







Summary

Open industrial uses provide employment and necessary services in New York City. However, many open industrial uses degrade the environment and hamper economic development in industrial areas.

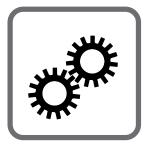
To protect the environment and communities, the City's 1961 Zoning Resolution performance standards for open industrial uses should be replaced by prescriptive site design standards, in light of other regulations and flood hazards.

Open industrial use types studied

The study focuses on six primary use categories; these categories have been described as generating a more significant environmental impact in New York City.



Concrete & Asphalt Manufacturing



Scrap Metal Processing



Auto Wrecking



Construction & Demolition Debris Transfer



Waste Recycling



Unenclosed
Storage of
Usable Materials

Objectives

INDUSTRIAL USES

The study supports the City's working waterfront and industrial businesses, while making

industrial areas stronger, safer and more resilient to natural hazards. The study's three primary objectives are: **QUALITY OF LIFE** Improvements that address transportation, and aesthetic concerns. such as parking and urban design. Cost-effective measures **Effective** will seek to improve the business climate and natural environment in **Feasible** industrial areas, retain important industrial businesses, and foster new businesses and jobs in areas near open **ENVIRONMENTAL PROTECTION** industrial uses Reduce emissions and off-site impacts to improve **ECONOMIC DEVELOPMENT** water quality, air quality, and provide protections for Low-Cost hazardous materials in the flood zone.

Process

The engineering phase of the study began in January 2013, and has been completed in six months. Draft recommendations will be developed over the next several months, OIUS aims to initiate the public review and ULURP process before the end of 2013.

ENGINEERING STUDY Financial **Identify** Prototypical Regulatory **DRAFT** Pollution **Feasibility** Site Analysis Review RECOMMENDATIONS Controls Assessment **PUBLIC OUTREACH** Ongoing . Winter 2013 6 months Fall 2013



Draft Recommendations Summary

OIUS recommends a four part proposal that addresses the City's goal of improving the quality and safety of NYC's manufacturing districts.

- Regulatory Amendments applicable to all open industrial uses
- Regulatory Amendments applicable to open storage and activity in the flood zone
- 3 Compliance Framework
- 4 Incentives and Outreach Programs



Draft Recommendations Summary

Regulatory amendments applicable to all open industrial uses

- Revise zoning to include provisions for cost-effective, pollution prevention controls and site design standards at new and existing open industrial facilities. These provisions will support existing goals for water and air quality and aid enforcement.
- Additional amendments to Building and other codes to support environmental objectives with respect to open industrial uses citywide.

Regulatory Amendments applicable to all open storage and activity in the flood zone

 Revise Building Code to include flood-resistant construction standards for new and existing open industrial facilities.



Draft Recommendations Summary

3 Compliance Framework

- Improve coordination between regulatory agencies, consider more effective means for enforcement.
- Ongoing technical discussions with DOB, DEP, DEC with regard to permits and approvals

4 Incentives and Outreach Programs

- Create financial incentives for upgrades at new and existing facilities.
- Develop programming that provides technical assistance, educational support, and outreach to open industrial uses.



Context

The history of New York City's working waterfront, along with contemporary developments in environmental regulation have created a unique context for open industrial facilities.

Where are they clustered?

The 6 open industrial uses are allowed to operate unenclosed in M1, M2, and M3 zones if they meet the Performance Standards in the Zoning Resolution.

Areas permitting industrial uses:

M1 Zoning Districts

M2 Zoning Districts

M3 Zoning Districts

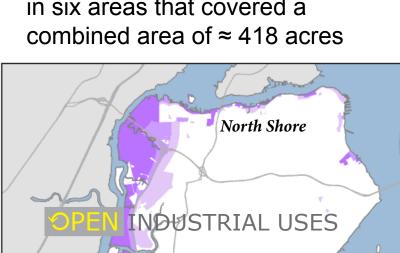
Areas with high concentrations of facilities under study:

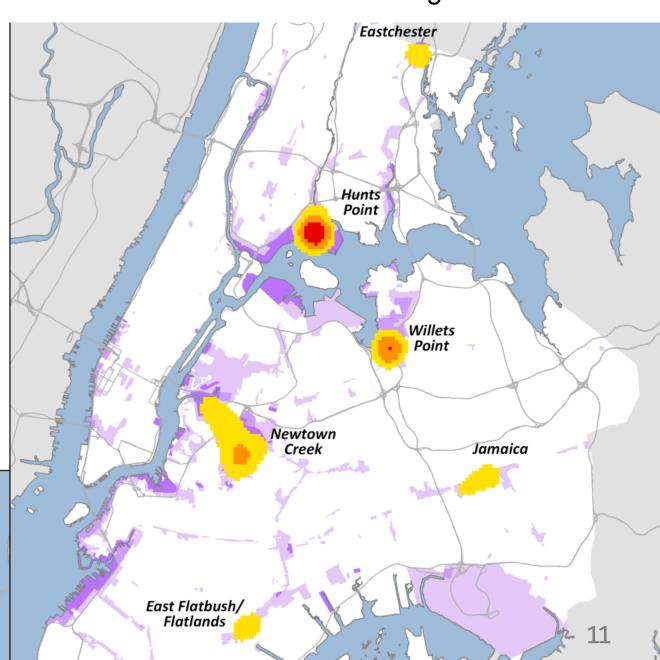
10 - 20 facilities per square mile

20.1 - 30 facilities per square mile

30.1 - 46 facilities per square mile

600 open industrial uses surveyed in six areas that covered a





Environmental concerns

Certain issues are conditions unique to NYC - High density, small sites, absence of buffering adjacent to residences, tendency of open industrial uses to locate in flood zones.

NOISE

AIR QUALITY

FLOOD RESILIENCE

WATER QUALITY

HAZARDOUS MATERIALS



 O_2









Performance Standards

The performance standards in the Zoning Resolution are outdated and inconsistent with other more contemporary environmental regulations and emission standards, with more robust enforcement.

| Performance Standard | Issue | Superseded By | Enforcement | |
|---|---|--|-------------|--|
| 42-21 Noise | Outdated measurement | Noise Control Code | DEP | |
| 42-22 Vibration | Outdated measurement | Noise Control Code | DEP | |
| Smoke, Dust, and Other Particulate Matter | Outdated measurement, inconsistent with current standards | Air Pollution Control Code | DEP | |
| 42-24 Odorous Matter | Qualitative without enforcement mechanism | Air Pollution Control Code | DEP | |
| 42-25 Toxic or Noxious Matter | No enforcement mechanism | Air Pollution Control Code, Right-to-Know | DEP | |
| 42-26 Radiation Hazards | No enforcement mechanism | Right-To-Know, Department of Health | DEP, DOH | |
| Fire and Explosive Hazards | Inconsistent with current standards | Fire Code, Building Code | FDNY DOB | |
| Humidity, Heat, and Glare | No enforcement mechanism | Air Pollution Control Code | DEP | |
| INDUCTOIAL LICEC | | | | |

INDUSTRIAL USES

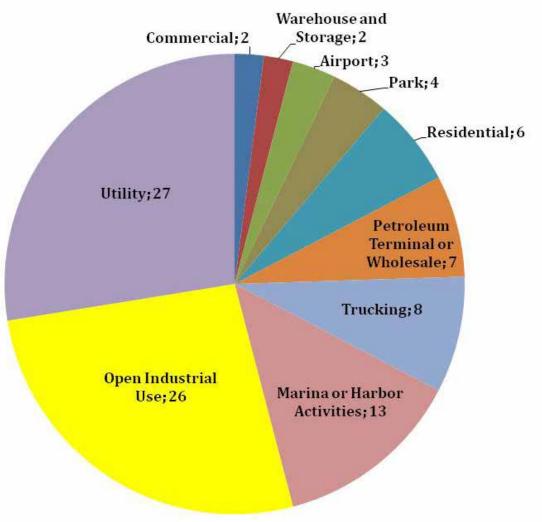
REGULATION

Issues of compliance

Regulations affecting recycling, cement manufacture, scrap metal salvage, auto dismantling, and open storage of usable materials are less rigorous that those affecting construction and demolition waste transfer.

- Rules based on performance and operational standards are difficult to enforce.
- Better regulation should focus on proactive, structural solutions to stormwater management and nuisances
- Insufficient clarity in Building Code to address issue of flood resilience on vulnerable sites or for hazardous material storage.

Clean Water Act Violations in NYC (2008-2013)





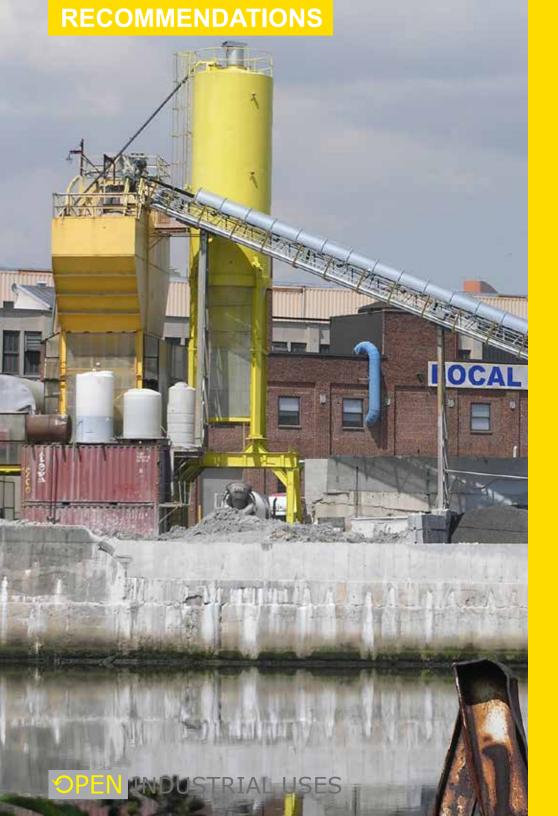


Precedents

New York City has not updated zoning regulations for open industrial sites since the 1960s. Other cities have demonstrated more rigorous policy approaches to addressing environmental contamination and resiliency issues for these sites.

How do other cities handle these issues?

| City Name | Requires enclosure? | Paving | Stormwater management plan | Fencing? | Flood stadards reinforce FEMA? | Site Plan Review |
|-------------------|---|-------------|----------------------------------|----------|---|---------------------|
| Baltimore, MD | In Light Industrial (M2) and Heavy Industrial (M3) Districts - Enclosure or Screening | Yes | Yes | Property | All-Hazards Plan for the City of Baltimore | Yes |
| Boston, MA | No | Yes | Yes | Yes | Yes | Yes |
| Chicago, IL | In Light Industrial (M2) and Heavy Industrial (M3) Districts | | Yes | | All-Hazard Mitigation Plan | |
| Indianapolis, IN | In Heavy Industrial Districts | | Joint - City & Private | Storage | MULTI-HAZARD MITIGATION PLAN | |
| London, UK | Recycling | Yes | Yes | Yes | "Drain London" - surface water flooding plan | Yes |
| Los Angeles, CA | Concrete and Cement Manufacturing; Auto Dismantling | | Yes | Yes | Floodplain Management Report | |
| Milwaukee, WI | Material Reclamation | | Yes | | All-Hazard Mitigation Plan | Informal |
| Newark, NJ | Does not allow open industrial uses | Recommended | Yes | Yes | State DEP | Yes |
| Philadelphia, PA | No | | Yes | | Philadelphia Natural Hazard Mitigation Plan | Yes |
| Portland, OR | No | Recommended | Yes | Yes | Natural Hazard Mitigation Plan | Yes |
| San Francisco, CA | Concrete Manufacturing, Scrap Metal, Salvage Yards | Yes | Yes | Yes | San Francisco Hazard Mitigation Plan | Yes |
| Seattle, WA | Heavy Manufacturing | Recommended | Yes | Yes | King County Regional Hazard Mitigation Plan | Yes |
| Washington D.C. | Recycling and Concrete/Asphalt | | Yes | Yes | Recommended - Stormwater Pollution Plans | Yes |



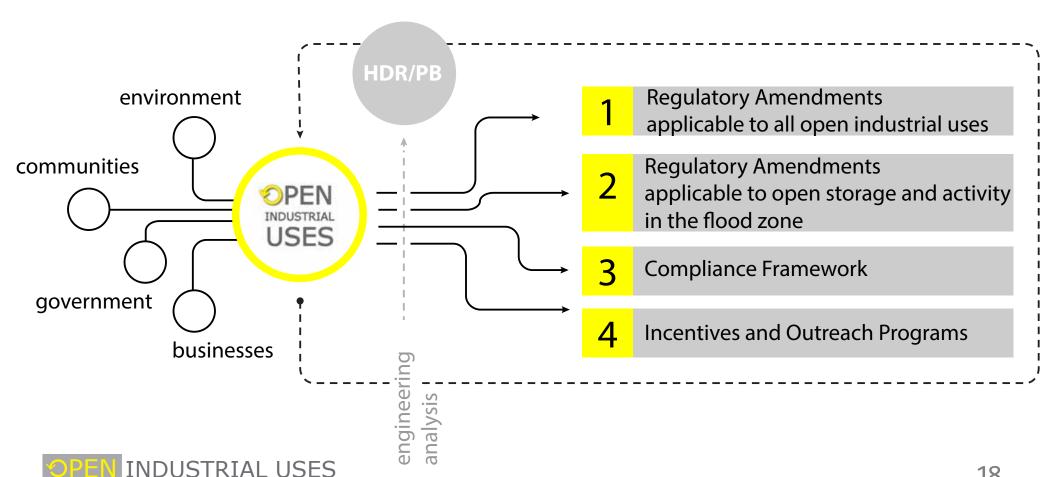
Draft Recommendations

OIUS recommends a four part proposal that addresses the City's goal of improving the quality and safety of New York City's manufacturing districts, framed by the discourse on air quality, stormwater management and flood hazard mitigation.

Draft Recommendations

OIUS recommends a four part proposal that addresses the City's goal of improving the quality and safety of New York City's manufacturing districts.

- Applies to all uses
- Applies retroactivity where appropriate
- Emphasizes stormwater management, while addressing other concerns



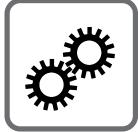
Zoning Text Amendments applicable to all Open Industrial Sites



Applies to new and existing unenclosed uses. (Except for existing construction and demolition facilities) The six defined open industrial uses would no longer be subject to the performance standards.



Concrete & Asphalt Manufactuing



Scrap Metal Processing



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Waste Recycling



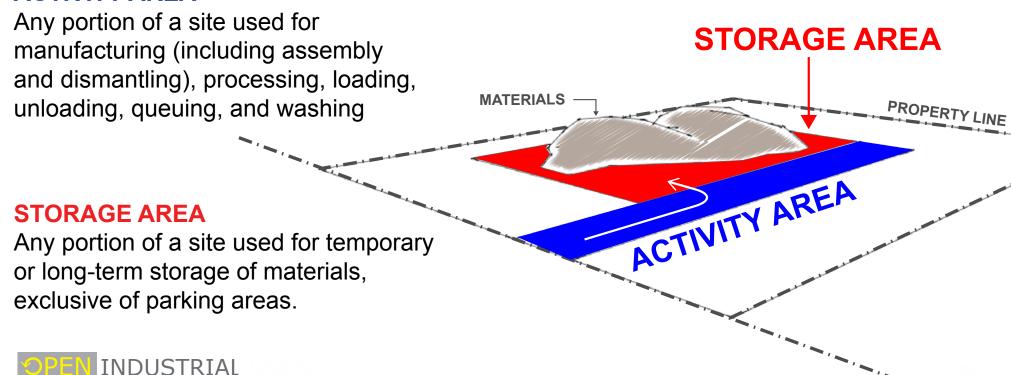
Unenclosed
Storage of
Usable Materials

Zoning Text Amendments applicable to Open Industrial Sites



Applies to open, unenclosed, unsecure, and outdoor activities, uses and storage types, as described below.

ACTIVITY AREA

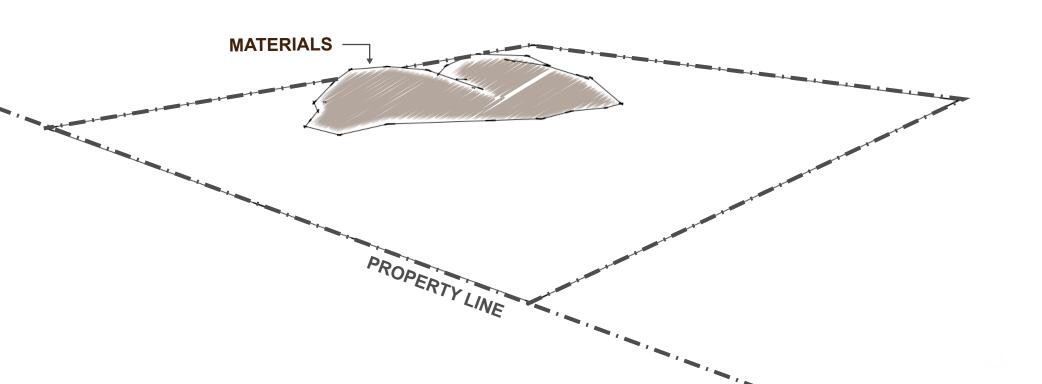


Zoning Text Amendments

Regulatory Amendments applicable to all open industrial sites



Zoning would require that the five applicable categories of open industrial uses meet new pollution prevention standards within five years of [date of adoption].

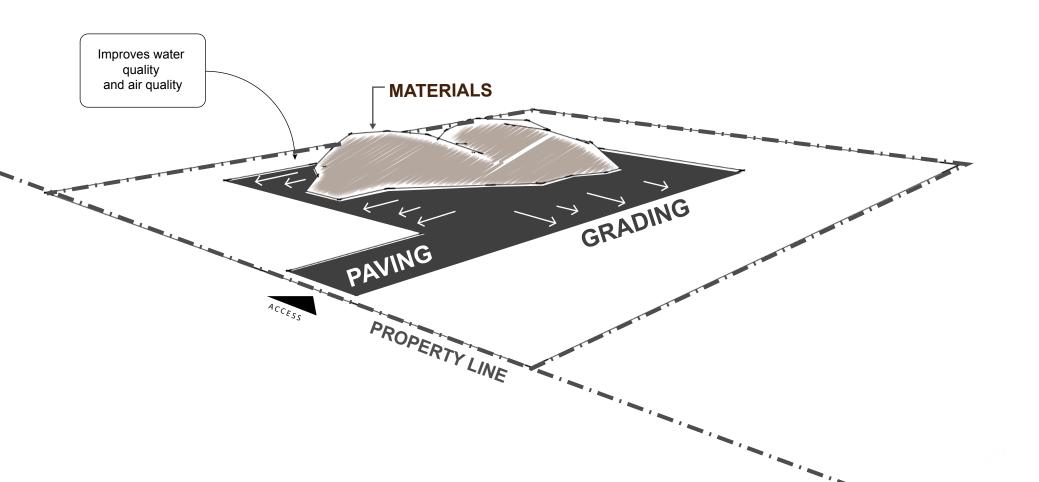


Zoning Text Amendments - OIU sites

Part I: Regulatory Amendments applicable to all open industrial sites



1. Pave and grade the activity and storage areas.

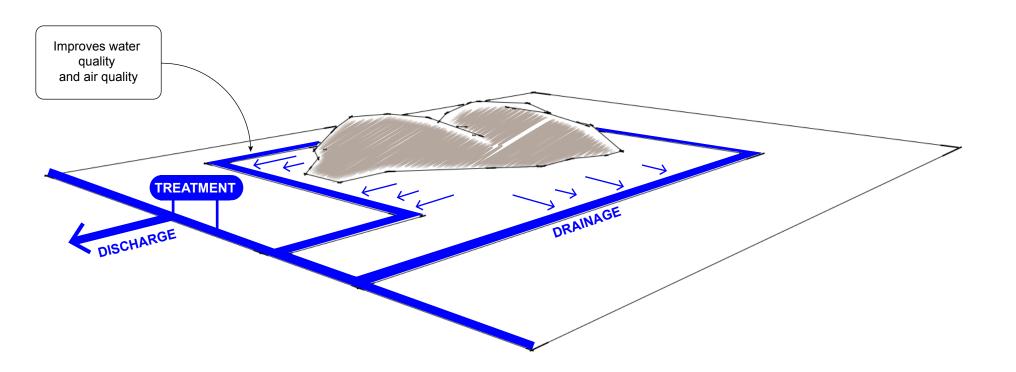


Zoning Text Amendments - OIU sites

Part I: Regulatory Amendments applicable to all open industrial sites



2. Install drainage system for paved area, including treatment and filtration (grit or oil) depending on use.

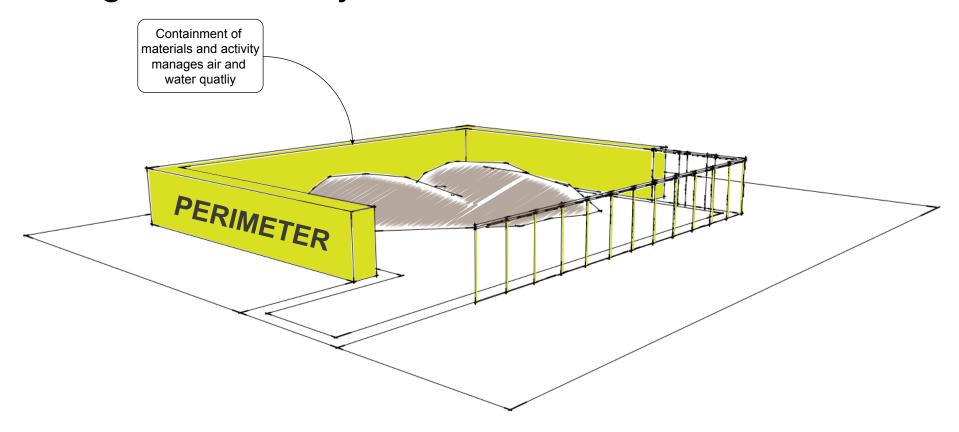


Zoning Text Amendments - OIU sites

Part I: Regulatory Amendments applicable to all open industrial sites



3. Install containment or perimeter treatment around storage and activity areas.



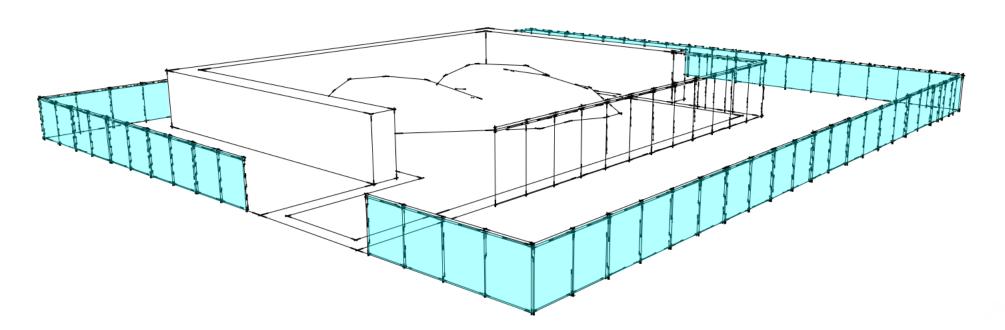
Zoning Text Amendments

Regulatory Amendments applicable to all open industrial sites



Evaluate property line fencing standards for new facilities.

8' fencing requirement does not provide pollution prevention and impairs visability to natural resources. Fencing requirements are under review with DCP Urban Design Division.



Zoning Text Amendments

Regulatory Amendments applicable to all open industrial sites



Other site design standards under consideration

Quality of Life Standards

[ONLY APPLICABLE TO NEW FACILITIES, EXPANSIONS, OR CHANGE OF USE]

Minimum truck parking and queuing requirement.

Landscaping and buffering adjacent to residential districts

Fencing standards for height, materials, transparency

Signage

[REQUIRED FOR ALL FACILITIES: NEW AND EXISTING]

A sign shall be posted at all entrances to the facility and shall indicate the business name, hours of operation, the types of materials it accepts and does not accept, the types of permits to operate pursuant to City and State regulations and expiration dates, and the telephone number of the business.

(check if reference should be in Building Code)

Coordination with other Codes

Regulatory Amendments applicable to all open industrial sites

 Coordinate amendments to other City codes to address inconsistencies, gaps and specify applicability of standards to open industrial uses.



Air Code (DEP)

Noise Code (DEP)

Sanitation Rules (DSNY)



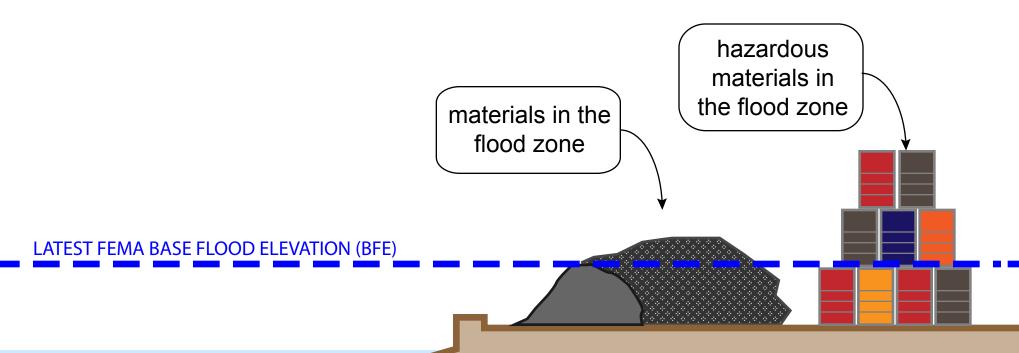




Regulatory Amendments applicable to open activity and storage in flood zones



Appendix G of the NYC Building Code regulates the storage of materials and activities in the flood zone.



Regulatory Amendments applicable to open activity and storage in flood zones



Appendix G requires that facilities flood proof open stored and hazardous material in the flood zone, or design to BFE (base flood

elevation) + 1'

isolate, contain and secure

(wet floodproofing)

isolate, secure,

elevate or remove

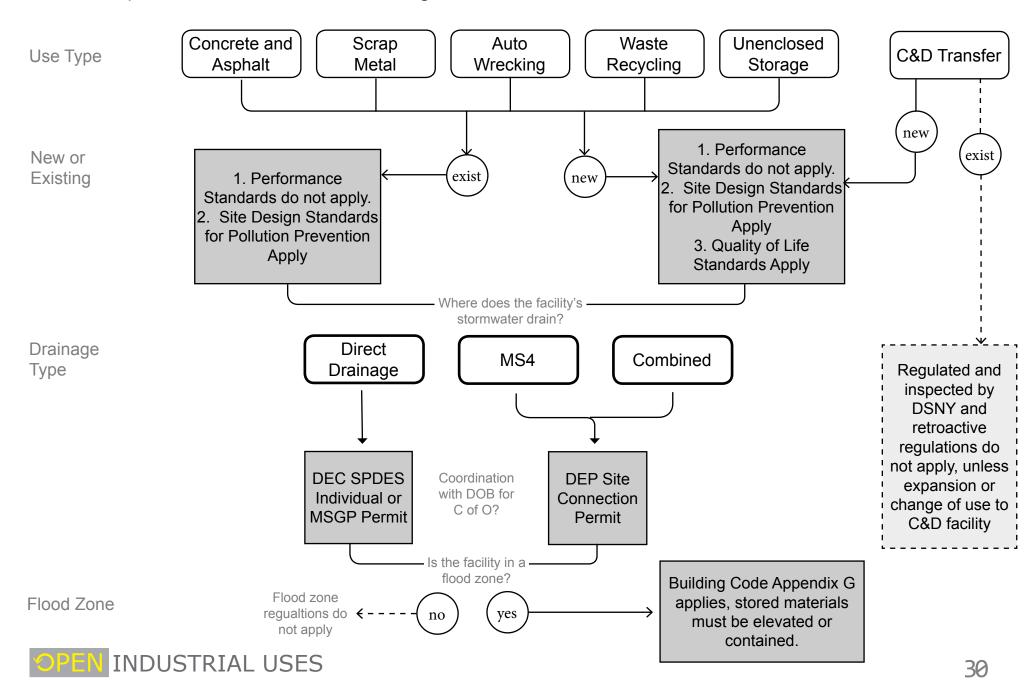
BASE FLOOD ELEVATION PLUS 1 FOOT

LATEST FEMA BASE FLOOD ELEVATION (BFE)

 Revise Appendix G: Flood-resistant construction standards would apply to new and existing open industrial uses and all other open storage, whether or not the primary use on site.

Compliance Framework

Part III: Improve coordination with other agencies



Incentives and Outreach

Identify and create program to provide financial assistance for upgrades required by new zoning provisions. Such as:

- Study potential incentives for small industrial improvements with EDC/IDA.
- Education, support and outreach on existing financial incentives such as ICAP and Brownfields Programs.
- Develop program that provides businesses with technical permit assistance, education and outreach on the proposed changes.















Next Steps...

- Initiate Draft Zoning Text Amendment
- Outline Environmental Review
- Begin Public Review in Fall of 2013
- Continue Public Outreach