



**ADVISORY COMMITTEE
MEETING
MARCH 11, 2013**

OPEN INDUSTRIAL USES

Agenda

Monday March 11, 2013 11am - 12:30pm

External Advisory Committee Meeting

- 1) Welcome and Introductions
- 2) Overview of Role of External Advisory Committee
- 3) Matrix of Controls Presentation
 - a. Methodology
 - b. Preliminary Control Categories
 - c. Screening Assessment
 - d. Regulatory Review process
- 4) Questions and Discussion
- 5) Next Steps
 - a. Future meeting dates
 - b. What to expect for future meetings
 - c. Updates to website with steering committee information and presentation

The Open Industrial Uses Study



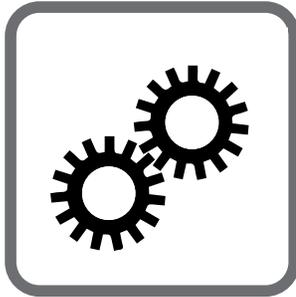
Should the City's 1961 Zoning Resolution controls on open industrial uses—especially along the waterfront—be updated, in light of other regulations and climate change?

Objective: Pollution prevention controls that foster economic development while providing appropriate protections to neighboring industrial, commercial and residential uses, enhancing resilience to climate change, especially flooding, and protecting natural resources.

Six use categories



Concrete
& Asphalt
Manufacturing



Scrap Metal
Processing



Auto
Dismantling



Non-putrescible
Waste, C&D,
Clean Fill

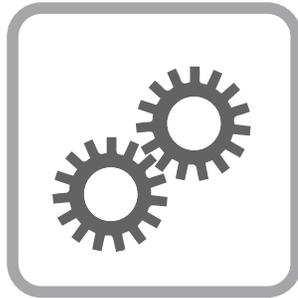


Waste
Recycling



Unenclosed
Storage

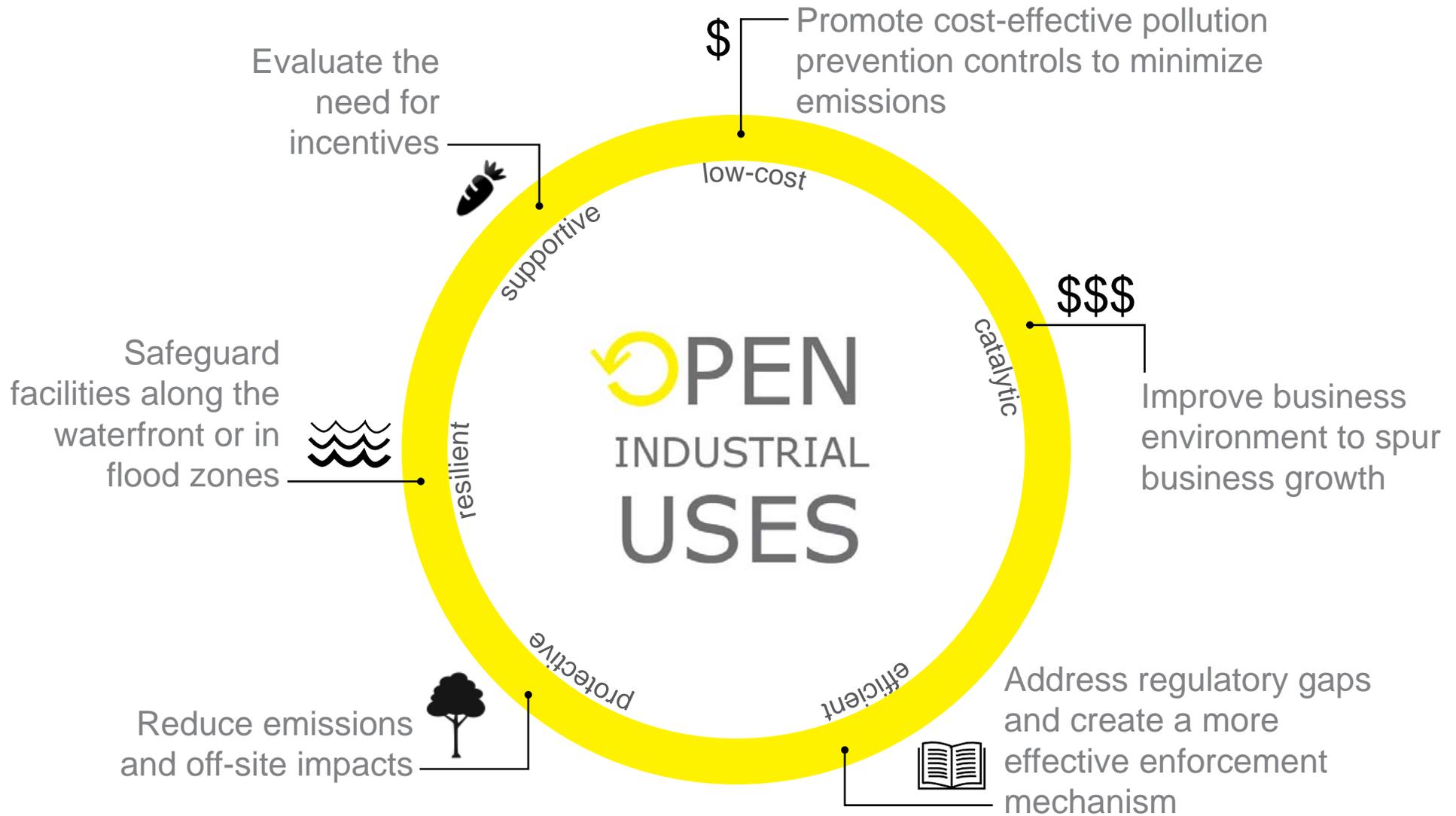
Common concerns



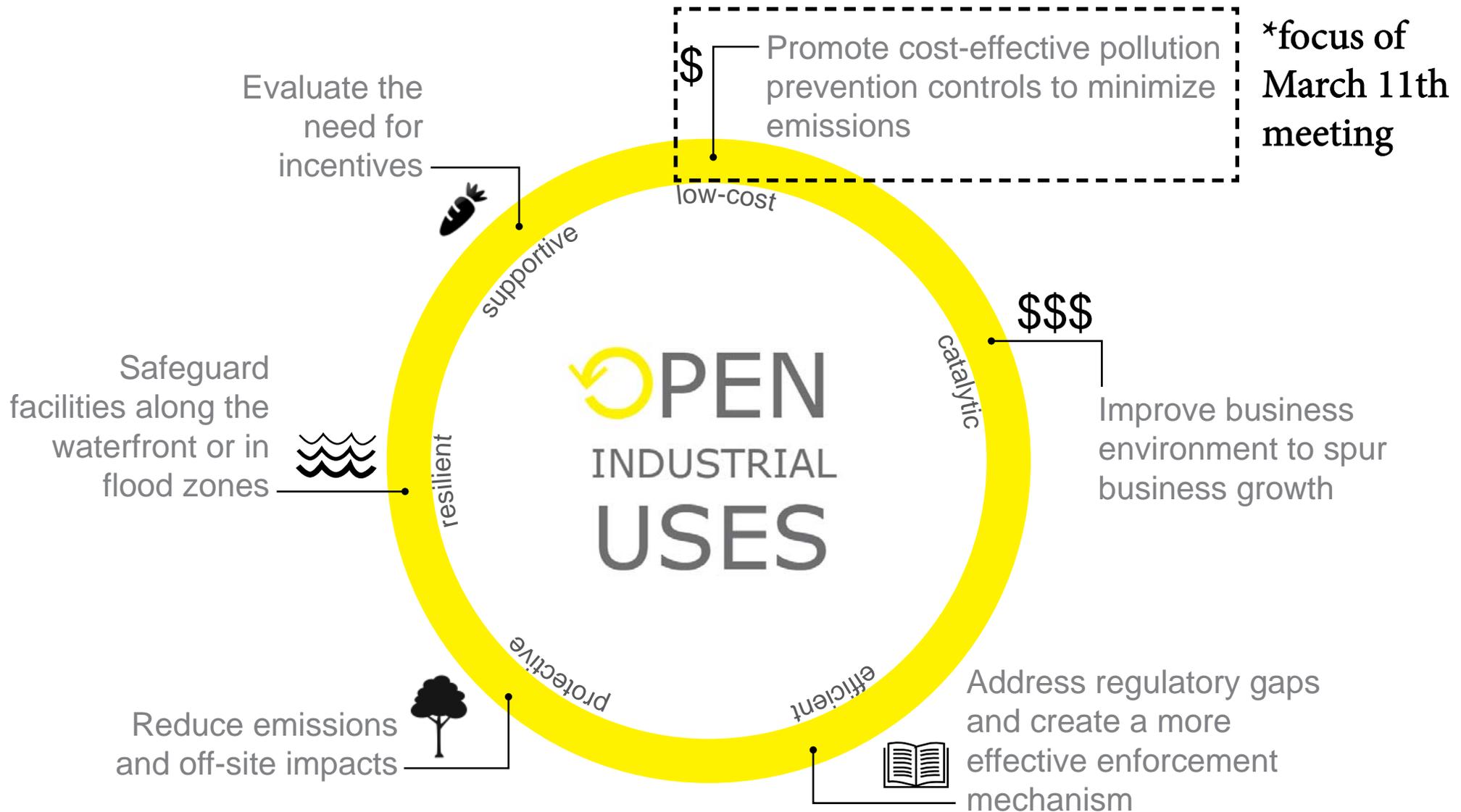
- Blowing dust, debris, infestation, and contamination of water and soil are frequent problems.
- Damage to public infrastructure
- Improperly stored materials pose threats in severe storms or flooding.
- While many businesses comply with industry best practices, they compete with others that fail to maintain standards.



Objectives



Objectives



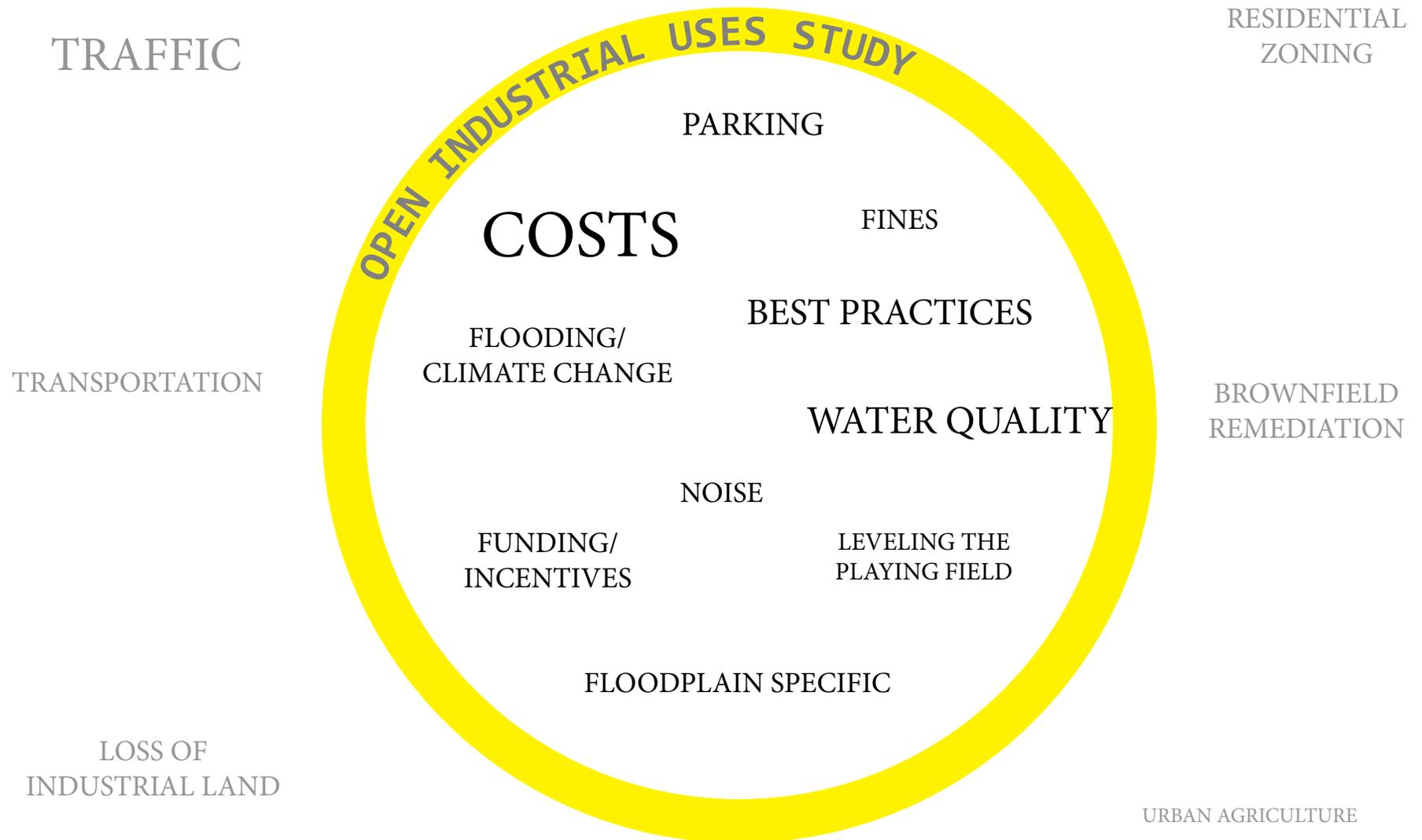
Stakeholder Feedback

Topics of concern mentioned at January 2013 Stakeholder Meetings



Scope

The topics inside the circle fall within the scope of OIUS.



Methodology

Engineering controls have been evaluated and scored based on a series of parameters including cost and measures of effectiveness in addressing environmental factors.

Factor	Category	POLLUTION PREVENTION CONTROL	Already Required? (If YES, list which industry, or ALL)	Original numbering order	Source	Page	Assessment Chart		Factored into X VALUE (EFFICACY) of Assessment Chart										Total Costs	Weighted Score	Ra			
							Efficacy (X VALUE)	Cont (Y VALUE)	Total Controls	Categories of Open Industrial Uses being Addressed						Total Environmental Quality	Environmental Factors being Addressed							
										Concrete and Cement Manufacturing	Auto Disassembling/Auto Salvage	Scrap Metal Salvage	Waste Recycling	Non-Putrescible Waste	Unenclosed Storage of Open Piles of Bulk & Unstable Materials		Air Quality	Water Quality/Stormwater				Noise	Climate Resilience	
							1 = Applicable to Use										Score Compilation (Automatic) for each environmental effectiveness measure.							
							72	60	18	1	1	1	1	1	1	1	14	15	18	12	18	45		
enclose		Enclose the entire operation; including proposed installation of ventilation and filtration system.	Putrescible Solid Waste Transfer Station, Included in SWPPP for Construction	9	28, 55, 71, 8, 2, 18, 74, 27	10, 32, 2, 20, 4, 14, 18, 60	85%	43%	15								46.5	12	18	10	13	15		
buffer		Require minimum lot area for specified uses for new/redevelopment sites; to allow space for the implementation of controls			78	n/a	55%	47%	18								21.5	4	12	4	3	15		
grade & Grade		Pave site to reduce dust generation; add a stormwater management system and/or sediment interceptor.		39	10, 29	32, 27	53%	57%	18								20.5	4	12	1	7	24		
enclose		open storage of materials or products shall be permitted only if effectively screened by a solid wall (including solid entrance and exit gates) at least twelve feet in height.			78	943	52%	70%	18								19.5	5	6	8	1	30		
conveyance & Flow		Facilities should develop a SWPPP that prescribes how stormwater will be managed	Included in SWPPP for Construction Projects that disturb 1 acre or more of land.	85	28, 8, 19, 74, 3, 27, 20	6, 1, 6, 2, 30, 117, 3	51%	45%	18								18.5	0	18	0	1	15		
shield		Noise walls and/or other noise abatement measures and equipment enclosures should be utilized to provide shielding to sensitive receptor locations from significant noise generating equipment		51	83	8	49%	68%	18								17	5	0	12	0	30		
stabilize & Reinforce		Vegetative Cover: By establishing a vegetative cover on areas that will not see vehicle traffic, exposed soil is stabilized and wind velocity at ground level can be reduced, thus reducing the potential for dust to become airborne.			8	27	49%	68%	18								17	3	10	0	8	30		
enclose		Store all containers of gasoline, oil, solvents and other flammable chemicals in sealed containers in a fire safe, ventilated enclosed structure on an impervious spill containment surface where materials cannot pollute water if involved in flooding incident		14	2, 24, 27	6, 7, 84	48%	90%	18								16.5	2	9	0	11	42		
stabilize & Reinforce		Provide cover to surfaces unsuitable for planting with mulch, compost, matting, or netting; control erosion and sedimentation	Included in SWPPP for Construction	99	28, 73, 11, 8, 24, 3, 18	194, 4, 22, 19, 6, 19, 23	47%	68%	18								16	3	10	0	6	30		
manage		Install "no idling" signage consistent with regulations to reduce idling of equipment/ vehicles to reduce emissions		49	17, 36	80, 127	47%	97%	18								15.5	12	0	3	1	45		
buffer		Lay out or change the facility plan in a way to locate emission sources away from the sensitive land uses outside		3	41	n/a	46%	63%	18								15	8	0	5	4	27		
maintenance		Perform routine maintenance to all equipment to ensure they are working at maximum efficiency and minimize emissions. Have quality muffler installed.		2	7	3	45%	87%	18								14.5	8	1	5	1	42		
conveyance & Flow		Storm-water conveyances- prevent storm-water run-on from entering site and runoff from leaving site untreated	Included in SWPPP for Construction Projects that disturb 1 acre or more of	68	28, 11, 8	23, 20, 13	45%	48%	18								14.5	0	12	0	5	15		

CONTROLS

175

CATEGORIES

22

MECHANISMS

4

Mechanisms

Supportive documentation provided by an operator to demonstrate technical details relevant to site design, operations, and preparedness planning. These written instruments provide evidence of the operator's intention to implement required or recommended pollution control measures and are the tools by which regulatory agencies may grant approvals, monitor facility conditions, and enforce against non-compliance.

Contingency Plans

SITE PLAN

SITE PLAN STANDARDS

Detailed engineering, architecture, and/or landscape drawing that represents planned improvements at a facility, including locations and dimensions for property boundaries, existing and proposed improvements such as buildings, infrastructure, utilities, plantings, and areas of use.

GENERAL OPERATIONS

STANDARD OPERATING PROCEDURES MANUAL

Instructions that improve an operation's effectiveness in controlling common types of emissions, improving safety, and its ability to reduce nuisances through standardized systems, procedures and maintenance.

SPILL PREVENTION

RESPONSE PLAN

Specifies materials handling and storage requirements and identifies spill cleanup procedures for areas and processes in which spills may potentially occur. The plan standardizes spill cleanup response procedures and employee training in an effort to minimize accidental pollutant release that could contaminate storm water runoff.

EMERGENCY & RECOVERY

PREPAREDNESS PLAN

Plan and risk assessment that aims to protect people, property and the environment while lessening the financial impact of emergencies and human-induced or natural disasters. The plan typically includes evacuation, sheltering, and lockdown procedures as well as addressing specific recovery strategy options.

Categories



locate

defines parameters for entry and exit points, as well as parking and loading/unloading



shield or suppress

installation of a protective material, construction, planting or system that inhibits or deflects the diffusion of airborne vectors, pollutants, debris, and/or sound.



buffer

placement of equipment or activities from sensitive receptors to lessen noise or air quality impacts



perimeter

placement of equipment or activities from sensitive receptors to lessen noise or air quality impacts



cover

application of a protective material or structure other than a building to reduce dispersal by gravity, water runoff, and wind



intercept

positioning a material or system that prevents materials from falling or spilling during transmission, loading processes, or migrating off-site



enclose

structure consisting of four walls and roof



inform

universally accessible signage that may reduce exposure to risks or impacts by notifying employees and visitors of hazards, site limits, emergency equipment, and relevant operating procedures



pave/grade

treatment of the ground's surface to minimize tracking of dirt and dust from the site, channel storm/waste water on the site, and form a more protective barrier protecting the soil and ground water contamination from leachate.



elevate

raise operations or materials by increasing the base land elevation or mounting



stabilize/reinforce

soil confinement structures, retention systems or vegetative frameworks that mitigate and guard against erosion or sediment deposition



conveyance/flow

infrastructure that moves or controls the movement of water such as gutters, trenching, swales and hydraulic fixtures



infiltrate/discharge

systems and technologies designed to capture, detain/retain, filter, stratify liquids, and/or control the outflow or release of water from the facility site



Maintenance Parts & Equipment



P&E



Stormwater Planning



Green Products



Proper Disposal/ Recycling



Risk Assessment



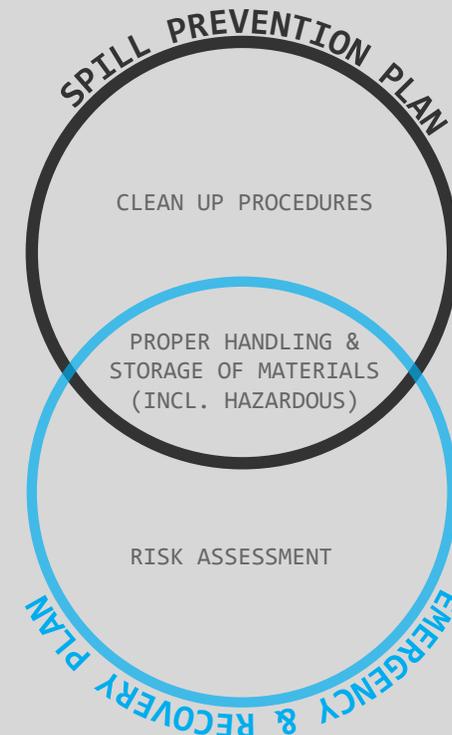
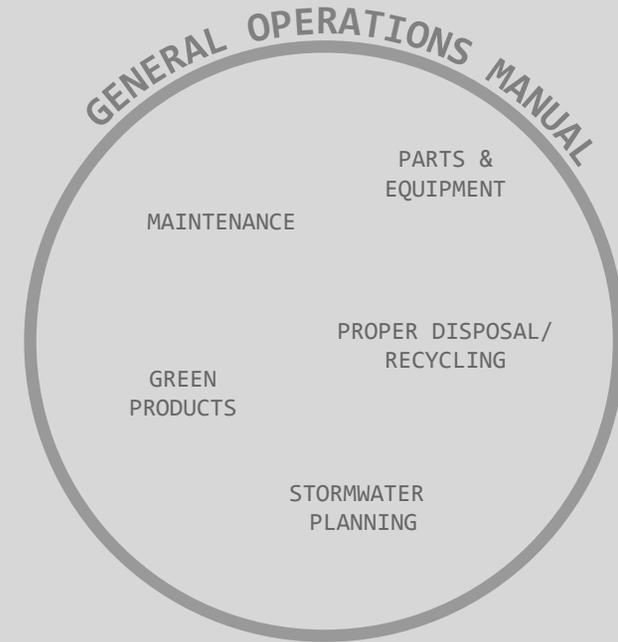
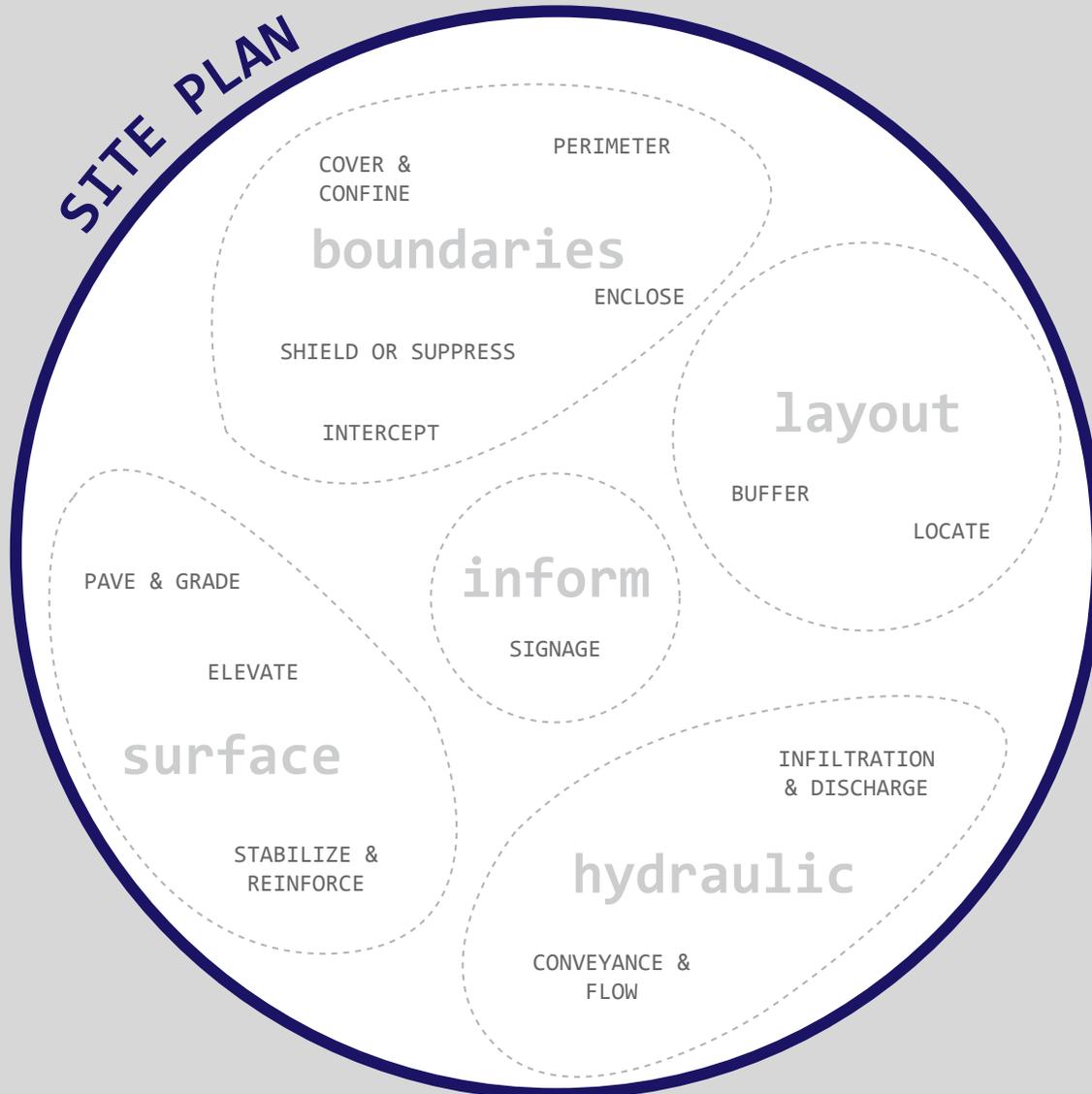
Clean Up Procedures



Proper Handling of Materials

Categories by Mechanism

Classification that describes general control categories based on the primary function, typology, or practice.



Evaluation Tool

Generate an X and Y VALUE for each control represented by a percentage % of points achieved out of the total from the following parameters. These values will be plotted on the following chart.

COST

Cost to Implement	(45)
Capital	0-3 pt
Long-term O&M	0-3 pt
Life Cycle	0-3 pt
Time to Apply	0-3 pt
Requires 3rd Party Expertise	0-3 pt

rank from 0-3, where 3 is the lowest cost

Categories of Open Industrial Uses	(6)
Concrete and Cement Manufacturing	1 pt
Auto Dismantling/Auto Salvage	1 pt
Scrap Metal Salvage	1 pt
Waste Recycling	1 pt
Non-Putrescible Waste	1 pt
Unenclosed Storage	1 pt

1 = Meets Criteria

Environmental Factors being Addressed

Air Quality	(12)
Particulate Pollution	0-3 pt
Fugitive Dust	0-3 pt
Air Toxics	0-3 pt
Other Air Pollutants (SO ₂ , NO ₂ , CO)	0-3 pt

rank from 0-3, where 3 is most effective

EFFECTIVENESS

Total Cost Score (Y) (45)
Total Effectiveness Score (X) (69)

Water Quality/ Stormwater	(18)
Erosion Control	0-3 pt
Particulate Matter	0-3 pt
Chemical Pollutants	0-3 pt
Petroleum Products	0-3 pt
Volume Control	0-3 pt
Heavy Metal	0-3 pt

rank from 0-1, where 1 is most effective

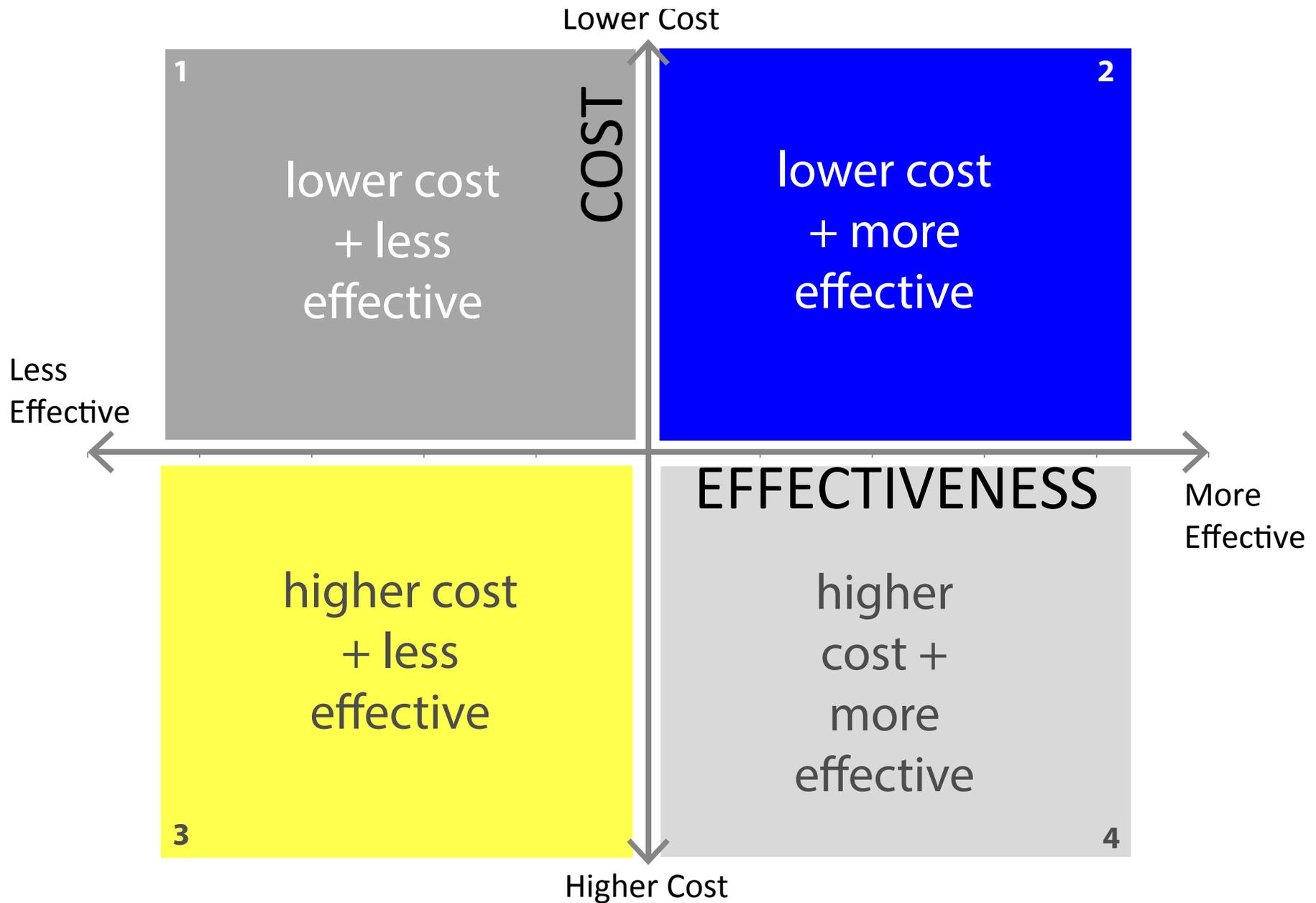
Noise	(12)
Truck Noise	0-3 pt
Heavy Machinery Noise	0-3 pt
Impact Equipment Noise	0-3 pt
General Facility Noise	0-3 pt

rank from 0-1, where 1 is most effective

Climate Resilience	(18)
Intense Precipitation/Flooding	0-3 pt
Coastal Flooding/Sea Level Rise	0-3 pt
Extreme Heat	0-3 pt
Extreme Cold	0-3 pt
Drought	0-3 pt
Extreme Wind	0-3 pt

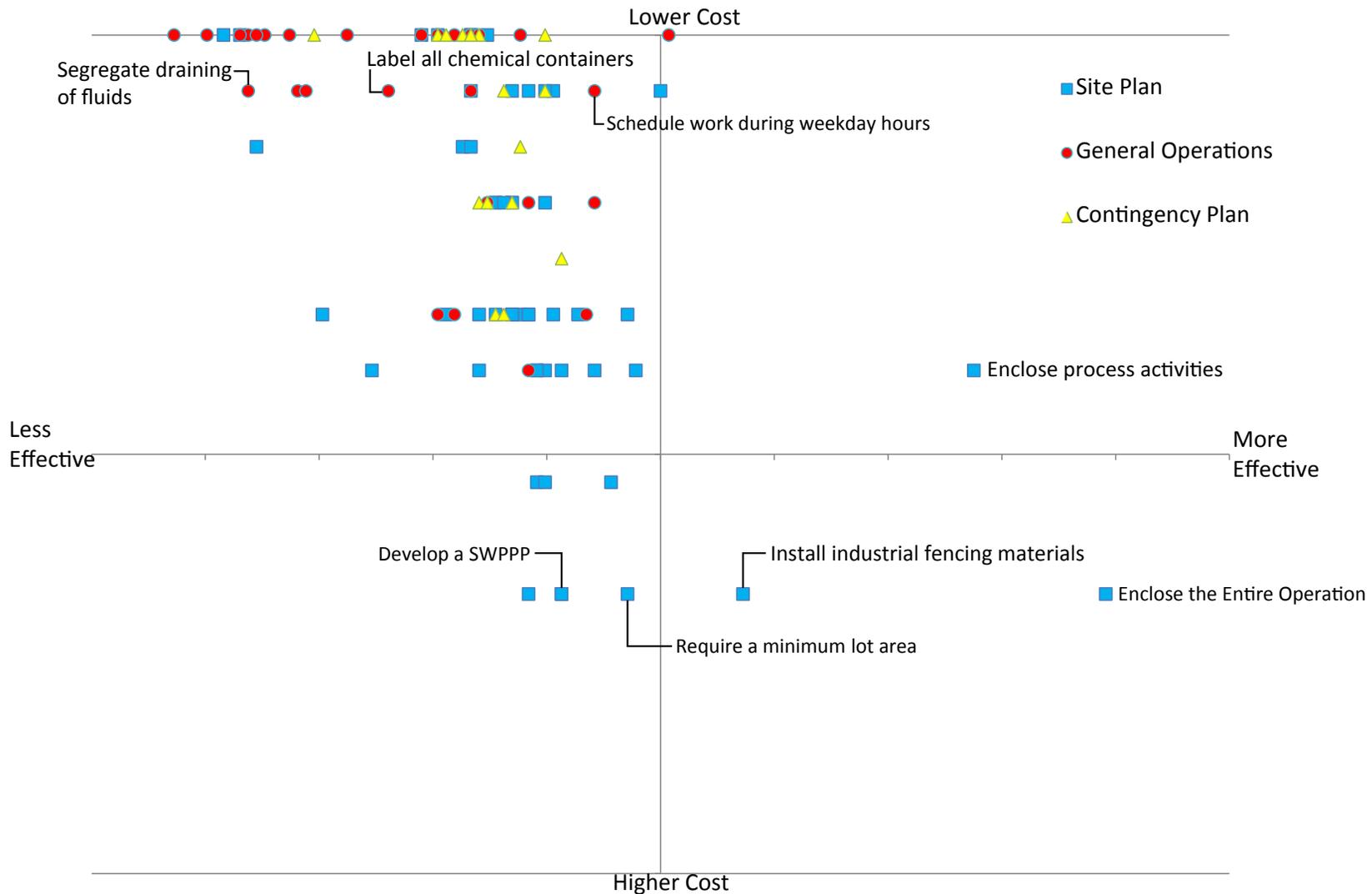
rank from 0-3, where is most effective

Assessment



Assessment Chart by Control

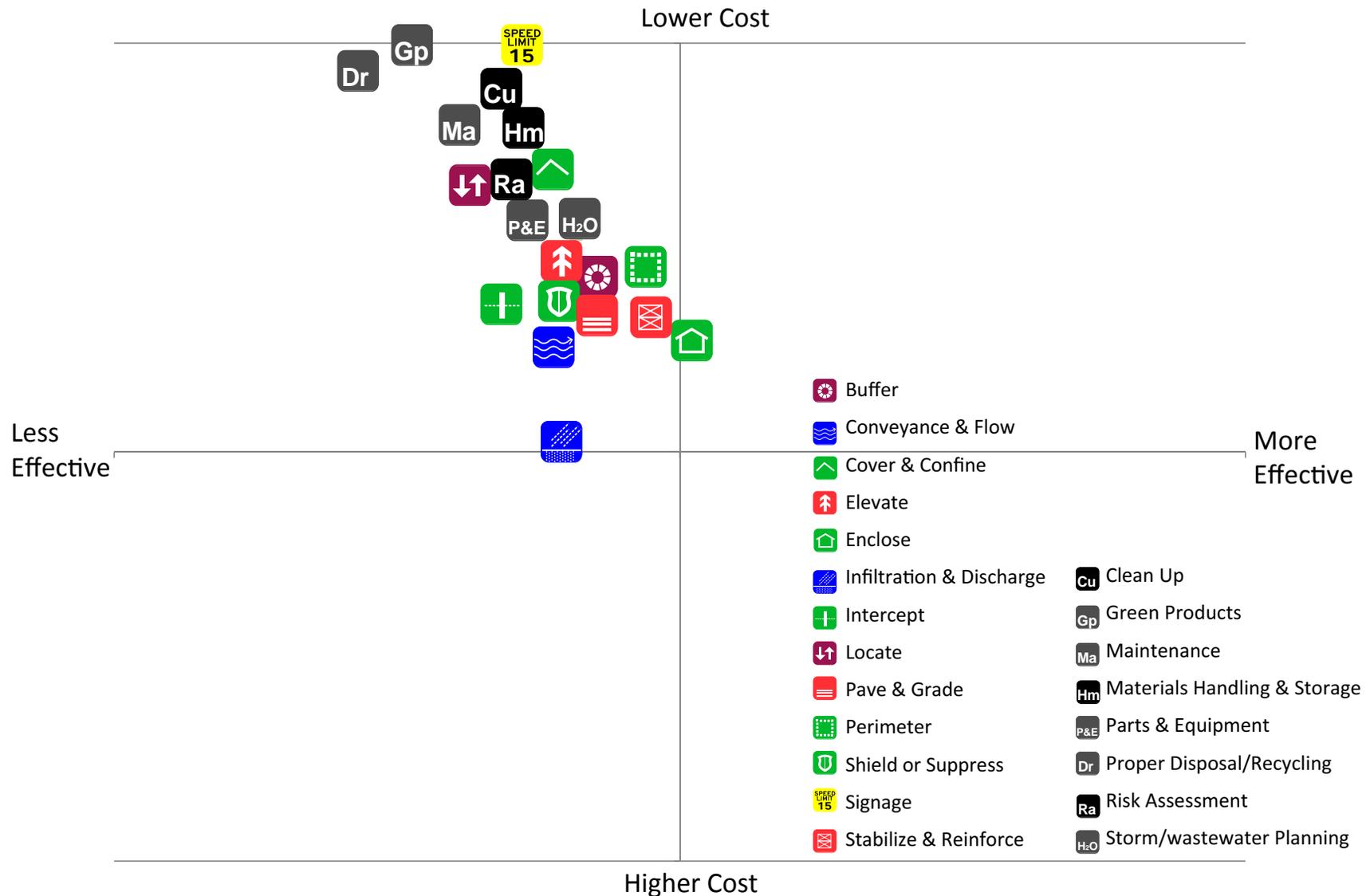
Pollution Prevention Controls' Relative Cost and Efficacy Scores



The scores reflect the average ratio of efficacy and cost points by category. These scores do not reflect the precise costs or a precise reduction in emissions. Rather, they illustrate a general ranking. More specifically, the scores show that individually the categories of controls are similar in cost and efficacy (i.e. generally low cost and minimally effective) as stand alone controls. The prototypical site analysis will provide finer grain detail on the cost to upgrade facilities and the effectiveness of packaging controls.

Assessment Chart by Category

Pollution Prevention Categories' Relative Cost and Efficacy Scores

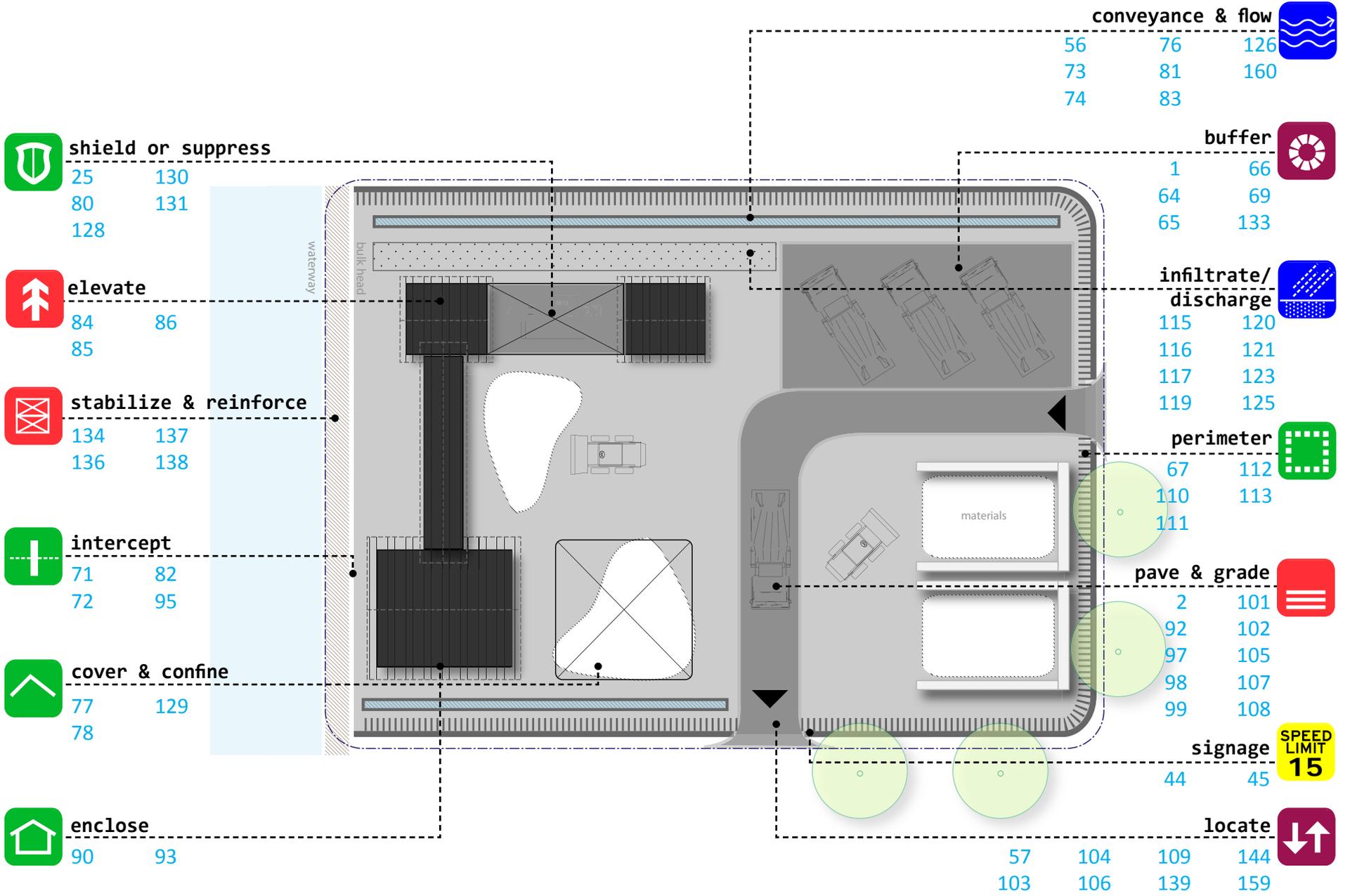


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Prototypical Site Analysis

This generic site plan illustrates all controls identified for concrete and asphalt manufacturing waste facilities.



Regulatory Review

Evaluation table included in each use category brief

	Existing Regulation	Proposed Control	Notes
Site Plan	HAY Article 4 § 89-2. Yards shall be screened by natural objects, plantings, fences or other appropriate means so as not to be visible from the main traveled way of such systems.	Perimeter Buffer Pave/Grade Conveyance Cover/Confine Intercept Stabilize/Reinforce	Enclose Access Elevate Inform Infiltration Shield
Operations & Maintenance	GBL §6-C Scrap Processors 1. Records 1. Such scrap processor shall record (i) each purchase of any pig or pigs of metal	Parts & Equipment Maintenance Green Products Proper Disposal Logbook	
Contingency Plan (SSP or Emergency Response)	NYC Community Right-To-Know Laws and Regulations §42-718 Risk Management Plan: facilities with substantial quantities of defined hazardous materials must provide risk management plans, including: inventory reporting, labeling, risk evaluation, spill history, analysis of processes, risk reduction program, emergency response program,	Risk Assessment Proper Handling and Storage of Materials	

Questions

- > Do you have thoughts about how to improve the approach?
- > Do you agree with the metrics?
- > Do you have thoughts about baseline requirements? i.e. controls that should be required at all facilities

Next Advisory Committee Meetings

Eddie Bautista	Environmental Justice Alliance
David Biederman	National Solid Waste Management Association (NSWMA)
Ken Diamondstone	SWAB Board Chair, Brooklyn
Jamila Diaz	SOBRO (IBZ Service Provider)
Laura E. Imperiale	Tully Construction co., Inc.
Scott Miller	Sims Metal Recycling
Phillip Musegaas	Riverkeeper
Andrea Schaffer	City Matters
Kellie Terry-Sepulveda	The Point
Beryl Thurman	North Shore Waterfront Conservancy (NSWC)
Anusha Venkataraman	El Puente, Leaders for Peace & Justice
Richard Werber	Greater Jamaica Development Corporation
Elizabeth Yeampierre	UPROSE

First Meeting

March 11, 2013

**Preliminary Assessment
& Control Categories**

Meeting #2

April 25, 2013

**Prototypical Site Analysis
& Financial Feasibility**

Meeting #3

June 13, 2013

**Draft
Recommendations**