
CITY OF CHICAGO

RULES



DEMOLITION BY IMPLOSION



Chicago Department of Public Health

RULES FOR DEMOLITION BY IMPLOSION

Whereas, pursuant to Chapter 2-112, Section 2-112-160(b), and Chapter 11-4 of the Municipal Code of Chicago (the "Code"), the Commissioner of Health ("the Commissioner") is granted the authority to issue rules and regulations necessary or proper for the implementation of environmental ordinances and to accomplish the purposes of Chapter 11-4, the Chicago Environmental Protection and Control Ordinance; and

Whereas, pursuant to Section 2-30-030 of the Code, the Commissioner is charged with the issuance of proposed rules regulating the use of explosives for the demolition of buildings and other structures ("Implosions"); and

Whereas, Section 11-4-760(e) of the Code authorizes the Commissioner to promulgate additional rules for the proper management of any substance or material that may become airborne or be scattered by the wind; and

Whereas, the general rulemaking authority in Chapter 2-112 and 11-4 includes any rules necessary to implement Article VIII of Chapter 11-4 of the Code, Sections 11-4-1410 through 11-4-1460, "Pollution of Waters"; and

Whereas, pursuant to Section 8-32-090(d), the Commissioner is authorized to promulgate rules and regulations to enforce the noise provisions under Section 8-32-090, Part B of Chapter 8-32 of the Code; and

Whereas, Implosions are subject to multiple local, state, and federal environmental requirements and the full compliance with said requirements is crucial to the protection of public health and the environment; and

Whereas, Implosions are significant sources of dust with the potential to harm human health and the environment, and cause a public nuisance or adversely impact the surrounding area or surrounding users; and

Whereas, for waste minimization purposes and to reduce the emission of hazardous chemicals and substances during and post demolition, recyclable materials (e.g., plumbing and ventilation equipment) and hazardous materials (e.g., asbestos and lead [Pb]) should be removed prior to Implosion;

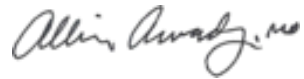
Whereas, the dust plume resulting from an Implosion will be immediate, intense, and short-lived, affording opportunity for planning to minimize community impact; and

Whereas, these Implosion activities are a significant source of noise and vibrations; and

Whereas, the furtherance of these goals and principles can be advanced by a more detailed recitation of requirements for hazardous material abatement, dust mitigation, air quality monitoring, emergency response, and site cleanup plans required under 15-4-311(a) to obtain a license from the Commissioner of Business Affairs and Consumer Protection; now therefore,

BY AUTHORITY VESTED IN THE COMMISSIONER OF THE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO SECTIONS 2-30-030 AND 2-112-160 OF THE MUNICIPAL CODE OF CHICAGO, THE FOLLOWING RULES REGARDING DEMOLITION BY IMPLOSION ARE ADOPTED HEREIN.

By Order of the Commissioner:



Signed: _____ Date: 4/8/21 _____

Commissioner Allison Arwady, M.D.

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Rule 1.0 Scope and Purpose

These rules apply to demolition by implosion activities subject to the additional requirements provided in Section 15-4-311 of the Code.¹ These rules provide explanatory details, guidelines, and provisions regarding specific components of the Comprehensive Plan required under Section 15-4-311(a) of the Code, including but not limited to, the following Plans:

1. Hazardous Material Abatement Plan;
2. Air Quality Monitoring Plan;
3. Dust Mitigation Plan; and
4. Site Cleanup Plan.

These plans are necessary to ensure an Application seeking a license with the Department of Business Affairs and Consumer Protection (BACP) fully Demonstrates that the proposed Implosion will be performed in accordance with all applicable environmental standards and are protective of the public health and the environment.

Rule 2.0 Definitions

“Asbestos Containing Material” or “ACM” means any material or product that contains more than one percent asbestos as determined by weight or volume, or by using the methods specified in Title 40, Part 763, Subpart E, Appendix E, Section 1 of the Code of Federal Regulations (C.F.R.), or test method EPA-600/M4-82-020, or other analytical method acceptable to the Commissioner. It also means any material contaminated with particles, fibers, or dust from asbestos containing material.

“Air Quality Monitoring Plan” means the air quality monitoring plan required to be included in the Comprehensive Plan.

“Applicant” means the person submitting an application for a permit for demolition by implosion to the City.

“Application” means the set of documentation required under Section 15-4-311 of the Code to apply for a license from BACP to use explosives in the demolition of a building or structure.

“Code” means the Municipal Code of Chicago.

“Commissioner” means the Commissioner of Public Health of the City of Chicago or the Commissioner’s designee.

“Comprehensive Plan” means one of the required components of the Application as specified in Subsection (a) of Section 15-4-311 of the Code.

“Demonstrate” means to provide sufficient Documentation to validate that the representations made in the Application are accurate. A demonstration may include reports, analyses, calculations, modeling, studies, or other information necessary to validate the accuracy and truthfulness of representations made in the Application.

“Department” or “CDPH” means the City of Chicago Department of Public Health.

¹ Capitalized terms are defined in Section 2 below.

“Documentation” means items, in any tangible form, whether directly legible or legible with the aid of any machine or device, that are used to support facts or hypotheses, including but not limited to affidavits, certificates, deeds, leases, contracts or other binding agreements, licenses, permits, photographs, audio or video recordings, maps, geographic surveys, chemical and mathematical formulas or equations, mathematical and statistical calculations and assumptions, research papers, technical reports, technical designs, design drawings, stocks, bonds, and financial records.

“Dust Mitigation Plan” means the dust monitoring plan required to be included in the Comprehensive Plan.

“EPA” means the United States Environmental Protection Agency.

“Fugitive Dust” means any solid particulate matter that becomes airborne by natural or human-made activities, excluding engine combustion exhaust and particulate matter emitted from a properly permitted exhaust stack equipped with a pollution control device.

“Fugitive Source” means a non-ducted airborne emission, such as dust from demolition activities, clearing and grubbing, grading, material handling or storage, wind erosion of storage stockpiles, or material re-suspended from paved and unpaved surfaces.

“Hazardous Abatement Plan” means the hazardous abatement plan required to be included in the Comprehensive Plan.

“Hazardous Air Pollutants” or “HAP” means any hazardous air pollutant listed under Section 112 of the Clean Air Act, as amended.

“Hazardous Waste” means any waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of or otherwise managed, or which has been identified by characteristics or listing as hazardous pursuant to Federal and State law including, but not limited to Section 3001 of the Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901 et seq., as amended, the Illinois Environmental Protection Act, or pursuant to regulations promulgated by the Illinois Pollution Control Board.

“Housing and Urban Development” or “HUD” means the United States Department of Housing and Urban Development.

“IDPH” means the Illinois Department of Public Health.

“IEPA” means the Illinois Environmental Protection Agency established by the Illinois Environmental Protection Act.

“Implosion” means the use of explosives for the demolition of buildings or other structure.

“Lead Containing Paint” or “LCP” shall have the meaning ascribed to the term in 11-4-2190(d)(2) of the Code

“Liquid Waste” means any waste which maintains the physical state of continuous volume relatively independent of pressure and which takes the shape of its container at ambient

temperature; or is determined to contain “free liquids” as defined by Method 9095 (Paint Filter Liquids Test), as described in “Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods” (EPA Pub. No. SW-846).

“MWRD” means the Metropolitan Water Reclamation District of Greater Chicago.

“Municipal Waste” means garbage, household waste, commercial/retail waste, institutional waste, industrial lunchroom and office waste, landscape waste, and construction or demolition debris.

“National Pollutant Discharge Elimination System” or “NPDES” means the program for issuing, modifying, revoking, reissuing, terminating, monitoring, and enforcing permits and imposing and enforcing pretreatment requirements under the Clean Water Act (33 U.S.C. 1251 et seq.), Section 12(f) of the Environmental Protection Act (415 ILCS 5/12(f)) and 35 Ill. Admin. Code 309, Subpart A and 35 Ill. Admin. Code 310.

“Near Reference PM 10 Monitor” means a device that measures the level of PM 10 in ambient air and meets or exceeds the specifications contained in Appendix A of these rules, or as otherwise approved by the Commissioner.”

“NPDES permit” means a permit issued under the NPDES program.

“Particulate Emission Potential” or “PEP” means the potential for in situ soils to be dispersed by wind or by physical disturbance as determined using the procedures described in 3.2.10 of these rules.

“Person” means any individual natural person, trustee, court-appointed representative, syndicate, association, partnership, co-partnership or joint stock company, limited liability company, trust, estate, firm, club, company, corporation, business trust, institution, agency, government corporation, municipal corporation, city, county, municipality, district or other political subdivision, department, bureau, agency or instrumentality of federal state or local government, contractor, supplier, vendor, installer, operator, user, or owner, or any officers, agents, employees, factors, or any kind of representative thereof, in any capacity, acting either for himself, or for any other person, under either personal appointment or pursuant to law, or any other entity recognized by law as the subject of rights and duties. The masculine, feminine, singular, or plural is included in any circumstance.

“Pollution Control Waste” means any liquid, solid, semi-solid, or gaseous waste generated as a direct or indirect result of the removal of contaminants from the air, water, or land and which poses a threat or potential threat to human health or to the environment or with inherent properties which make the disposal of such waste in a landfill difficult to manage by normal means. “Pollution Control Waste” includes, but is not limited to, water and wastewater treatment plant sludges, baghouse dusts, landfill waste, scrubber sludges and chemical spill cleanings.

“Potentially Infectious Medical Waste” means wastes as defined in 415 ILCS 5/3.360.

“Recognized Environmental Conditions” or “REC” means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property.

“Run-off” means water resulting from precipitation, irrigation, or dust-suppression activities that flows overland before it enters a defined stormwater receptor (e.g., a ditch, pond, sewer, or stream channel), any portion of such overland flow that infiltrates into the ground before it reaches the stormwater receptor, and any portion that falls directly into a stormwater receptor.

“Sensitive Area” shall mean any residentially zoned or mixed-used property with residential use, park, hospital, clinic, church, day-care, or school.

“Site” means real property containing the building or structure to be demolished and all structures, equipment, and ancillary fixtures on a Site used in or to support the demolition. A Site may include, but is not limited to structures, buildings, scales, roadways, parking areas, queuing areas, fences, processing equipment, processing areas, staging/stockpiling areas, and monitoring stations.

“Site Cleanup Plan” means the site cleanup plan required to be included in the Comprehensive Plan.

“Solid Waste” means abandoned or discarded materials that are not defined as a Liquid, Special, or Hazardous Waste.

“Special Waste” means any industrial process waste, Pollution Control Waste or Hazardous Waste, and other wastes as defined by the Illinois Environmental Protection Act as amended and in regulations promulgated by the Illinois Pollution Control Board. “Special Waste” includes Potentially Infectious Medical Waste.

“SWPPP” or “Storm Water Pollution Prevention Plan” means a document that outlines how a Facility will minimize stormwater pollution through best management practices (BMPs) that 1) minimizes pollutants such as sediments, oil, chemicals, and trash; 2) provides for inspections and BMP maintenance; and 3) monitoring, laboratory sampling and analysis.

“Utilities” means any service provided to the Site that has a dedicated system of service. Utilities may include, but are not limited to electricity, potable water, process water, telephone, and natural gas.

“Vector” means any living agent, other than human, capable of transmitting, directly or indirectly, an infectious disease.

“Waste” means any discarded or abandoned material in solid, semisolid, liquid, or contained gaseous form, including but not limited to, industrial process waste, Hazardous Waste, Liquid Waste, Municipal Waste, special waste, garbage, sludge from a waste water treatment plant, water supply treatment plant, or air pollution control Facility, but excluding: (1) sewage collected and treated in a municipal or regional sewage system; or (2) Recyclable Materials managed in compliance with the provisions of the Municipal Code and applicable regulations.

“Waters” means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois. Examples of Waters include, but are not limited to, Lake Michigan, the Chicago River, Calumet River, and Lake Calumet.

Rule 3.0 Information Required by CDPH

This section outlines the information and minimum standards required by CDPH to satisfy the Comprehensive Plan requirement, and other information necessary for the Department's review of the Application. All the information required in this section must be incorporated in the Comprehensive Plan and shall be in addition to any information required by any other city department.

The Comprehensive Plan shall contain sufficient evidence to Demonstrate that the Implosion is designed and will be conducted in a manner that is protective of public health and the environment. To the extent applicable, Documentation submitted to other regulatory agencies such as USEPA, IEPA, IDPH, MWRD, and HUD may be used. This Documentation must be included as an attachment to the Application and referenced in the appropriate sections of the Comprehensive Plan.

3.1. Site Plans

The Comprehensive Plan must include site plans necessary to describe the features at the Site and in the surrounding area.

3.1.1. Site Survey

The Site Plans shall include a site survey delineating the boundaries of the property and the locations of all buildings, pavements, unpaved areas along with their PEP, environmental and geotechnical sampling locations required under this section, fences, barriers, any ancillary structures or features within the Site, and depicts the topographic contours, at a minimum two-foot contour interval, of existing conditions and any proposed regrading of the Site in connection with demolition and post cleanup activities.

3.1.2. Aerial Photograph

The Site Plans shall include an aerial photograph taken within six months before the date of the Application that shows the following:

- 3.1.2.1. The delineated boundaries of the Site;
- 3.1.2.2. A clearly marked radius of 1,000 feet around the entire Site boundary; and
- 3.1.2.3. Identification of all Sensitive Areas and zoning district boundaries within 1,320 feet (one-quarter mile) or inside the modeled plume area in 3.2.8, whichever distance is greater, around the Site.

3.2. Hazardous Material Abatement Plan

The Comprehensive Plan must include a Hazardous Material Abatement Plan that Demonstrates all hazardous or toxic substances are removed prior to Implosion to prevent the dispersion of Hazardous Air pollutants and potentially harmful chemicals into the air. This demonstration shall include but not be limited to the following Documentation:

3.2.1. Asbestos Abatement and Air Clearance Report

The Hazardous Material Abatement Plan shall include Documentation that the building or structure to be imploded does not contain asbestos containing materials (ACM). Such Documentation shall include a copy of the following documents relating to asbestos inspections and abatement work at the Site:

- 3.2.1.1. Combined Notification of Demolition and Renovation form submitted pursuant to Section 11-4-2170 of the Code;
- 3.2.1.2. Asbestos Survey Report, Air Clearance Report, and Asbestos Abatement Closeout Report prepared in accordance with NESHAPS requirements.

3.2.2. Lead Survey

The Hazardous Material Abatement Plan shall include a comprehensive survey of the proposed building or structure for Lead Containing Paint (LCP). The survey shall be performed by a lead inspector or lead risk assessor duly licensed by the State of Illinois.

If the above survey found surfaces with LCP, the Hazardous Material Abatement Plan should also include a report, prepared by a lead abatement contractor licensed by the State of Illinois, certifying that the building or structure is free of LCP. If the LCP cannot be removed, the Applicant shall submit a justification on why LCP cannot be removed, a plan for minimizing lead emission and offsite deposition, and a calculation of the amount of lead-deposition that may occur offsite.

3.2.3. Environmental Site Assessment

The Hazardous Material Abatement Plan shall include a Phase 1 Environmental Site Assessment (Phase 1 ESA) identifying Recognized Environmental Conditions (RECs) at the Site. The Phase 1 shall be conducted in conformance with ASTM E1527-13, as updated.

3.2.4. Building Decommissioning and Decontamination

The Hazardous Material Abatement Plan shall include Documentation that the building or structure to be imploded has been adequately decommissioned and decontaminated in preparation for Implosion. Such Documentation shall Demonstrate that:

- 3.2.4.1. All Utilities to the building have been disconnected;
- 3.2.4.2. All underground and aboveground storage tanks have been removed;
- 3.2.4.3. The building walls, floors, ceilings, and other surfaces have been cleaned and are free of contaminants and toxic mold;
- 3.2.4.4. The building or structure has been completely emptied and is free of any equipment (e.g., HVACs, generators, process equipment and machinery), appliances, furniture, accessories, fixtures, and Waste;
- 3.2.4.5. The building or structure is free of hazardous, flammable, radiological, potentially infectious, PCB-containing, and mercury-containing materials; and
- 3.2.4.6. The building or structure has been inspected and treated for Vectors.

3.2.5. Surficial Soil Sampling Report

The Hazardous Material Abatement Plan shall include an investigation of RECs, as identified in the Phase I ESA, in the surficial soils (from zero to six inches below grade surface) around the building or structure to be imploded. The investigation shall focus on the area from the building perimeter up to 1.5 times the distance of the ground impact area. The investigation shall confirm the presence, concentration, and lateral extents of all RECs and determine the waste characterization profile of the sampled soil.

Soils determined to have free product as defined in 35 IAC Section 742.200 or determined to be a Hazardous Waste shall be lawfully removed, transported, and disposed offsite, or otherwise covered to prevent air dispersion as approved by the Commissioner.

3.2.6. Air Quality Monitoring Plan

The Comprehensive Plan must include a comprehensive air monitoring plan that investigates air quality impacts from Fugitive Dust prior to Implosion and a plan for the monitoring of PM 10 in the air before, during, and after Implosion activities. Such air monitoring plan shall include, but may not necessarily be limited to, the following:

3.2.7. Air Dispersion Modeling

The Air Quality Monitoring Plan shall include an air dispersion modeling study using computational fluid dynamic simulation such as finite element method, applied element method, or other methods approved by the Commissioner. The study shall simulate dust propagation generated from the Implosion under varying wind speeds, wind directions, and weather stability classes (unstable, neutral, and stable).

The model shall calculate the concentrations of PM10 in the dust plume generated from the impact of the collapsed building or structure with the ground. The model shall produce the following outputs superimposed over aerial or satellite imagery:

- 3.2.7.1. PM10 concentration contours;
- 3.2.7.2. PM10 concentration versus time at the source, in the surrounding public way, and at Sensitive Areas offsite;
- 3.2.7.3. Maximum PM10 concentrations at the areas specified in (b) above; and
- 3.2.7.4. Computer-generated videos for the estimated dust cloud propagation and dissipation.

In addition to informing the placement of air monitors, the air dispersion modeling results shall be used in the development of the Dust Mitigation Plan and the Site Cleanup Plan, as well as assist in formulating traffic management plans and the siting of protection and exclusion zones onsite and offsite.

3.2.8. Air Monitoring Plan

The air upwind and downwind at the Site, as well the air at Sensitive Areas within 1,000 feet of the site or within the plume modeled in 3.2.7, whichever distance is greater, shall be continuously monitored for PM10 for a 24-hour duration one week prior, the day of, and one week following the Implosion until air monitoring confirms that the hourly and 24-hour PM10 levels are back to normal, pre-Implosion levels. PM10 levels shall be considered normal when the measured PM10 levels are within the historic mean, plus or minus the standard deviation, within the last three years,

unless the Commissioner has reason to believe that the Site is still causing PM10 levels to be elevated. Historic PM10 data shall be based on data collected from the nearest ambient air quality station operated by Cook County or IEPA or other data sources approved by the Commissioner.

In conjunction with the above PM-10 monitoring, air samples shall be collected at all monitored locations for analysis of lead using NIOSH Method 7300, 7302 or 7303; asbestos fibers using NIOSH Method(s) 7400 and/or 7402; silica using NIOSH Method 7500 or 7602; respirable particulates using NIOSH Method 0600; and total dust using NIOSH Method 0500. The Commissioner may approve alternate test methods or require the use of EPA methods, depending on site-specific factors. The Commissioner may also require the air sampling of any or all RECs that may be emitted into the air by the Implosion.

The PM10 monitoring shall be conducted using instruments designated as Federal Equivalent Method (FEM) by EPA or meet the requirements for a Near Reference PM 10 Monitor as defined in these rules. If Near Reference PM 10 Monitors will be used, a site-specific correlation factor must be determined that calibrates the instruments' readings against concentrations determined by gravimetric sampling using EPA IO 3.1, NIOSH 0500, or other methods approved by CDPH. The site-specific correlation factor shall be calculated using mathematical formulas provided by the equipment manufacturer.

The plan shall also include operation, according to manufacturer's specifications, a weather station, or other permanent device to monitor and record wind speed and wind direction, along with the corresponding temperature, barometric pressure, and relative humidity at or near the Site. Such readings shall be taken at an unobstructed, unsheltered area, unimpacted by the Implosion, and at a minimum height of 10 meters above ground level, unless another height is appropriate pursuant to applicable US Environmental Protection Agency protocols and guidance.

The Department may require additional monitoring methods, including, but not limited to, video recording and one or more filter-based sampling sites, based on the findings of the Phase I ESA, soil sampling results, the material composition of the building or structure, or when the Commissioner believes the PM10 monitoring is not sufficient to adequately assess the health and environmental impacts.

3.2.9. Dust Mitigation Plan

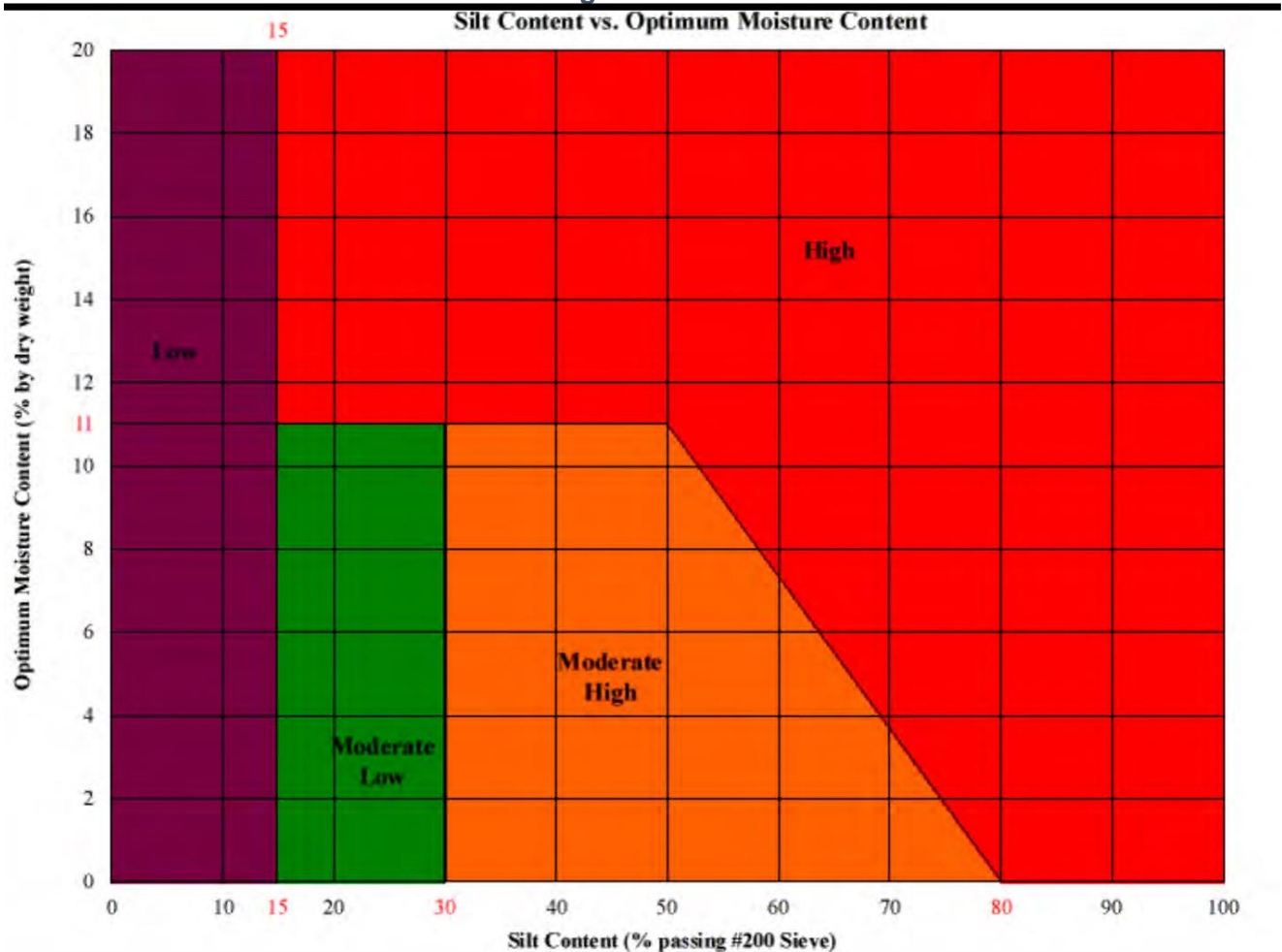
The Comprehensive Plan must include a Dust Mitigation Plan that Demonstrates that adequate precautions and best practices are employed to minimize Fugitive Dust; as

well as Demonstrates that a robust contingency plan will be in place in case the above primary measures fail to control or minimize Fugitive Dust. Such Demonstrations must include, but are not necessarily limited to, the following Documentation:

3.2.10. Evaluation of Onsite Soil for Particulate Emission Potential

The surficial soil at the Site shall be evaluated for Particulate Emission Potential (PEP) by plotting the soil’s fines content against its optimal moisture content using Figure 1. The fines content shall be determined using ASTM D1140-17, while the optimum moisture content shall be measured using ASTM D1557 or AASHTO T180-D. Alternate methods may be used with prior written approval from the Commissioner. The results of the investigation shall be depicted on a site map showing the PEP of unpaved surfaces at the Site.

Figure 1



3.2.11. Dust Mitigation Measures

The Dust Mitigation Plan shall describe measures that will be implemented to limit the generation and dispersion of Fugitive Dust. Such measures shall include, but are not necessarily limited to, the following best practices:

- 3.2.11.1. The thorough sweeping of paved surfaces using a sweeper effective at removing fine particulates;
- 3.2.11.2. Adequate wetting of all unpaved areas. The operator shall ensure that surficial soils within the ground impact area and 50% beyond is thoroughly saturated up to a depth of four inches, or otherwise treated using method(s) approved by the Commissioner, on the day of and within one-hour prior to the Implosion, or within the closest timeframe allowed by safety protocol;
- 3.2.11.3. Employing misting cannons around the building or structure and/or at strategic locations and elevations determined based on the results of the air dispersion modeling in 3.2.7;
- 3.2.11.4. Applying water to debris immediately following blast and safety clearance; and
- 3.2.11.5. Restricting traffic and operations to paved areas or stabilized surfaces. Soils exhibiting a High PEP should be fenced off or otherwise demarcated to prevent disturbance, or shall be effectively stabilized, removed or covered if vehicle traffic or operations will occur over these areas.

3.2.12. Contingency Plan

This Dust Mitigation Plan must include a description of the contingency measures to be implemented if the above control measures fail to adequately control dust emissions. In addition, the plan must describe the steps that will be taken to verify that a dust control measure is working and, upon discovery of an inadequacy, the steps that will be taken to initiate a contingency measure.

3.2.13. Sedimentation and Erosion Plan

The Applicant shall include a sedimentation and erosion plan for Site activities following guidelines prescribed in the Illinois Urban Manual, as published by the Association of Illinois Soil and Water Conservation Districts or other guidelines approved by the Commissioner.

3.2.14. Site Cleanup Plan

The Comprehensive Plan must include a Site Cleanup Plan to remove dust, debris, and litter from the surrounding impacted area as expeditiously and as safely possible to minimize disruption to the community. The Site Cleanup Plan shall include, but may not necessarily be limited to, the following:

- 3.2.14.1. The use of a street sweeper to clean impacted paved areas. Such sweeper shall be equipped with a waterless dust suppression system comprised of vacuum assist and filtration for pickup and mitigation of potential fugitive fine particulates, and PM10-certified by Canada's Environmental Technology Verification Program or as approved by the Commissioner;
- 3.2.14.2. The cleaning of impacted parkways and private properties (with owner permission);
- 3.2.14.3. Inspection and cleaning, as required, of all catch basins and Waters within the plume footprint;
- 3.2.14.4. Protocol for the collection, storage, and lawful disposal of Liquid Waste, including, as applicable, storm water and dust suppression runoffs;
- 3.2.14.5. Inspection protocols that ensure impacted areas are returned to pre-implosion conditions; and
- 3.2.14.6. A staffing plan and equipment list necessary to execute the cleanup.

3.2.15. Noise and Vibration

The Comprehensive Plan shall include a noise and vibration assessment. At a minimum, such assessment shall estimate sound levels from explosives, and the magnitude of ground vibrations from the collapsing structure hitting the ground.

The above assessments shall demonstrate that noise levels will not create a nuisance and any earthshaking vibration does not exceed the standards set forth in Section 8-32-160 of the Code.

3.3. Compliance History Documentation

The applicant must submit documentation of violations of any federal, state or local environmental or other regulations that impact the health, safety or welfare of the community within the past three years by the applicant, or any owner or officer of the applicant, or any person having control of applicant or any of its operations.

3.4. Additional Information and Other Documentation

The Commissioner may require additional information to be submitted if it is determined that the information in the Application is insufficient, if the nature of the Site or Implosion activities warrant additional information, and if additional information is required to verify compliance with other environmental laws and regulations. Examples of the latter may include, but are not necessarily limited to, the following:

- 3.4.1.** Environmental Assessments as may be mandated under the National Environmental Policy Act (NEPA);
- 3.4.2.** NPDES Notices of Intent (NOIs) and Stormwater Pollution Prevention Plans (SWPPPs) for projects subject to NPDES permitting;
- 3.4.3.** Discharge authorization issued by MWRD; and
- 3.4.4.** Environmental investigations and remediation reports if the Site is enrolled in IEPA's Site Remediation Program, is listed in EPA's National Priority List (NPL), or has leaking underground storage tanks (LUST).

Rule 4.0 Compliance with laws and document submission

- 4.1.** These rules in no way affect the Applicant's responsibility to comply with all other applicable federal, state, and City laws, including but not limited to those regarding the construction, operation, maintenance, and closure of the Site.
- 4.2.** The Commissioner shall conduct an evaluation of the applicant's prior compliance with health and environmental regulations, and may refuse to consent to the issuance of a demolition by implosion permit if the applicant, or any owner or officer of the applicant, or any person having control of applicant or any of its operations, has, within the past three years violated any federal, state or local environmental or other regulations that impact the health, safety or welfare of the community.
- 4.3.** Any application, plan, and documentation required to be submitted to the Department under any provision of these Rules shall be complied by submitting such application, plan or documentation to the Office of Emergency Management and Communications.

Rule 5.0 Severability

If any clause, sentence, paragraph, subsection, section, or part of these rules is adjudged by any court of competent jurisdiction to be invalid, that judgment shall not affect, impair or invalidate the remainder of these rules, but shall be confined in its operation to the clause, sentence, paragraph, subsection, section or part to which the judgment is rendered.

APPENDIX A

Minimum Specifications for Near-Reference PM 10 Monitors

The PM10 monitors required by the Rules shall meet or exceed the following requirements, subject to approval by the Commissioner:

1. PM10 monitors must be continuous direct-reading near-real time monitors and shall monitor particulate matter less than 10 microns.
2. PM10 monitors must be equipped with:
 - a. Omni-directional heated sampler inlet;
 - b. Sample pump;
 - c. Volumetric flow controller;
 - d. Enclosure; and
 - e. Data logger capable of logging each data point with average concentration, time/date, and data point number.
3. PM10 monitors must have the following minimum performance standards:
 - a. Range: 0 - 10,000 $\mu\text{g}/\text{m}^3$
 - b. Accuracy: $\pm 5\%$ of reading \pm precision
 - c. Resolution: 1.0 $\mu\text{g}/\text{m}^3$
 - d. Measurement Cycle: User selectable
4. In order to ensure the validity of the PM10 measurements performed, there must be appropriate Calibration Plan as set forth in 3.9.21.1 of these rules. It is the responsibility of the Owner or Operator to adequately supplement the Calibration Plan to include the following critical features: instrument calibration, instrument maintenance, operator training, and daily instrument performance (span) checks.