



*Driving Business Advantage*



# Current Environmental Issues for Hospital Construction

May 15, 2009

Seth D. Jaffe

# Hot Topics

---

- DON Requirements for Green Building
- DEP Proposed Regulations for Stormwater Discharges
- MEPA Greenhouse Gas Regulations
- Global Warming Solutions Act

# DEP Stormwater Regulations

---

- Who Will Be Subject to the Regulations
- What Activities Will Be Subject to the Regulations
- What Will Be Required to Comply

# Who Is Subject to the Regulations?

- Focus on impervious surfaces
- Basic thresholds for existing impervious areas
  - Minimum thresholds statewide
  - Thresholds in TMDL areas
- New Development
- Redevelopment

# How Much Impervious Surface?

## Regulated Impervious Area (RIA)

***Five or more acres of impervious surfaces*** that are located on a single lot or two or more ***contiguous lots aggregated in accordance with 314 CMR 21.05***

- \* Lots separated by public way are “contiguous” if part of one “facility or campus”
- \* Two-acre threshold in TMDL area such as Charles River




# Aggregation

- Contiguous Lots Will Be Aggregated, if lots share:
  - On-site stormwater management systems, or
  - “Agreements or practices” for:
    - Shared O&M
    - Use of parking or storage
    - Off-site BMPs, or
    - Buildings or structures

## TMDL-Identified Areas (2 Acre RIAs)





- 6 watersheds
- Based on phosphorus TMDLs (more to come)
- Defined by MassDEP maps:  
<http://www.mass.gov/dep/water/laws/swgppaplg.htm>
- If part of property is in TMDL area, it is all in
- Coverage will change over time as additional TMDLs are established

# What Is Required: Existing RIAs

|   | <b>TMDL areas<br/>(2+ acres)</b>  | <b>Statewide<br/>(5+ acres)</b>   |
|---|---|---|
| <b>Baseline<br/>Performance<br/>Standards</b>                     |   |  |
| <b>Retrofit to<br/>achieve<br/>pollution<br/>reduction target</b> |  |   |



# What is Required: New Development & Redevelopment

|   | <b>TMDL areas<br/>(2+ acres)</b>  | <b>Statewide<br/>(5+ acres)</b>  |
|---|---|--|
| <b>Additional<br/>Performance<br/>Standards for<br/>Development</b>   |   |   |
| <b>Additional<br/>Performance<br/>Standards for<br/>Redevelopment</b> |  |  |

# Development Trigger

---

- New pavement or roof that did not previously exist
- New pavement or roof in connection with replacement of existing building or structure

## Redevelopment Trigger

Reconstruction, rehabilitation, repair, or improvement of a roof resulting in a ***substantial improvement in the building or structure***

Reconstruction, rehabilitation, repair, or improvement of a paved surface, including:

the full depth reconstruction of previously paved surface;

the scarifying of existing pavement to lay down a new top coat; and

any repaving of a previously paved surface other than a ***minor repair of a paved surface.***

## Transition Rule (21.11)

- Grandfathers projects that are fully permitted within 6 months of start of program
- Project must proceed “continuously and expeditiously to completion,” i.e. no delays of 6 months or more



# General Permit Requirements

- Existing sites: baseline performance standards
  - No retrofits required for non-TMDL sites
- New development of impervious surfaces
  - Install LID techniques and stormwater BMPs
- Redevelopment of impervious surfaces
  - Install LID techniques and stormwater BMPs that maintain existing development recharge and treatment
  - Infiltration of at least 40% of “redevelopment volume”
- TMDL areas:
  - Stormwater discharges from impervious areas
  - Infiltration BMPs for pollutant reduction %

# Summary of Implications

- Non-TMDL areas:
  - more formalized requirements for O&M
  - no retrofits required
- New development sites:
  - Generally the same
  - In TMDL areas (Charles River Watershed) must comply with
    - 65% phosphorous removal rates
    - May have to complete off-site mitigation
- Existing RIA sites in Charles River Watershed and other TMDL areas will require retrofits

# Compliance Costs

- MassDEP provided no estimate of compliance costs
- NAIOP/AIM cost analysis by Tetra Tech Rizzo
  - Costs for retrofit \$50,000-\$100,000/acre in many areas

# Greenhouse Gas (GHG) Regulation Under MEPA

---

- Policy in place since 2007
- Originally applied to projects meeting traffic or air emissions thresholds
- As of February 2009, all projects required to prepare Environmental Impact Report (EIR) must prepare GHG analysis



# Required Analysis Under GHG Policy

## Quantify GHG Emissions

- Direct emissions from energy consumption
- Indirect emissions from energy consumption (electricity, steam, cooling)
- Indirect emissions from transportation
- Compare emissions from
  - Code-compliant baseline
  - Preferred alternative
  - Alternative “plus”

# Avoid, Minimize, Mitigate

---

- Focus on mitigation
- Appendix has list of suggested mitigation measures
- Project proponent must certify that mitigation measures have been implemented

# Upcoming Changes to GHG Policy

- Global Warming Solutions Act provides statutory basis for the GHG policy
- February 2009 change to make apply policy to all projects subject to EIR requirement
- Consideration of regulatory changes
  - Discussion of specific new categorical thresholds
    - Indirect emissions – building size ?
    - Direct emissions – potential new categories of air emissions?

# GHG Reporting

- DEP Emergency Regulations December 2008
  - Facilities emitting  $\geq 5,000$  tons/year CO<sub>2</sub> or subject to CAA Title V operating permit were required to register by April 15, 2009
  - Affected sources must report 2009 emissions by April 15, 2010
  - Use Climate Registry General Reporting Protocol
  - For most subject facilities, reporting includes emissions from motor vehicles

# Proposed Revisions To GHG Reporting

---

- Certification and third party verification
- Voluntary reporting
- Once in, always in

# On The Horizon

- **Stretch Energy Code**
  - Approved this week
  - Allows communities to adopt code requiring commercial buildings to be 20% more energy efficient than ASHRAE 2007
- **Reclaimed Water Regulations (314 CMR 20.00)**
- **Mandatory GHG Reductions pursuant to GWSA Regulations (First regulations promulgated 2011)**
- **Regulation of Pharmaceuticals in Wastewater**

## Questions?

---

*Seth D. Jaffe, Esq.*

Foley Hoag LLP

World Trade Center West

155 Seaport Boulevard

Boston, MA 02210

617.832.1203 (t)

617.832.7000 (f)

[sjaffe@foleyhoag.com](mailto:sjaffe@foleyhoag.com)

[www.foleyhoag.com](http://www.foleyhoag.com)

[www.lawandenvironment.com](http://www.lawandenvironment.com)