navigable waters” - “the waters of the United States”
- Broad jurisdiction asserted

Wetlands

U.S. v. Riverside Bayview Homes (1985)

- **FACTS:**
 - Low-lying marshy land located directly adjacent to actually navigable creek

Wetlands

U.S. v. Riverside Bayview Homes (1985)

- ISSUE:
 - Whether § 404 of CWA authorized USACE to require a permit before discharging fill material into wetlands adjacent to actually navigable waters

Wetlands

U.S. v. Riverside Bayview Homes (1985)

- HELD:
 - “[I]t is reasonable for the Corps to interpret the term ‘waters’ to encompass wetland adjacent to waters as more conventionally defined.”
 - “[A]djacent wetlands may be defined as waters under the Act.”

Wetlands

U.S. v. Riverside Bayview Homes (1985)

Footnote 8:

“We are not called upon to address the question of the authority of the Corps to regulate discharges of fill material into wetlands that are not adjacent to bodies of open water, and we do not express any opinion on that question.”

Wetlands

Asserted Jurisdiction

- Migratory Bird Rule
 - Waters that are or would be used as habitat by migratory birds that cross state lines

Wetlands

SWANCC v. USACE (2001)

- FACTS :
 - Isolated, intrastate, seasonally ponded, abandoned sand and gravel pit

Wetlands

SWANCC v. USACE (2001)

HELD:

- The Migratory Bird Rule exceeds the authority of the Corps

Wetlands

SWANCC v. USACE (2001)

RESULT:

- Jurisdiction asserted to the reach of the Commerce Clause, except under the Migratory Bird Rule

Wetlands

Asserted Jurisdiction

- “Adjacent” wetlands - those “separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes and the like.”

Wetlands

Rapanos v. United States (2006)

- Rapanos Sites:
 - Salzburg site – wetlands connected to man-made drain, which drains into Hoppler Creek, which flows into the Kawkawlin River, which empties into Saginaw Bay and Lake Huron
 - Hines Road site – wetlands connected to the Rose Drain, which has a surface connection to the Tittabawassee River
 - Pine river Site – surface connection to the Pine River, which flows into Lake Huron

Wetlands

Rapanos v. United States (2006)

- Carabells Site:
 - Man-made drainage ditch runs along one side of the wetland, separated from it by a 4' wide man-made berm. Ditch empties into another ditch or drain, which connects to Auvase Creek, which empties into Lake St. Clair (about 1 mile away)

Wetlands

Rapanos v. United States (2006)

- HELD:
 - Cases remanded for further consideration

Wetlands

Rapanos v. United States (2006)

- Scalia, Renquist, Thomas, and Alito Opinion:
 - Jurisdiction only over relatively permanent, standing or continuously flowing bodies of water forming streams, oceans, rivers, and lakes, AND
 - Wetlands with a continuous surface connection thereto

Wetlands

Rapanos v. United States (2006)

- Kennedy Opinion:
 - Jurisdiction over water or wetland if it possesses a “significant nexus” to waters that are navigable in fact or that could reasonably be so made
 - Significant nexus - wetlands, alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical and biological integrity of traditionally navigable water

Wetlands

Rapanos v. United States (2006)

- Stevens, Souter, Ginsburg, and Breyer Dissent:
 - Jurisdiction extends to the outer limits of Congress' commerce power

Wetlands

EPA and USACE Memorandum

- Follows Kennedy opinion

[http://www.usace.army.mil/cw/cecwo/reg/cwa
_guide/rapanos_guide_memo.pdf](http://www.usace.army.mil/cw/cecwo/reg/cwa_guide/rapanos_guide_memo.pdf)

Wetlands

EPA and USACE Memorandum

- Jurisdiction:
 - Traditional navigable waters
 - Relatively permanent, non-navigable tributaries of traditional navigable waters
 - Wetlands directly adjacent to both, even if no continuous surface connection

Wetlands

EPA and USACE Memorandum

- Case-by-Case Significant Nexus Evaluation
 - Non-navigable tributaries that are NOT relatively permanent
 - Wetlands adjacent to non-navigable tributaries that are NOT relatively permanent
 - Wetlands adjacent to, but not directly abutting, a relatively permanent tributary

Wetlands

EPA and USACE Memorandum

- No Jurisdiction
 - Swales or erosional features
 - Ditches excavated wholly in and draining only uplands, which do not carry a relatively permanent flow of water

Wetlands

Now What?

- Wetlands delineation unchanged
- Jurisdictional determination more complex
- Get competent, professional help

Wetlands

Wetlands Mitigation

- Goal – no net loss of values and function
- Impacts
 - avoid
 - minimize
 - compensate

Wetlands

Federal Permits

- Nationwide Permits
 - residential, commercial and institutional development
 - loss < ½ acre of non-tidal waters and < 300 linear-feet of stream bed
 - Notice required for loss > 1/10-acre of non-tidal waters or > 300 linear feet of intermittent stream bed

http://www.usace.army.mil/cw/cecwo/reg/nwp/nwp_2007_final.pdf

- Individual Permits

Wetlands

Texas § 401 Certification

- TCEQ certifies § 404 permit complies with state water quality standards
- Tier I
 - Small project
 - Checklist incorporates all applicable BMPs
- Tier II – Individual certification
- Imposes regional conditions on NWPs

Storm Water Management

Typical Problems

- Extensive siltation and sediment deposits
- Excessive storm water discharges
- Storm water relocates hazardous substances from industrial run-off

Storm Water Management

Clean Water Act

- NPDES Program
 - Regulates discharge of any pollutant from any point source to navigable waters
- TPDES Program

Storm Water Management

General Permit

- TPDES General Permit No. TXR150000 – General Permit to Discharge Waste from Construction Activities
- Expires March 4, 2008

Storm Water Management Construction General Permit

- What's regulated
 - Large construction activities
 - Disturbs > 5 acres
 - Small construction activities
 - Disturbs > 1 acre
 - Part of larger “common plan of development”

Storm Water Management

Construction General Permit

- Storm Water Pollution Prevention Plan
- File Notice of Intent
- Pay Fee
- Post Construction Site Notice with NOI
- Construction
- File Notice of Termination

Storm Water Management Enforcement

- Government enforcement – EPA priority
- CWA citizen suits
 - Failure to obtain permit
 - Ongoing violation of a permit
- Trespass, nuisance, negligence claims

Brownfield Redevelopment

- Goal – get environmental impaired properties back on the market
- Manage risks
- Before acquisition - “All Appropriate Inquiry” (ASTM Phase I ESA) required for liability defenses

Brownfield Redevelopment

Texas Voluntary Cleanup Program

- Remediate to meet state standards
- Certificate of Completion – releases future owners and lenders from liability to Texas
- Must apply before taking title

Brownfield Redevelopment

Texas Innocent Owner/Operator Program

- Texas Innocent Owner/Operator
 - Property contaminated by release or migration from off-site source or sources, and
 - Did not cause or contribute to the source or sources of the contamination
- Immune from liability

Brownfield Redevelopment

Texas Innocent/Owner Operator Program

- Texas Innocent Owner/Operator
 - If acquire property from person that caused the release, must be not know or have reason to know of release after appropriate inquiry
 - Must grant reasonable access for investigation and remediation

Brownfield Redevelopment

Texas Innocent Owner/Operator Program

- IOP Certificate of Completion confirms eligibility
- IOP Certificates are not transferable

Brownfield Redevelopment

Texas Municipal Setting Designation

- City ordinance restricts potable use of groundwater
- Eliminates exposure pathway so may
 - Lower cleanup standards
 - Reduce investigation/remediation requirements
 - Reduce costs

Brownfield Redevelopment

Texas Municipal Setting Designation

- TCEQ certifies the ordinance
- Potentially high transaction costs

Brownfield Redevelopment

Relocating Impacted Soil For Reuse

- Remedy Standard A
 - Meets critical PCLs
 - Protects ecological receptors
 - Meets Remedy Standard A
 - Complies with institutional controls
 - No prior TCEQ approval required if all one site

Brownfield Redevelopment

Relocating Impacted Soil For Reuse

- Remedy Standard B
 - Meets critical PCLs
 - Protects ecological receptors
 - Meets Remedy Standard B
 - Complies with institutional controls
 - Prior TCEQ approval required

Brownfield Redevelopment

Reuse of Petroleum-Substance Waste

- May be reused:
 - In cold-mix-emulsion bituminous paving at a registered cold mix asphalt-producing facility
 - In asphalt mix at registered hot-mix asphalt-producing facility
 - In road base or parking lot stabilized base when base will be covered with concrete or asphalt

Brownfield Redevelopment

Groundwater Management

- Locally regulated
- Depends on contaminates and concentrations
 - Storm drain
 - Sanitary sewer
 - Landfill

Brownfield Redevelopment

Closed Municipal Solid Waste Landfills

- Developments > 1 acre – Must perform subsurface investigation or licensed engineer must observe all subsurface disturbances
- Permit required for enclosed structures over CMSWLF (Subchapter T)

Release Reporting

- Storage tank systems
- Non-tank releases

“Whenever an accidental discharge or spill occurs from an activity or at a facility which causes or may cause pollution”

Waste Management

Hazardous Waste Determination

- Inert material
- Municipal solid waste
- Municipal hazardous waste
- C&D waste
- Industrial waste
 - Hazardous waste
 - Class 1 nonhazardous waste
 - Class 2 nonhazardous waste
 - Class 3 nonhazardous waste

Waste Management

Recycling

- No permit required for facility that receives, processes, and returns to use only nonputrescible, source-separated recyclable materials diverted from a municipal solid waste stream, or source-separated nonhazardous recyclable materials from industrial sources.

Asbestos

- ACM - >1% asbestos
- RACM
 - Friable ACM
 - Some non-friable ACM
- PACM – rebuttable presumption

Asbestos

Demolition and Renovation

- EPA - hazardous air emissions under CAA
 - Inspect for ACM
 - Notification 10 working days in advance
 - >260 l.f. on pipes or 160 s.f. on other component, or
 - 35 c.f. off facility components
 - Emission control requirements

Asbestos

Construction Industry

- OSHA – worker health and safety
 - No exposure in excess of PELs
 - TWA – 0.1 fiber per cubic centimeter of air
 - EL – 1.0 fiber per cubic centimeter of air
 - Work practices
 - Training
 - Medical surveillance

Lead

Demolition and Renovation

- OSHA
 - Exposure assessment
 - PEL = $< 50 \mu\text{g}/\text{m}^3$ of air average over 8-hours
 - Protection
 - Monitoring

Endangered Species Act

- Prohibits any action that results in a "taking" of a listed species, or adversely affects habitat
- Plants and animals
- US Fish & Wildlife
 - 1500 endangered species
 - 300 threatened species

Thank You!

Questions & Answers

Presented by:
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